## D Subminiature

## C onnectors


The ITT C annon
D Subminiature family ofconnectors has grown toinclude a wide variety of styles,options and accessories and isoften the most economicalsolution to any interconnectproblem. Ideally suited forboth commercial/industrialapplications and military/aerospace applications,ITT C annon D Subminiatureconnectors have foundworldwide acceptance in amultitude of applicationsranging from office equipmentto satellites.
Contents Page
General Application D Subminiature Connectors

- Straight PCB Selection Guide ..... 2
D*NG Pressfit Termination ..... 4
D*M Solder Termination (Machined) - Standard PC Tails ..... 6
ZD* Solder Termination (Stamped) .....  8
D* Solder Termination (Machined) - European PC Tails ..... 10
D* Wrap Post Termination ..... 12
- $90^{\circ}$ PCB Selection Guide .....  14
D*M Solder Termination (Machined) - Standard Footprint . 318 * or . $283 *$ inch .....  16
ZED* Solder Termination (Stamped) - Standard Footprint . 318 inch .....  18
D* Solder Termination (Machined) - European Footprint 10,2 or $9,4 \star$ mm ..... 20
ZD* Solder Termination (Stamped) - European Footprint 10,2 mm ..... 28
- Cable Selection Guide ..... 30
D Solder Cup Solder Termination (Machined) with Tin Shells .....  32
ZD* Solder Cup Solder Termination (Stamped) with Tin Shells ..... 34
D*A Crimp Connectors without Contacts ..... 36
D*W Discrete Wire IDC ..... 38
Special Application D Subminiature Connectors
- Combo D® Selection Index ..... 42
Combo D ${ }^{\circledR}$ PCB Connectors with 75 Ohm Coaxial Contacts ( 50 Ohm Option) ..... 44
Combo D® ${ }^{\circledR}$ PCB Connectors with High Power ..... 60
Combo D ${ }^{\circledR}$ PCB Connectors with (Size 20) Signal Contacts Only ..... 74
Combo D ${ }^{\circledR}$ Cable Solder Cup ..... 78
Combo D ${ }^{\circledR}$ Cable Crimp Connectors and Shield Cans ..... 80
Loose Contacts and Tooling ..... 83
- Commercial Micro D Selection Index ..... 96
MDSM Connectors and Tooling ..... 98
- Filter D Selection Index ..... 104
Product Performance ..... 106
D*JK PCB Connectors ..... 108
D*JT Solder Cup and Combo High Power Connectors ..... 122
High Reliability D Subminiature Connectors
- Military/High Reliability Selection Index. ..... 130
PCB $90^{\circ}$, Straight, Wrap Post, and Cable Solder Cup ..... 132
24308-Style Cross References and Test Data ..... 142
Military/High Reliability Combo D ..... 146
- Space/High Reliability Selection Index ..... 168
PCB Straight, $90^{\circ}$ and Cable Solder Cup ..... 172
Cable Crimp ..... 182
High Density Cable Crimp ..... 184
Space/High Reliability Combo D* ..... 188
Space Accessories and Loose (Size 8) Contacts. ..... 190
NASA/GSFC \& ESA-SCC Cross References. ..... 195
Accessories Selection Guide ..... 198
Backshells ..... 200
Locking Hardware ..... 208
Miscellaneous ..... 214
Reader's Resource Selection Index ..... 219
Dimensional Reference Data. ..... 220
Lease Tooling ..... 275
Glossary of Terms ..... 276
Obsolete Products/Available Products Not Previously Listed ..... 282
Part Number Index ..... 283
Product Safety and Warranty ..... 297
On the Cover
Filter D, Combo D*,
Commercial M icro D

Our facility is not currently certified by the DLA and this product is not covered by the QPL/QML.

## D*NG - Straight Pressfit Termination



See pages 4-5.

The $D * N G$ is based upon the specification CECC75-301-802. These connectors provide a low-cost alternative to traditional through hole solder contacts. Utilizing stamped "Eye of the Needle" compliant contacttails per IEC-352-5, the parts are quickly and easily mounted onto PCBs without soldering, crimping or specialized tooling. The socket contact engaging area utilizes a "spoon" shape with four points of interconnection. Hardware options provide flexibility and ensure that the final product fits the electrical requirements of any application.

## Product Features

Quick and easy press-in installation without specialized tooling
"Spoon" socket contact provides improved interface compared to "Tuning Fork"
Closed-entry socket for secure blind mating Front-shell only design based on CECC 75-301-802
"Eye of the Needle" compliant contact tails
Press-in bolt for ground continuity
\# 4-40 UNC and M3 hardware options

## D*M Straight Solder Termination (Machined) - Standard PC Tails



See pages 6-7.

D*M straight PCB connectors, which are designed to be equivalent to MIL-C-24308 (except for finishes) for printed circuit boards and backplanes in demanding applications. Additional contact lengths, hardware and finish options available; consult factory for details.

## Product Features

7.5 A current capacity

Machined contacts
2 contact finishes
Optional vertical standoffs, screw locks, and
boardlocks (4 prongs)
UL file number E8572
Dimensionally compatible with Combo D®

## ZD* - Straight Solder Termination (Stamped)



See pages 8-9.

ZD* straight connectors are available for applications where price is the primary driver. They are available with or without boardlocks and screw locks.

## Product Features

Stamped contacts with 5 A current capacity Economical
Optional vertical standoffs with optional harpoon style boardlocks or screw locks

## D* - Straight Solder Termination (Machined) - European PC Tails



See pages 10-11.

D* straight connectors are available for high performance uses according to DIN 41652. Available with European length OL contacts.

Select contact finish from 2 performance classes.

## Product Features

High performance commercial connectors Two contact finish performance classes Optional vertical standoffs, threaded inserts and pushfits/boardlocks OL2 contact length, other lengths available Tin plated contact PC tails (pin \& socket) Machined contacts

## D* - Wrap Post Termination



See pages 12-13.

D* straight connectors are available for high performance uses according to DIN 41652. Contacts available in two popular lengths.

## Product Features

High performance commercial class connectors
Two contact lengths for 2 or 3 wraps Machined contacts

## D Subminiature

| Specifications |
| :---: |
| Current Rating $5 \mathrm{~A} / 25^{\circ} \mathrm{C}, 3.5 \mathrm{~A} / 70^{\circ} \mathrm{C}$ ambient |
| Temperature Rating $-55^{\circ} \mathrm{C}$ to $125^{\circ} \mathrm{C}$ |
| Contact Resistance $10 \mathrm{~m} \Omega$ |
| Test Voltage 1200 Vrms at Sea Level |
| $\varnothing$ Plated Through Hole 1,09-0,94 (.043-.037) |
| PC Tail Press-in Force $100 \mathrm{~N} /$ contact max. |
| PC Tail Push-out Force 30N/contact min. |
| PC Board Thickness 3,20-1,60 (.125-.062) |


| Materials and Finishes |  |  |
| :--- | :--- | :--- |
|  |  | Finish |
| Description | Material | Tin |
| Shell | Steel | Thermoplastic, UL 94V-0 | None (color: black) \(\left.\begin{array}{lll}Insulator \& Gold over Nickel (Standard) <br>

or Gold over PdNi (-408)\end{array}\right]\)

## Specifications

Temperature Rating $-55^{\circ} \mathrm{C}$ to $125^{\circ} \mathrm{C}$
Current Rating 7.5 A
Contact Resistance 55 millivolt max at 7.5 A test current
Dielectric Withstanding
Voltage 1000 VAC at Sea Level

Materials and Finishes

| Description | Material | Finish |
| :--- | :--- | :--- |
| Shell | Steel | Tin |
| Insulator | Thermoplastic, UL 94V-0 | None (color: dark green) |
| Contact | Copper Alloy | Gold over Nickel. Terminating <br> end Tin (Socket only) |
| Hardware | Steel/Copper Alloy | Tin/Zinc |


| Description | Material | Finish |
| :--- | :--- | :--- |
| Shell | Steel | Tin |
| Insulator | Thermoplastic, UL 94-0 | None (color: black) |
| Contacts | Copper Alloy | Gold over Nickel |
| Hardware | Steel/Copper Alloy | Tin/Zinc |

Materials and Finishes

| Description | Material | Finish |
| :--- | :--- | :--- |
| Shell | Steel | Tin |
| Insulator | Thermoplastic, UL 94V-0 | None (color: dark green) |
| Contacts | Copper Alloy | Gold over Nickel in mating area, <br> Tin on balance |
| Hardware | Steel/Copper Alloy | Tin/Zinc |

## Specifications

| Temperature Rating | $-55^{\circ} \mathrm{C}$ to $125^{\circ} \mathrm{C}$ |
| ---: | :--- |
| Current Rating | $\frac{5 \mathrm{~A}}{10 \mathrm{~m} \Omega}$ |
| Contact Resistance |  |
| Dielectric Withstanding |  |
| Voltage | $\underline{1250 \mathrm{VAC} \text { at Sea Level }}$ |


| Description | Material | Finish |
| :--- | :--- | :--- |
| Shell | Steel | Tin |
| Insulator | Thermoplastic, UL 94V-0 | None (color: dark green) |
| Contact | Socket: Copper Alloy | Gold over Nickel. Terminating <br> end Tin (Socket) |
| Hardware | Steel/Copper Alloy | Tin/Zinc |

## Straight Pressfit Termination

## Plug



## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 2-3.

## Reader's Resource

For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 274.
For panel cutouts, see page 221.

| Part Numbers <br> Shell <br> Size <br> Layout | Through <br> Hole | Clinch Nut <br> \# 4-40 UNC | Clinch Nut <br> M3 | Press-In Bolt <br> \#4-40 UNC | Press-In Bolt <br> M3 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DENG9P-P1 | DENGE9P-P1 | DENGX9P-P1 | DENGZ9P-P1 | DENGLPP-P1 |
| DA | 15 | DANG15P-P1 | DANGE15P-P1 | DANGX15P-P1 | DANGZ15P-P1 | DANGL15P-P1 |
| DB | 25 | DBNG25P-P1 | DBNGE25P-P1 | DBNGX25P-P1 | DBNGZ25P-P1 | DBNGL25P-P1 |
| DC | 37 | DCNG37P-P1 | DCNGE37P-P1 | DCNGX37P-P1 | DCNGZ37P-P1 | DCNGL37P-P1 |
| DD | 50 | DDNG50P-P1 | DDNGE50P-P1 | DDNGX50P-P1 | DDNGZ50P-P1 | DDNGL50P-P1 |

Note: For performance class 1 (gold over PdNi finish) add -408. Example: DENG9P-P1-408.


## Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) |

## Mounting Types



Through Hole


Clinch Nut


Press-In Bolt

## Straight Pressfit Termination

Receptacle

## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 2-3.

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 274.
For panel cutouts, see page 221.

## Engaging Face



Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} D \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathbf{E} \\ \pm 0,38(.015) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) |

## Mounting Types



Through Hole


Clinch Nut


Press-In Bolt

## Straight Solder Termination (Machined) - Standard PC Tails

Plug


## Selection Guide

For Product Features, Specifications, Materials and Finishes, see pages 2-3.

Part Numbers

| Shell Size | Layout | Standoff |  <br> Baodrack |  <br> Screw L Lock |
| :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DEMV9PNK87 | DEM2PNK87 | DEMNPPK87 |
| DA | 15 | DAMV15PNK87 | DAMZ15PNK87 | DAMN15PNK87 |
| DB | 25 | DBMV25PNK87 | DBMZ25PNK87 | DBMN25PNK87 |
| DC | 37 | DCMV37PNK87 | DCMZ37PNK87 | DCMN37PNK87 |
| DD | 50 | DDMV50PNK87 | DDMZ50PNK87 | DDMN50PNK87 |

Note: For contacts with 30 microinches gold substitute K127 for K87. Example: DEMN9PNK127

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 274.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.


Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(, 0145) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(, 016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

## Straight Solder Termination (Machined) - Standard PC Tails

## Receptacle



## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 2-3.

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 274.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.

Part Numbers

| Shell Size | Layout | Standoff |  <br> Boardlock |  <br> Screw Lock |
| :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DEMV9SNA197 | DEM29SNA197 | DEMN9SNA197 |
| DA | 15 | DAMV15SNA197 | DAM215SNA197 | DAMN15SNA197 |
| DB | 25 | DBMV25SNA197 | DBM225SNA197 | DBMN2SSNA197 |
| DC | 37 | DCMV37SNA197 | DCMZ37SNA197 | DCMN37SNA197 |
| DD | 50 | DDMV50SNA197 | DDM250SNA197 | DDMN5OSNA197 |

Note: For contacts with 30 microinches gold substitute K126 for A197. Example: DEMN9SNK126


Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} F \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

## Straight Solder Termination (Stamped)

Plug


Part Numbers

| Shell Size | Layout | Through Hole | Standoff With <br> Baardlock |
| :---: | :---: | :---: | :---: |
| $D E$ | 9 | ZDE9P-0L2 | ZDEE9P-0L2-146 |
| $D A$ | 15 | ZDA15P-OL2 | ZDAE15PP-0L2-146 |
| $D B$ | 25 | ZDB25P-OL2 | ZDBE25P-0L2-146 |
| $D C$ | 37 | ZDC37P-OL2 | ZDCE37P-0L2-146 |
| $D D$ | 50 | ZDD50P-OL2 | ZDDE50P-OL2-146 |

## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 2-3.

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 274.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.


| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{F} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{W} \\ \pm 0,368(.0145) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{W} \\ \pm 0,41(.016) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693(.2635) | - |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) |

## Straight Solder Termination (Stamped)

## Receptacle



For Product Features, Specifications,
Materials and Finishes, see pages 2-3.

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 274.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.


Hardware removed for clarity

## Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) |
| DD | 66,93 (2.635) | 52,42 (2,064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) |

## Straight Solder Termination (Machined) - European PC Tails

Plug


## Selection Guide

For Product Features, Specifications, Materials and Finishes, see pages 2-3.

## Reader's Resource

For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 274.
For panel cutouts, see page 221.
Part Numbers

| Shell Size | Layout | Through Hole | Standoff \# 4-40 UNC With Pushfit/Boardlock | Standoff M3 With Pushfit/Boardlock |
| :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DE9P-0L2-K87 | DEE9P-0L2-K87-146 | DEX9P-0L2-K87-146 |
| DA | 15 | DA15P-0L2-K87 | DAE15P-0L2-K87-146 | DAX15P-OL2-K87-146 |
| DB | 25 | DB25P-0L2-K87 | DBE25P-0L2-K87-146 | DBX25P-0L2-K87-146 |
| DC | 37 | DC37P-0L2-K87 | DCE37P-0L2-K87-146 | DCX37P-OL2-K87-146 |
| DD | 50 | DD50P-0L2-K87 | DDE50P-OL2-K87-146 | DDX50P-OL2-K87-146 |

Note: For performance class 2 add -A191. Example DA15P-OL2-A191-K87.

| PC Tail <br> Modifier | $\mathbf{X}$ <br> $\pm 0,30(.012)$ | $\mathbf{Y}$ <br> $\pm 0,30(.012)$ |
| :---: | :---: | :---: |
| OL2 | $5,20(.205)$ | $10,20(.401)$ |
| OL4 | $6,75(.266)$ | $11,80(.465)$ |

For hardware views (European),
see page 227.

Engaging Face
DD Configuration


Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0.25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(, 0145) \\ \hline \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

## Straight Solder Termination (Machined) - European PC Tails

Receptacle


Selection Guide
For Product Features, Specifications,
Materials and Finishes, see pages 2-3.

## Reader's Resource

For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 274.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.

Part Numbers

| Shell Size | Layout | Through Hole | Standoff \# 4-40 UNC With PushititBoardlock | Standoff M3 With Pushfit/Boardlock |
| :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DE9S-OL2-A197 | DEE9S-OL2-A197-146 | DEX9S-OL2-A197-146 |
| DA | 15 | DA155-OL2-A197 | DAE15S-0L2-A197-146 | DAX15S-0L2-A197-146 |
| DB | 25 | DB25S-OL2-A197 | DBE25S-0L2-A197-146 | DBX255-0L2-A197-146 |
| DC | 37 | DC37S-0L2-A197 | DCE37S-0L2-A197-146 | DCX375-0L2-A197-146 |
| DD | 50 | DD50S-OL2-A197 | DDE50S-0L2-A197-146 | DDX50S-OL2-A197-146 |

Note: For performance class 2 add -A191. Example DA15S-0L2-A191-A197

| PC Tail <br> Modifier | $\mathbf{X}$ | $\mathbf{Y}$ |
| :---: | :---: | :---: |
| $\pm 0,30(.012)$ | $\pm 0,30(.012)$ |  |
| OL2 | $5,20(.205)$ | $10,20(.401)$ |
| OL4 | $6,75(.266)$ | $11,80(.465)$ |

Engaging Face


Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathbf{E} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \mathbf{F} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { L } \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

## Wrap Post Termination

## Plug



## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 2-3.

## Reader's Resource

Part Numbers

| Shell Size | Layout | Through Hole |
| :---: | :---: | :---: |
| DE | 9 | DE9P-F179A-K87 |
| $D A$ | 15 | DA15P-F179A-K87 |
| $D B$ | 25 | DB25P-F179A-K87 |
| $D C$ | 37 | DC37P-F179A-K87 |
| $D D$ | 50 | DD50P-F179A-K87 |


| Modification <br> Code | Number of <br> Wraps | $\mathbf{X}$ <br> max. | $\mathbf{Y}(03)$ <br> $\pm 0,89(.035)$ |
| :---: | :---: | :---: | :---: |
| F179 | 2 | $10,21(.402)$ | $15,20(.598)$ |
| F179A | 3 | $13,61(.536)$ | $18,60(.732)$ |

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 274.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.


DD Configuration


Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,368(, 0145) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \text { L } \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,64 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,64 (.269) | 0,99 (.039) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,64 (.269) | 0,99 (.039) |

## Wrap Post Termination

## Receptacle



## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 2-3.

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 274.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.

Part Numbers

| Shell Size | Layout | Through Hole |
| :---: | :---: | :---: |
| $D E$ | 9 | DE9S-F179A-A197 |
| $D A$ | 15 | DA15S-F179A-A197 |
| $D B$ | 25 | DB25S-F179A-A197 |
| $D C$ | 37 | DC37S-F179A-A197 |
| $D D$ | 50 | DD50S-F179A-A197 |


| Modification <br> Code | Number of <br> Wraps | $\mathbf{X}$ <br> max. | $\mathbf{Y}$ <br> $\pm 0,89(.035)$ |
| :---: | :---: | :---: | :---: |
| F179 | 2 | $10,21(.402)$ | $15,20(.598)$ |
| F179A | 3 | $13,61(.536)$ | $18,60(.732)$ |



Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathbf{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { L } \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

## $\overline{D^{*}} \mathrm{M}-90^{\circ}$ Solder Termination (Machined) - Standard Footprint $.318 *$ or 283 inch * *



See pages 16-17.

D*M $90^{\circ}$ PCB connectors, designed to be comparable to MIL-C-24308 (except for finishes), for use with printed circuit boards in demanding applications. Additional contact lengths, hardware and finish options available; consult factory for details.

## Product Features

7.5 A current capacity

Machined contacts
Two contact finishes
Metal bracket with threaded insert standard Optional screw locks and boardlocks UL file number E8572
Dimensionally compatible with Combo D ${ }^{\text {® }}$

## ZED* - $90^{\circ}$ Solder Termination (Stamped) - Standard Footprint. 318 inch *



ZED* $90^{\circ}$ connectors are available for applications where price is the primary driver. They are available with integrated plastic brackets with Standard footprints.

## Product Features

Stamped contacts with 5 A current capacity Economical Plastic bracket with integrated boardlocks and grounding strap Optional screw locks

See pages 18-19.

D* $-90^{\circ}$ Solder Termination (Machined) - European Footprint $10,2 \bullet$ or $9,4 \mathrm{~mm} * *$


See pages 20-27.

D* $90^{\circ}$ connectors are available for high performance uses according to DIN 41652. Available with European footprint 1AON contacts, plastic and metal brackets, \# 4-40 or M3 threads and stamped pushfits/boardlocks. Contact finish available in 2 performance classes.

Product Features
High performance commercial class connectors
Two contact performance classes
Optional metal and plastic brackets, threaded standoffs, clinch nuts, and stamped pushfits/ boardlocks
Tin plated contact PC tails (pin \& socket)

## $\overline{\mathrm{ZD} *-90^{\circ}}$ Solder Termination (Stamped) - European Footprint 10,2 mm *



See pages 28-29.

ZD* $90^{\circ}$ connectors are available for applications where price is the primary driver. They are available with integrated plastic brackets with European footprints.

## Product Features

Stamped contacts with 5 A current capacity Economical
Plastic bracket with integrated boardlocks and grounding strap
Optional screw locks

## D Subminiature

| Specifications |
| :--- |
| Temperature |
| Rating$-55^{\circ} \mathrm{C}$ to $125^{\circ} \mathrm{C}$ <br> Current Rating <br> Contact <br> Resistance 55 millivolt max. at 7.5 A test <br> Cielectric <br> Current <br> Withstanding <br> Voltage 1000 VAC at Sea Level. |

Materials and Finishes

| Description | Material | Finish |
| :--- | :--- | :--- |
| Shell | Steel | Tin |
| Insulator | Thermoplastic, UL 94V-0 | None (Color: dark green) |
| Pin Contact | Copper Alloy | Gold over Nickel |
| Socket Contact | Copper Alloy | Gold over Nickel in mating area, <br> Tin on balance |
| Hardware (except Boardlocks) | Steel | Tin |
| Boardlocks | Copper Alloy | Tin |


| Specifications |
| :--- |
| Temperature |
| Rating $-55^{\circ} \mathrm{C}$ to $105^{\circ} \mathrm{C}$ |
| Current Rating 5 SA |
| Contact |
| Resistance $15 \mathrm{~m} \Omega$ |
| Dielectric |
| Withstanding |
| Voltage 1000 VAC at Sea Level |

Materials and Finishes

| Description | Material | Finish |
| :--- | :--- | :--- |
| Shell | Steel | Tin |
| Insulator | Thermoplastic, UL 94V-0 | None |
| Contacts | Copper Alloy | Gold over Nickel in mating area, <br> Tin on balance |

Specifications

Materials and Finishes
Temperature
Rating $-55^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}$
Current Rating
Contact
Resistance $10 \mathrm{~m} \Omega$
Dielectric
Withstanding
Voltage 1250 VAC at Sea Level

| Description | Material | Finish |
| :--- | :--- | :--- |
| Shell | Steel | Tin |
| Insulator | Thermoplastic, UL 94V-0 | None (Color: dark green) |
| Contacts | Copper Alloy | Gold over Nickel in mating area, <br> Tin on balance |
| Hardware | Steel or Plastic | Tin or None |
| Boardlocks | Copper Alloy | Tin |

Specifications

| Temperature |
| :--- |
| Rating $-55^{\circ} \mathrm{C}$ to $105^{\circ} \mathrm{C}$ |
| Current Rating |
| Contact |
| Resistance $15 \mathrm{~m} \Omega$ |
| Dielectric |
| Withstanding |
| Voltage 1000 VAC at Sea Level |

Materials and Finishes

| Description | Material | Finish |
| :--- | :--- | :--- |
| Shell | Steel | Tin |
| Insulator | Thermoplastic, UL 94V-0 | None |
| Contacts | Copper Alloy | Gold over Nickel in mating area, <br> Tin on balance |

$90^{\circ}$ Solder Termination (Machined) - Standard Footprint . 318 * or . 283 inch **

Plug


## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 14-15.

Part Numbers

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | | Bracket, |
| :---: |
|  |

Note: For contacts with 30 microinches gold substitute K127 for K87. Example: DAMG15PJ K127

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 272.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.
For alternate bracket configuration (when connectors are supplied without boardlocks),
see page 226.


Note: Dimension varies with alternate bracket configuration. See Reader's Resource page 226.
Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathbf{F} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(, 016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(, 010) \end{gathered}$ | $\begin{gathered} M \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{N} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) | 12,34 (.486) | 8,64 (.340) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) | 12,34 (.486) | 8,64 (.340) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) | 12,34 (.486) | 8,64 (.340) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) | 12,34 (.486) | 8,64 (.340) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) | 13,74 (.541) | 10,06 (.396) |

[^0]- Connector footprint measured from the rear shell.


## $90^{\circ}$ Solder Termination (Machined) - Standard Footprint . $318 *$ or .283 inch*

Receptacle


## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 14-15.

Part Numbers

| Shell Size | Layout | Bracket | Bracket \& Boardlock | Bracket \& Screw Lock \# 4-40 UNC | Bracket, Boardlock \& Screw Lock <br> \# 4-40 UNC |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DEMP9SJ A197 | DEMC9SJ A197 | DEMD9SJA197 | DEMG9SJA197 |
| DA | 15 | DAMP15SJA197 | DAMC15SJ A197 | DAMD15SJ A197 | DAMG15JJ A197 |
| DB | 25 | DBMP25SJA197 | DBMC25SJ A197 | DBMD25SJ A197 | DBMG25JJ A197 |
| DC | 37 | DCMP37SJ A197 | DCMC375J A197 | DCMD375J A197 | DCMG37JJ A197 |
| DD | 50 | DDMP50SJ A197 | DDMC50SJ A197 | DDMD50SJ A197 | DDMG50SJ A197 |

Note: For contacts with 30 microinches gold substitute K126 for A197. Example: DAMG15SJ K126

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 272.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.
For alternate bracket configuration (when
connectors are supplied without boardlocks),
see page 226 .


Note: Dimension varies with alternate bracket configuration. See Reader's Resource page 226.

## Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} M \\ \pm 0,25(, 010) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{N} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) | 12,34 (.486) | 8,64 (.340) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) | 12,34 (.486) | 8,64 (.340) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) | 12,34 (.486) | 8,64 (.340) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) | 12,34 (.486) | 8,64 (.340) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) | 13,74 (.541) | 10,06 (.396) |

- Connector footprint measured from the front shell.
- Connector footprint measured from the rear shell.


## $90^{\circ}$ Solder Termination (Stamped) - Standard Footprint .318 inch

Plug


## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 14-15.

Part Numbers

| Shell Size | Layout | Plastic Bracket, Integrated Grounding Strap, Boardlock, Threaded Insert \# 4-40 UNC | Plastic Bracket, Integrated Grounding Strap, Boardlock, Screw Lock \# 4-40 UNC |
| :---: | :---: | :---: | :---: |
| DE | 9 | ZEDELOPBA | ZEDE9PBA |
| DA | 15 | ZEDAL15PBA | ZEDA15PBA |
| DB | 25 | ZEDBL25PBA | ZEDB25PBA |
| DC | 37 | ZEDCL37PBA | ZEDC37PBA |

Note: For contacts with 30 microinches of gold add -30. Example: ZEDEL9PBA-30

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 272.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.


Dimensions

|  | A | B | C |
| :---: | :---: | :---: | :---: |
| Shell Size | $\pm 0,38(.015)$ | $\pm 0,25(.010)$ | $\pm 0,25(.010)$ |
| $D E$ | $30,89(1.216)$ | $16,92(.666)$ | $24,99(.984)$ |
| $D A$ | $39,09(1.539)$ | $25,25(.994)$ | $33,32(1.312)$ |
| $D B$ | $53,09(2.090)$ | $38,96(1.534)$ | $47,04(1.852)$ |
| $D C$ | $69,40(2.732)$ | $55,42(2.182)$ | $63,50(2.500)$ |

## $90^{\circ}$ Solder Termination (Stamped) - Standard Footprint. 318 inch

## Receptacle



## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 14-15.

Part Numbers

| Shell Size | Layout | Plastic Bracket, Integrated Grounding Strap, Boardlock, Threaded Insert \# 4-40 UNC | Plastic Bracket, Integrated Grounding Strap, Boardlock, Screw Lock \# 4-40 UNC |
| :---: | :---: | :---: | :---: |
| DE | 9 | ZEDEL.9SBA | ZEDE9SBA |
| DA | 15 | ZEDAL15SBA | ZEDA15SBA |
| DB | 25 | ZEDBL25SBA | ZEDB25SBA |
| DC | 37 | ZEDCL37SBA | ZEDC37SBA |

Note: For contacts with 30 microinches gold add -30. Example: ZEDEL9SBA-30

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 272.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.


Dimensions

| Shell Size | $\mathbf{A}$ | $\mathbf{B}$ |  |
| :---: | :---: | :---: | :---: |
| $\mathbf{0 , 3 8}(.015)$ | $\pm \mathbf{0 , 2 5 ( . 0 1 0 )}$ | $\mathbf{C}$ |  |
| $D E$ | $30,89(1.216)$ | $16,28(.641)$ | $24,99(.984)$ |
| $D A$ | $39,09(1.539)$ | $24,66(.971)$ | $33,32(1.312)$ |
| $D B$ | $53,09(2.090)$ | $38,38(1.511)$ | $47,04(1.852)$ |
| $D C$ | $69,40(2.732)$ | $54,84(2.159)$ | $63,50(2.500)$ |

## $90^{\circ}$ Solder Termination (Machined) - European Footprint 10,2 * or 9,4 mm * *

## Plug



Part Numbers

| Shell Size | Layout | Through Hole |
| :---: | :---: | :---: |
| $D E$ | 9 | DE9P-1AON-K87 |
| $D A$ | 15 | DA15P-1AON-K87 |
| $D B$ | 25 | DB25P-1AON-K87 |
| $D C$ | 37 | DC37P-1AON-K87 |
| $D D$ | 50 | DD50P-1AON-K87 |

Note: For performance class 2 add-A191. Example: DE9P-1AON-A191-K87

## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 14-15.

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.


Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

- Connector footprint measured from the front shell.
- Connector footprint measured from the rear shell.


## $90^{\circ}$ Solder Termination (Machined) - European Footprint 10,2 * or 9,4 mm * *

## Receptacle



## Part Numbers

| Shell Size | Layout | Through Hole |
| :---: | :---: | :---: |
| DE | 9 | DESS-1AON-A197 |
| DA | 15 | DA15S-AON-A197 |
| DB | 25 | DB25S-AAON-A197 |
| $D C$ | 37 | DC37S-AAON-A197 |
| $D D$ | 50 | DD50S-AAON-A197 |

Note: For performance class 2 add -A191. Example: DE9S-1AON-A191-A197

## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 14-15.

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.



## Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{array}{r} \text { B } \\ \pm 0,13(.005) \\ \hline \end{array}$ | $\begin{array}{r} \text { C } \\ \pm 0,13(.005) \\ \hline \end{array}$ | $\begin{array}{r} \hline D \\ \pm 0,13(.005) \\ \hline \end{array}$ | $\begin{array}{r} \hline \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{array}$ | $\begin{array}{r} \mathrm{F} \\ \pm 0,25(.010) \\ \hline \end{array}$ | $\begin{gathered} \hline \mathrm{W} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{array}{r} \hline \mathrm{L} \\ \pm 0,25(.010) \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76(.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

[^1]- Connector footprint measured from the rear shell.


## $90^{\circ}$ Solder Termination (Machined) with Metal Bracket - European Footprint 10,2 * or 9,4 * mm

Plug


## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 14-15.

Part Numbers

| Shell Size | Layout | Bushing with <br> Through Hole | Captive Nut <br> \#4-40 UNC | Captive Nut <br> M3 | Post <br> \#4-40 UNC |
| :---: | :---: | :--- | :--- | :---: | :---: |
| DE | 9 | DE9P-1AFN-K87 | DE9P-1A7N-K87 | DE9P-1A9N-K87 | DE9P-1A8N-K87 |
| DA | 15 | DA15P-1AFN-K87 | DA15P-1A7N-K87 | DA15P-1A9N-K87 | DA15P-1A8N-K87 |
| $D B$ | 25 | DB25P-1AFN-K87 | DB25P-1A7N-K87 | DB25P-1A9N-K87 | DB25P-1A8N-K87 |
| DC | 37 | DC37P-1AFN-K87 | DC37P-1A7N-K87 | DC37P-1A9N-K87 | DC37P-1A8N-K87 |
| DD | 50 | DD50P-1AFN-K87 | DD50P-1A7N-K87 | DD5OP-1A9N-K87 | DD50P-1A8N-K87 |

Notes: For pushfit/boardlock option add -146. Example: DE9P-1AFN-K87-146
For performance class 2 add -A191. Example: DE9P-1AFN-A191-K87

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.


## $90^{\circ}$ Solder Termination (Machined) with Metal Bracket - European Footprint 10,2 * or 9,4 * * mm



For Product Features, Specifications,
Materials and Finishes, see pages 14-15.

Part Numbers
$\left.\left.\begin{array}{cccccc}\hline \text { Shell Size } & \text { Layout } & \begin{array}{c}\text { Bushing with } \\ \text { Through Hole }\end{array} & \begin{array}{c}\text { Captive Nut } \\ \text { \#4-40 UNC }\end{array} & \text { Captive Nut } \\ \text { M3 }\end{array}\right] \begin{array}{c}\text { Post } \\ \text { \#4-40 UNC }\end{array}\right]$

Notes: For pushfit/boardlock option add -146. Example: DE9S-1AFN-A197-146
For performance class 2 add -A191. Example: DE9S-1AFN-A191-A197

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.


Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{array}{r} \text { C } \\ \pm 0,13(.005) \\ \hline \end{array}$ | $\begin{array}{r} \hline \text { D } \\ \pm 0,13(.005) \\ \hline \end{array}$ | $\begin{array}{r} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{array}$ | $\begin{gathered} \hline \mathbf{F} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathrm{W} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{array}{r} \hline \mathrm{L} \\ \pm 0,25(.010) \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

- Connector footprint measured from the front shell.
- Connector footprint measured from the rear shell.
$90^{\circ}$ Solder Termination (Machined) with Plastic Bracketand Grounding Strap - European Footprint 10,2 ${ }^{\bullet}$ or 9,4 mm

Plug


## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 14-15.

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.

Part Numbers

| Shell Size | Layout | Through Hole | Captive Nut <br> $\# 4-40$ UNC | Captive Nut <br> M3 | Post <br> \# 4-40 UNC |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DE9P-1ADN-K87 | DE9P-1AWN-K87 | DE9P-1AVN-K87 | DE9P-1AJ N-K87 |
| DA | 15 | DA15P-1ADN-K87 | DA15P-1AWN-K87 | DA15P-1AVN-K87 | DA15P-1AJ N-K87 |
| DB | 25 | DB25P-1ADN-K87 | DB25P-1AWN-K87 | DB25P-1AVN-K87 | DB25P-1AJ N-K87 |
| DC | 37 | DC37P-1ADN-K87 | DC37P-1AWN-K87 | DC37P-1AVN-K87 | DC37P-1AJN-K87 |
| DD | 50 | DD50P-1ADN-K87 | DD50P-1AWN-K87 | DD50P-1AVN-K87 | DD50P-1AJ N-K87 |

Notes: For pushfit/boardlock option add -146. Example: DE9P-1ADN-K87-146
For performance class 2 add -A191. Example: DE9P-1ADN-A191-K87


Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} D \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0.38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

[^2]- Connector footprint measured from the rear shell.


## $90^{\circ}$ Solder Termination (Machined) with Plastic Bracket and Grounding Strap - European Footprint 10,2 * or 9,4 mm

## Receptacle



## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 14-15.

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.

Part Numbers

| Shell Size | Layout | Through Hole | Captive Nut \# 4-40 UNC | Captive Nut M3 | $\begin{gathered} \text { Post } \\ \# 4-40 \text { UNC } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DE9S-1ADN-A197 | DE9S-1AWN-A197 | DE9S-1AVN-A197 | DE9S-1AJ N-A197 |
| DA | 15 | DA155-1ADN-A197 | DA155-1AWN-A197 | DA15S-1AVN-A197 | DA15S-1AJ N-A197 |
| DB | 25 | DB25S-1ADN-A197 | DB255-1AWN-A197 | DB25S-1AVN-A197 | DB25S-1AJ N-A197 |
| DC | 37 | DC375-1ADN-A197 | DC375-1AWN-A197 | DC37S-1AVN-A197 | DC375-1AJ N-A197 |
| DD | 50 | DD50S-1ADN-A197 | DD50S-1AWN-A197 | DD50S-1AVN-A197 | DD50S-1A] N-A197 |

Notes: For pushfit/boardlock option add -146. Example: DE9S-1ADN-A197-146
For performance class 2 add -A191. Example: DE9S-1ADN-A191-A197


## Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0.38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

[^3]- Connector footprint measured from the rear shell.
$90^{\circ}$ Solder Termination (Machined) with Plastic Bracket - European Footprint 10,2 * or 9,4 mm * *


## Plug



Part Numbers

| Shell Size | Layout | Through Hole | Captive Nut <br> \# 4-40 UNC | Captive Nut <br> M3 | Post <br> \# 4-40 UNC |
| :---: | :---: | :---: | :--- | :---: | :---: |
| DE | 9 | DE9P-1A5N-K87 | DE9P-1AUN-K87 | DE9P-1ATN-K87 | DE9P-1A6N-K87 |
| DA | 15 | DA15P-1A5N-K87 | DA15P-1AUN-K87 | DA15P-1ATN-K87 | DA15P-1A6N-K87 |
| DB | 25 | DB25P-1A5N-K87 | DB25P-1AUN-K87 | DB25P-1ATN-K87 | DB25P-1A6N-K87 |
| DC | 37 | DC37P-1A5N-K87 | DC37P-1AUN-K87 | DC37P-1ATN-K87 | DC37P-1A6N-K87 |
| DD | 50 | DD50P-1A5N-K87 | DD50P-1AUN-K87 | DD50P-1ATN-K87 | DD50P-1A6N-K87 |

Notes: For pushfit/boardlock option add -146. Example: DE9P-1A5N-K87-146
For performance class 2 add -A191. Example: DE9P-1A5N-A191-K87

## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 14-15.

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.


Dimensions

| Shell Size | $\begin{array}{r} \mathrm{A} \\ \pm 0,38(.015) \\ \hline \end{array}$ | $\begin{array}{r} \text { B } \\ \pm 0,13(.005) \\ \hline \end{array}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{array}{r} \hline \text { D } \\ \pm 0,13(.005) \\ \hline \end{array}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \mathbf{F} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \hline W \\ \pm 0,368(.145) \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathrm{W} \\ \pm 0,41(.016) \\ \hline \end{gathered}$ | $\begin{array}{r} \hline \text { L } \\ \pm 0,25(.010) \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

[^4]- Connector footprint measured from the rear shell.
$90^{\circ}$ Solder Termination (Machined) with Plastic Bracket - European Footprint 10,2• or 9,4 mm *


## Receptacle



## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 14-15.

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.

Part Numbers

| Shell Size | Layout | Through Hole | Captive Nut \# 4-40 UNC | Captive Nut M3 | $\begin{gathered} \text { Post } \\ \# 4-40 \text { UNC } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DE9S-1A5N-A197 | DE9S-1AUN-A197 | DE9S-1ATN-A197 | DE9S-1A6N-A197 |
| DA | 15 | DA15S-1A5N-A197 | DA155-1AUN-A197 | DA155-1ATN-A197 | DA155-1A6N-A197 |
| DB | 25 | DB25S-1A5N-A197 | DB25S-1AUN-A197 | DB25S-1ATN-A197 | DB255-1A6N-A197 |
| DC | 37 | DC37S-1A5N-A197 | DC375-1AUN-A197 | DC375-1ATN-A197 | DC375-1A6N-A197 |
| DD | 50 | DD50S-1A5N-A197 | DD50S-1AUN-A197 | DD50S-1ATN-A197 | DD505-1A6N-A197 |

Notes: For push/boardlock option add -146. Example: DE9S-1A5N-A197-146
For performance class 2 add -A191. Example: DE9S-1A5N-A191-A197


## Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{W} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DD | 66,93 (2,635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

[^5]- Connector footprint measured from the rear shell.
$90^{\circ}$ Solder Termination (Stamped) - European Footprint 10,2 mm
Plug


Selection Guide
For Product Features, Specifications,
Materials and Finishes, see pages 14-15.

Part Numbers

|  | Plastic Bracket, <br> Integrated Grounding <br> Strap, Boardlock, <br> Threaded <br> \#4-40 UNC | Plastic Bracket, <br> Integrated Grounding <br> Strap, Boardlock, <br> Screw Lock <br> \#4-40 UNC |  |
| :---: | :---: | :---: | :---: |
| Shell Size | Layout | 9 | ZDEL9P-1AKN-146 |

Note: For contacts with 30 microinches gold add -A191. Example: ZDELPP-1AKN-A191-146

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.


Dimensions

| Shell Size | $\mathbf{A}$ | $\mathbf{B}$ |  |
| :---: | :---: | :---: | :---: |
| $\mathbf{0 , 3 8}(.015)$ | $\pm \mathbf{0 , 2 5 ( . 0 1 0 )}$ | $\mathbf{C}$ |  |
| $D E$ | $30,89(1.216)$ | $16,92(.666)$ | $24,99(.984)$ |
| $D A$ | $39,09(1.539)$ | $25,25(.994)$ | $33,32(1.312)$ |
| $D B$ | $53,09(2.090)$ | $38,96(1.534)$ | $47,04(1.852)$ |
| $D C$ | $69,40(2.732)$ | $55,42(2.182)$ | $63,50(2.500)$ |

## $90^{\circ}$ Solder Termination (Stamped) - European Footprint 10,2 mm

## Receptacle



## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 14-15.

Part Numbers

|  | Layout | Plastic Bracket, <br> Integrated Grounding <br> Strap, Boardlock, <br> Threaded Insert <br> \# 4-40 UNC | Plastic Bracket, <br> Integrated Grounding <br> Strap, Boardlock, <br> Screw Lock <br> \# 4-40 UNC |
| :---: | :---: | :---: | :---: |
| Shell Size | 9 | ZDEL9S-1AKN-146 | ZDE9S-1AKN-146 |
| DE | 15 | ZDAL15S-1AKN-146 | ZDA15S-1AKN-146 |
| DA | 25 | ZDBL25S-1AKN-146 | ZDB25S-1AKN-146 |
| DB | 37 | ZDCL37S-1AKN-146 | ZDC37S-1AKN-146 |
| DC |  |  |  |

Note: For contacts with -A191 microinches gold add -A191. Example: ZDEL9S-1AKN-A191-146

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.


Engaging Face


## Dimensions

|  | A | B | B |
| :---: | :---: | :---: | :---: |
| Shell Size | $\pm 0,38(.015)$ | $\pm 0,25(.010)$ | $\pm 0,13(.005)$ |
| $D E$ | $30,89(1.216)$ | $16,33(.643)$ | $24,99(.984)$ |
| $D A$ | $39,09(1.539)$ | $24,66(.971)$ | $33,32(1.312)$ |
| $D B$ | $53,09(2.090)$ | $38,38(1.511)$ | $47,04(1.852)$ |
| $D C$ | $69,40(2.732)$ | $54,84(2.159)$ | $63,50(2.500)$ |

## D* - Solder Cup Termination (Machined) with Tin Shells



D* solder cup connectors are used for cable or panel mount wiring applications. Solder cup connectors provide maximum flexibility and performance for applications requiring discrete solder terminations and field repair without termination tooling.

## Product Features

Machined solder cup termination, 5 A current capacity
High performance commercial class
connectors
Two contact performance classes
Optional clinch nuts with \# 4-40 UNC or M3 threads

See pages 32-33.

## ZD* - Solder Cup Termination (Stamped) with Tin Shells



ZD* solder cup connectors are used for cable or panel mount wiring applications. Solder cup connectors provide maximum flexibility and performance for applications requiring discrete solder terminations.

## Product Features

Stamped solder cup termination, 5 A current capacity
Economical

See pages $34-35$.

## D*A - Crimp Connectors without Contacts



D*A crimp contact connectors are designed for reliable, fast cabling. Available in the industry standard D*A housing, the connectors provide a low-cost, quick cabling alternative compared to soldering.

## Product Features

Crimp contacts available in reels of 5,000
Application tooling:

- Hand or automatic
- Stripper crimper

See pages 36-37.

## $\overline{\text { D* }}$ - Discrete Wire IDC



The D*W connector provides insulation displacement connection technology for either solid or stranded wires. With $D^{* W}$, speed of cabling is increased significantly over solder cup or crimp solutions. Contacts are easily removable and replaceable. Several specialized accessories (including shield cans, ferrules, and plastic boots) are available to provide a complete product solution.

## Product Features

Quick harnessing capability with simple hand or semi-automatic tooling
Accepts 30 AWG to 20 AWG wire; sizes can be mixed
Shield cans insure reliable shielding continuity

| Specifications |
| :--- |
| Temperature |
| Rating $-55^{\circ} \mathrm{C}$ to $125^{\circ} \mathrm{C}$ |
| Current Rating $5 \mathrm{5A}$ |
| Contact |
| Resistance $10 \mathrm{~m} \Omega$ |
| Dielectric |
| Withstanding |
| Voltage 1250 VAC |

## Materials and Finishes

|  | Material | Finish |
| :--- | :--- | :--- |
| Shescription $/$ Hardware | Steel | Tin |
| Insulator | Thermoplastic, UL 94V-0 | None |
| Contacts | Copper Alloy | Gold over Nickel |

Voltage 1250 VAC

## Specifications

Temperature
Rating
Rating $-55^{\circ} \mathrm{C}$ to $105^{\circ} \mathrm{C}$
Current Rating 5 A
Contact
Resistance $15 \mathrm{~m} \Omega$
Dielectric
Withstanding
Voltage 1000 VAC at Sea Level

Specifications
Temperature
Rating $-55^{\circ} \mathrm{C}$ to $105^{\circ} \mathrm{C}$
Current Rating $5 \mathrm{~A}(20 \mathrm{AWG})$
Contact
Resistance $15 \mathrm{~m} \Omega$
Dielectric
Withstanding
Voltage 500 VAC at Sea Level

Materials and Finishes

| Description | Material | Finish |
| :--- | :--- | :--- |
| Shell | Steel | Tin |
| Insulator | Thermoplastic, UL 94V-0 | None |
| Contacts | Copper Alloy | Gold over Nickel |

Materials and Finishes

| Description | Material | Finish |
| :--- | :--- | :--- |
| Shell/Hardware | Steel | Tin |
| Insulator | Thermoplastic, UL 94V-0 | None |
| Contacts | Copper Alloy | Gold over Nickel |

Materials and Finishes

| Description | Material | Finish |
| :--- | :--- | :--- |
| Shell/Hardware | Steel | Tin |
| Insulator | Thermoplastic, UL 94V-0 | None |
| Contacts | Copper Alloy | Gold over Nickel in mating area, |

Contact
Resistance $15 \mathrm{~m} \Omega$
Dielectric Withstanding

Voltage 1000 VAC at Sea Level

## Solder Cup Termination (Machined) with Tin Shells

Plug


## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 30-31.
For Product Features, Specifications,
Materials and Finishes, see pages 30-31.

## Reader's Resource

For contact cavity arrangements, see page 224.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.

Part Numbers

| Shell Size | Layout | Through Hole | Clinch Nut <br> \#4-40 UNC | Clinch Nut <br> M3 |
| :---: | :---: | :---: | :--- | :--- |
| DE | 9 | DE9PK87 | DEE9PK87 | DEX9PK87 |
| DA | 15 | DA15PK87 | DAE15PK87 | DAX15PK87 |
| DB | 25 | DB25FK87 | DBE25P887 | DBX25FK87 |
| DC | 37 | DC37PK87 | DCE37PK87 | DCX37PK87 |
| DD | 50 | DD50PK87 | DDE50PK87 | DDX50PK87 |

Note: For performance class 2, add A191. Example: DA15PA191K87.

## Engaging Face

DD Configuration


Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(, 005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(, 005) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \quad \mathrm{F} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \\ \hline \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(, 010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

Solder Cup Termination (Machined) with Tin Shells

## Receptacle



## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 30-31.

## Reader's Resource

For contact cavity arrangements,
see page 224.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.

| Part Numbers |  |  |  |  |
| :---: | :---: | :---: | :--- | :--- |
| Shell Size | Layout | Through Hole | Clinch Nut <br> \#n4 | Clinch Nut <br> M3 |
| DE | 9 | DEESSA197 | DEESSA197 | DEX9SA197 |
| DA | 15 | DA15SA197 | DAE15SA197 | DAX15SA197 |
| DB | 25 | DB25SA197 | DBE25SA197 | DBX25SA197 |
| DC | 37 | DC37SA197 | DCE37SA197 | DCX37SA197 |
| DD | 50 | DD50SA197 | DDE50SA197 | DDX50SA197 |

Note: For performance class 2, add A191. Example: DA15SA191A197.


Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(, 005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathbf{F} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

## Solder Cup Termination (Stamped) with Tin Shells

## Plug

## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 30-31.

## Reader's Resource

For contact cavity arrangements,
Part Numbers

| Shell Size | Layout | Through Hole |
| :---: | :---: | :---: |
| $D E$ | 9 | ZDE9P |
| $D A$ | 15 | ZDA15P |
| $D B$ | 25 | ZDB25P |
| $D C$ | 37 | ZDC37P |
| $D D$ | 50 | ZDD50P |

see page 224.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.

## Engaging Face



DD Configuration


Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,317(.0125) \end{gathered}$ | $\begin{gathered} \text { K } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \text { L } \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |

## Solder Cup Termination (Stamped) with Tin Shells

## Receptacle



Part Numbers

| Shell Size | Layout | Through Hole |
| :---: | :---: | :---: |
| DE | 9 | ZDE9S |
| DA | 15 | ZDA15S |
| DB | 25 | ZDB25S |
| DC | 37 | ZDC37S |
| DD | 50 | ZDD50S |

## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 30-31.

## Reader's Resource

For contact cavity arrangements, see page 224.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.


DD Configuration


Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\underset{ \pm 0,13(.005)}{\text { C }}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} E \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{W} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,318(.0125) \end{gathered}$ | $\begin{gathered} \text { L } \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |

## Crimp Connectors without Contacts



Part Numbers

| Shell Size | Layout | Through Hole |
| :---: | :---: | :--- |
| DE | 9 | DEA9PK87FO |
| $D A$ | 15 | DAA15PK87FO |
| $D B$ | 25 | DBA25PK87FO |
| $D C$ | 37 | DCA37PK87FO |

Note: For crimp (size 20) contacts and tooling, see pages $83 \& 275$.

## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 30-31.

## Reader's Resource

For contact cavity arrangements,
see page 224.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.


Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathbf{F} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,317(.0125) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |

## Crimp Connectors without Contacts

| Receptacle | Part Numbers |  |  |
| :---: | :---: | :---: | :---: |
|  | Shell Size | Layout | Through Hole |
|  | DE | 9 | DEA9SA197FO |
|  | DA | 15 | DAA15SA197F0 |
|  | DB | 25 | DBA25SA197F0 |
|  | DC | 37 | DCA37SA197F0 |

Note: For crimp (size 20) contacts and tooling, see pages $83 \& 275$.

## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 30-31.

## Reader's Resource

For contact cavity arrangements,
see page 224.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.

## Engaging Face



Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { K } \\ \pm 0,318(.0125) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |

## Discrete Wire IDC



## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 30-31.

## Reader's Resource

For contact cavity arrangements,
see page 224.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.

Part Numbers

| Shell Size | Layout | Through Hole | Clinch Nut <br> \# 4-40 UNC | Through Hole <br> \& Shield Can Kit | Clinch Nut \# 4-40 UNC <br> \& Shield Can Kit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DEW9P* | DEWE9P* | DEW9P*G | DEWE9P*G |
| DA | 15 | DAW15P* | DAWE15P* | DAW15P*G | DAWE15P*G |
| DB | 25 | DBW25P* | DBWE25P* | DBW25P*G | DBWE25P*G |
| DC | 37 | DCW37P* | DCWE37P* | DCW37P*G | DCWE37P*G |

Note: *Insert contact type. Example: DEW9P1.
For contacts with $0,76 \mu \mathrm{~m}$ gold add -A176. Example: DEW9P1-A176.
For shield can kit, see page 40.

| Contact Types* | Wire Accommodation |
| :---: | :---: |
| 1 | 28 AWG/30 AWG |
| 2 | 22 AWG/26 AWG |
| 3 | 20 AWG/22 AWG |

For more information, see pages 40-41.


Rear Face


## Dimensions

| Shell Size | Layout | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,12(, 005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,12(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} E \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\underset{\max .}{G}$ | $\begin{gathered} \mathrm{H} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \text { J } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(, 010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DEW | 9 | 30,81 (1.213) | 16,91 (.666) | 24,99 (.984) | 8,35 (.329) | 12,55 (.494) | 10,71 (.422) | 6,05 (.238) | 19,27 (.759) | 10,71 (.422) | 0,76 (.030) |
| DAW | 15 | 39,14 (1.541) | 25,54 (.994) | 33,32 (1.312) | 8,35 (.329) | 12,55 (.494) | 10,71 (.422) | 6,05 (.238) | 27,50 (1.083) | 10,71 (.422) | 0,76 (.030) |
| DBW | 25 | 53,03 (2.048) | 38,96 (1.534) | 47,04 (1.852) | 8,35 (.329) | 12,55 (.494) | 10,82 (.426) | 5,99 (.236) | 41,27 (1.625) | 10,71 (.422) | 0,99 (.039) |
| DCW | 37 | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,35 (.329) | 12,55 (.494) | 10,82 (.426) | 5,99 (.236) | 57,70 (2.272) | 10,71 (.422) | 0,99 (.039) |

## Discrete Wire IDC

## Receptacle



## Selection Guide

For Product Features, Specifications,
Materials and Finishes, see pages 30-31.

## Reader's Resource

For contact cavity arrangements, see page 224.
For panel cutouts, see page 221. For hardware views (European), see page 227.

Part Numbers

| Shell Size | Layout | Through Hole | $\begin{aligned} & \text { Clinch Nut } \\ & \# 4-40 \text { UNC } \end{aligned}$ | Through Hole \& Shield Can Kit | Clinch Nut \# 4-40 UNC \& Shield Can Kit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DEW9S* | DEWE9S* | DEW95*G | DEWE9S*G |
| DA | 15 | DAW155* | DAWE15S* | DAW155*G | DAWE155*G |
| DB | 25 | DBW25s* | DBWE25S* | DBW255*G | DBWE255*G |
| DC | 37 | DCW375* | DCWE375* | DCW375*G | DCWE375*G |

Note: *Insert contact type. Example: DEW9S1.
For contacts with $0,76 \mu \mathrm{~m}$ gold add -A176. Example: DEW9S1-A176. For shield can kit, see page 40 .

| Contact Types* | Wire Accommodation |
| :---: | :---: |
| 1 | 28 AWG/30 AWG |
| 2 | 22 AWG/26 AWG |
| 3 | 20 AWG/22 AWG |

For more information, see pages 40-41.

## Engaging Face



## Dimensions

| Shell Size | Layout | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathrm{B} \\ \pm 0,12(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,12(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { D } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{F} \\ \pm 0,25(.010) \end{gathered}$ | $\underset{\text { max. }}{\substack{G \\ \hline}}$ | $\begin{gathered} \mathrm{H} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{array}{r} \mathrm{J} \\ \pm 0,25(.010) \\ \hline \end{array}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DEW | 9 | 30,81 (1.213) | 16,33(.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,89 (.429) | 6,30 (.248) | 19,27(.759) | 10,71 (.422) | 0,76 (.030) |
| DAW | 15 | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,89 (.429) | 6,30 (.248) | 27,50 (1.083) | 10,71 (.422) | 0,76 (.030) |
| DBW | 25 | 53,03 (2.048) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,89 (.429) | 6,30 (.248) | 41,27 (1.625) | 10,71 (.422) | 0,76 (.030) |
| DCW | 37 | 69,32 (2.729) | 55,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,89 (.429) | 6,30 (.248) | 57,70 (2.272) | 10,71 (.422) | 0,76(.030) |

## Shield Can Kit




## Ferrule



Wire Trim Dimensions



Crimp Tool Positions

## Discrete Wire IDC Contacts

| Contacts |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Contact Types | 1 |  | 2 |  |  | 3 |  |
| Pin | 330-8753-101 |  | 330-8753-102 |  |  | 330-8753-103 |  |
| Socket | 330-8754-101 |  | 330-8754-102 |  |  | 330-8754-103 |  |
| Solid Cable |  |  |  |  |  |  |  |
| Wire Size | 28 AWG | 30 AWG | 22 AWG | 24 AWG | 26 AWG | 20 AWG | 22 AWG |
| Section $\mathrm{mm}^{2}$ | 0.08 | 0.05 | 0.34 | 0.22 | 0.12 | 0.60 | 0.34 |
| Internal dia. mm max | 0.32 | 0.26 | 0.62 | 0.51 | 0.40 | 0.88 | 0.62 |
| External dia. mm max | 1.30 | 1.20 | 1.45 | 1.45 | 1.40 | 1.45 | 1.45 |
| Stranded Cable |  |  |  |  |  |  |  |
| Wire Size | 28 AWG | 30 AWG | 22 AWG | 24 AWG | 26 AWG | 20 AWG | 22 AWG |
| Section $\mathrm{mm}^{2}$ | 0.09 | 0.05 | 0.34 | 0.22 | 0.12 | 0.60 | 0.34 |
| Composition | $7 \times 0.13$ | $7 \times 0.10$ | $7 \times 0.25$ | $7 \times 0.20$ | $7 \times 0.15$ | $19 \times 0.20$ | $7 \times 0.25$ |
| Internal cable dia. mm max | 0.40 | 0.30 | 0.75 | 0.60 | 0.45 | 0.97 | 0.75 |
| External wire dia. mm max | 1.30 | 1.20 | 1.45 | 1.45 | 1.40 | 1.45 | 1.45 |

## Insulation Displacement Connection Concept



## Tooling



| Part Number |
| :---: |
| DW115394 |


| Part Number |
| :---: |
| Standard Tool: DW115394-1 |
| Automatic Tool: DW115394-2 |
| Tool Support: DW115394-20 |

ITT Cannon
Selection Index ..... Page
Combo D
An Introduction ..... 43
Combo D® PCB Connectors with Coaxial 75 Ohm Contacts ( 50 Ohm Option) Coaxial $90^{\circ}$ - Standard Footprint .318 * or $.283^{*}$ inch (Sizes DE-DC) ..... 44
Coaxial $90^{\circ}$ - Standard Footprint . 489 * or $.454 *$ inch (Size DD) ..... 46
13C3 Special - Receptacle Only ..... 48
3C3 Shielded Special - Receptacle Only ..... 49
Coaxial $90^{\circ}$ - European Footprint $10,2^{\star}$ or $9,4 \star$ mm (Sizes DE-DC) ..... 50
Coaxial Straight - Standard PC Tails (Sizes DE-DC) ..... 52
Coaxial Straight - Standard PC Tails (Size DD) ..... 54
Coaxial Straight - European PC Tails (Sizes DE-DC) ..... 56
Coaxial Straight - European PC Tails (Size DD) ..... 58
Combo D ${ }^{\oplus}$ PCB Connectors with High Power Contacts
40 A High Power $90^{\circ}$ - Standard Footprint . 489 or . 454 * inch (Sizes DE-DC) ..... 60
40 A High Power $90^{\circ}$ - Standard Footprint $489 \star$ or $.454^{\star *}$ inch (Size DD) ..... 62
40 A High Power $90^{\circ}$ - European Footprint $10,2 \star$ or $9,4 \star$ mm (Sizes DE-DC) ..... 64
40 A High Power Straight - Standard PC Tails (Sizes DE-DC) ..... 66
40 A High Power Straight - Standard PC Tails (Size DD) ..... 68
40 A High Power Straight - European PC Tails (Sizes DE-DC) ..... 70
40 A High Power Straight - European PC Tails (Size DD) ..... 72
Combo D ${ }^{\text {® }}$ PCB Connectors with (Size 20) Signal Contacts Only
$90^{\circ}$ - European Footprint 10,2 or 9,4 * mm (Sizes DE-DD) ..... 74
Straight PC Tails - European (Sizes DE-DD) ..... 76
Solder Cup (Sizes DE-DD) ..... 78
Combo D® PCB Crimp Connectors without Contacts (Sizes DA-DD) ..... 80
Loose Contacts and Tooling
Shield Cans and Crimp Tooling ..... 82
Crimp (Size 20) Contacts and Tooling ..... 83
Cable (Size 8) Loose Contacts
Coaxial 75 Ohm and Tooling - Straight Stamped Crimp/Crimp ..... 84
Coaxial 75 Ohm and Tooling - $90^{\circ}$ Crimp Braid/Solder Center Contact ..... 85
Coaxial 50 Ohm - Straight Crimp or Solder Braid ..... 86
Coaxial 50 Ohm - $90^{\circ}$ Crimp or Solder Braid ..... 87
Insertion/Extraction Instructions for Coaxial, High Power and High Voltage Contacts and Tooling ..... 88
Coaxial Assembly Instructions and Crimp Tooling ..... 89
High Power and Tooling - Straight Solder or Crimp ..... 90
High Voltage - Straight $/ 90^{\circ}$ ..... 91
PCB (Size 8) Loose Contacts
Coaxial 75 Ohm - Straight / $90^{\circ}$ ..... 92
High Power - Straight / $90^{\circ}$ ..... 93
High Voltage - Straight ..... 94
PCB Guide Pin and Socket ..... 95

[^6]- Connector footprint measured from rear shell.


## D Subminiature

Combination D Subminiature connectors offer the advantages of an industry standard shield I/O interconnect, with the flexibility of a customized special, designed for any application.

This connector system is ideal for applications that require optimization of space while improving overall shielding. Combo $\mathrm{D}^{\circledR}$ accomplishes this by combining multiple interconnect types into one fully shielded product, decreasing the number I/O interfaces and reducing the possibility of EMI/RFI leakage.

By continually investing in engineering and manufacturing technology, ITT Cannon has improved the performance and features of this popular product. This catalog contains our latest efforts to meet the global requirements of the commercial electronics industry with a flexible, reliable and cost effective connector solution.

## Applications

Video Coaxial Transmission ( $75 \Omega$ )
RF and Telecom Transmission ( $50 \Omega$ )
Power Interconnects (Up to 40 A)


## Product Features

Standard and European Footprints Pre-Installed $75 \Omega / 50 \Omega$ Coaxial or High Power contacts (One Part Number) Vertical Standoffs or $90^{\circ}$ Brackets
$90^{\circ}$ or Straight PCB
PC Boards up to 3,2 (.125) Thick
PCB Variants Available with Boardlocks and/or Screw Locks (\#4-40 or M3)

## Specifications

| Temperature Rating | $-55^{\circ} \mathrm{C}$ to $125^{\circ} \mathrm{C}$ | Coaxial VSWR | Less than $1.30+.03 \mathrm{~F}$ for F up to 500 MHz |
| :---: | :---: | :---: | :---: |
| Signal Contact Current Rating | 7.5 A current capacity | Coaxial Insertion Loss | . 3 dB loss at 500 MHz |
| Signal Contact Resistance | 55 millivolt max. at 7.5 test current | High Power Current Rating | Up to 40 A |
| Signal Contact Dielectric Withstanding Voltage | 1250 VAC at Sea Level | High Power Dielectric Withstanding Voltage | 1000 VAC at Sea Level |
| Coaxial Current Rating | 5 A | High Voltage Current Rating | 5 A |
| Coaxial Dielectric Withstanding Voltage | 1000 VAC at Sea Level | High Voltage Contact |  |
| Coaxial Impedance | $75 \Omega$ or $50 \Omega$ | Dielectric Withstanding Voltage | 2800 V at Sea Level |

## Materials and Finishes

Connector Assembly

| Description | Material | Finish/Treatment |
| :--- | :--- | :--- |
| Shell | Steel | Tin |
| Insulator | Black Polyester, UL 94V-0 | None |
| Pin Contact | Copper Alloy | Gold over Nickel |
| Socket Contact | Copper Alloy | Gold over Nickel in mating area, Tin on balance |
| Standoff | Stainless Steel | Passivated |
| Bracket | Steel | Tin |
| Rivnut | Steel | Tin |
| Boardlock | Copper Alloy | Tin |

## Coaxial/High Power/High Voltage Contact Assemblies

| Contacts and outer shells | Copper Alloy | Gold over Nickel (Tin on coax ground PC tails) |
| :--- | :--- | :--- |
| Ring, Retaining | Copper Alloy | Nickel |
| Insulator (Coaxial only) | Teflon | None |
| Insulator (High Voltage only) | Thermoplastic | None |

U.L. File Number: E8572

## Coaxial $90^{\circ}-$ Standard Footprint. $318 *$ or .283 inch $\bullet$ (Sizes DE-DC)

Plug


Reader's Resource
For contact cavity arrangements, see page 222.
For P.C. hole patterns, see pages 228-229. For panel cutouts, see page 221.
For hardware views (Standard), see page 226. For alternate bracket configuration (when connectors are supplied without boardlocks), see page 226.
For alternate 50 Ohm coaxial configuration, see page 225.

75 Ohm Part Numbers* with Metal Bracket and Rivnut \# 4-40 UNC

| Shell Size | Layout | Withoutt Screw Lock <br> Without Boardlocks | Part Number <br> Without Screw Locks <br> With | Part Nuardlocks | With Screwber Locks <br> Without Boardlocks |
| :---: | :---: | :---: | :--- | :--- | :--- | | Part Number |
| :---: |
| With Screw Locks |
| With Boardlocks |

Notes: * For 50 Ohm Coaxial substitute X for C. Example: DEMP5X1PJ K87
For contacts with 30 microinches gold substitute K127 for K87. Example: DEMP5C1PJ K127
For DD shell sizes, see page 46.
\& Keyed.


Screw lock, boardlock, and coaxial contact removed for clarity

Note: Dimension varies with alternate bracket configuration, see Reader's Resource page 226.

## Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

[^7]- Connector footprint measured from the rear shell.


## Coaxial $90^{\circ}-$ Standard Footprint $318 *$ or .283 inch * (Sizes DE-DC)

Receptacle


## Reader's Resource

For contact cavity arrangements, see page 223.
For P.C. hole patterns, see pages 231-232. For panel cutouts, see page 221.
For hardware views (Standard), see page 226. For alternate bracket configuration (when connectors are supplied without boardlocks), see page 226 .
For alternate 50 Ohm coaxial configuration, see page 225 .

75 Ohm Part Numbers* with Metal Bracket and Rivnut \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks Without Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEMP5C1SJ A197 | DEMC5C1SJA197 | DEMD5C1SJA197 | DEMG5C1SJ A197 |
| DA | 7W2 | DAMP7C2SJA197 | DAMC7C2SJA197 | DAMD7C2SJA197 | DAMG7C2SJA197 |
| DA | 11W1 | DAMP11C1SJA197 | DAMC11C1SJ A197 | DAMD11C1SJ A197 | DAMG11C1S A197 |
| DA | 3W3 | DAMP3C3SJA197 | DAMC3C3SJA197 | DAMD3C3SJA197 | DAMG3C3SJA197 |
| DA | 3WK3¢ | DAMP3CK3SJ A197TM | DAMC3CK3SJ A197TM | DAMD3CK3JJA197TM | DAMG3CK3SJA197TM |
| DB | 5W5 | DBMP5C5SJA197 | DBMC5C5SJA197 | DBMD5C5SJA197 | DBMG5C5SJ A197 |
| DB | 9W4 | DBMP9C4SJ A197 | DBMC9C4SJ A197 | DBMD9C4SJA197 | DBMG9C4SJ A197 |
| DB | 13W3 | DBMP13C3SJ A197 | DBMC13C3SJA197 | DBMD13C3S A197 | DBMG13C3SJ A197 |
| DB | 17W2 | DBMP17C2SJA197 | DBMC17C2SJA197 | DBMD17C2SJA197 | DBMG17C2SJ A197 |
| DB | 21W1 | DBMP21C1SJA197 | DBMC21C1SJ A197 | DBMD21C1SJ A197 | DBMG21C1SJ A197 |
| DC | 8W8 | DCMP8C8SJA197 | DCMC8C8SJA197 | DCMD8C8SJA197 | DCMG8C8SJ A197 |
| DC | 13W6 | DCMP13C6SJ A197 | DCMC13C6SJ A197 | DCMD13C6SJ A197 | DCMG13C6SJ A197 |
| DC | 17W5 | DCMP17C5SJA197 | DCMC17C5SJA197 | DCMD17C5SJ A197 | DCMG17C5SJ A197 |
| DC | 21WA4 | DCMP21CA4SJ A197 | DCMC21CA4S A197 | DCMD21CA4SJ A197 | DCMG21CA4SJ A197 |
| DC | 25W3 | DCMP25C3SJ A197 | DCMC25C3SJA197 | DCMD25C3SJ A197 | DCMG25C3SJ A197 |
| DC | 27W2 | DCMP27C2SJ A197 | DCMC27C2SJA197 | DCMD27C2SJ A197 | DCMG27C2SJ A197 |

Notes: * For 50 Ohm Coaxial substitute X for C. Example: DEMP5X1SJ A197
For contacts with 30 microinches gold substitute K126 for A197. Example: DEMP5C1SJ K126
For DD Shell Sizes, see page 47.
\& Keyed.


Screw lock, boardlock and signal contacts removed for clarity
 removed for clarity

Note: Dimension varies with alternate bracket configuration, See Reader's Resource page 226.

## Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \mathbf{F} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47.04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

[^8]- Connector footprint measured from the rear shell.


## Coaxial $90^{\circ}-$ Standard Footprint. $489 *$ or 454 inch * (Size DD)

Plug


## Reader's Resource

For contact cavity arrangements,
see page 222.
For P.C. hole patterns, see page 230.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.
For alternate bracket configuration (when connectors are supplied without boardlocks), see page 226.
For alternate 500 hm coaxial configuration,
see page 225.

75 Ohm Part Numbers* with Metal Bracket and Rivnut \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks Without Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 24W7 | DDMP24C7PJ K87 | DDMC24C7PJ K87 | DDMD24C7PJ K87 | DDMG24C7PJ K87 |
| DD | 36 W 4 | DDMP36C4PJ K87 | DDMC36C4PJ K87 | DDMD36C4PJ K87 | DDMG36C4PJ K87 |
| DD | 43W2 | DDMP43C2P) K87 | DDMC43C2PJ K87 | DDMD43C2PJ K87 | DDMG43C2PJ K87 |
| DD | 47W1 | DDMP47C1P K 87 | DDMC47C1PJ K87 | DDMD47C1PJ K87 | DDMG47C1PJ K87 |

Notes: * For 50 Ohm Coaxial substitute X for C. Example: DDMG36X4PJ K87
For contacts with 30 microinches gold substitute K127 for K87. Example: DDMP24C7PJ K127


Screw lock, boardlock, and coaxial contacts
removed for clarity


Screw lock, boardlock, and signal contacts removed for clarity

Note: Dimension varies with alternate bracket configuration, See Reader's Resource page 226.
Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{B} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | 6,84 (.269) | 0,99 (.039) |

[^9]- Connector footprint measured from the rear shell.


## Coaxial $90^{\circ}-$ Standard Footprint . 489 * or . 454 inch * (Size DD)

Receptacle


## Reader's Resource

For contact cavity arrangements,
see page 223.
For P.C. hole patterns, see page 233.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.
For alternate bracket configuration (when connectors are supplied without boardlocks), see page 226.
For alternate 50 Ohm coaxial configuration, see page 225.

75 Ohm Part Numbers* with Metal Bracket and Rivnut \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks Without Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 24W7 | DDMP24C75 A197 | DDMC24C7SJ A197 | DDMD24C75 A197 | DDMG24C7SJ A197 |
| DD | 36W4 | DDMP36C4SJ A197 | DDMC36C4SJ A197 | DDMD36C4SJ A197 | DDMG36C4SJ A197 |
| DD | 43W2 | DDMP43C2SJ A197 | DDMC43C2SJ A197 | DDMD43C2SJA197 | DDMG43C2SJ A197 |
| DD | 47W1 | DDMP47C1S A197 | DDMC47C1S A197 | DDMD47C1S A197 | DDMG47C1SJ A197 |

Notes: * For 50 Ohm Coaxial substitute X for C. Example: DDMG36X4SJ A197
For contacts with 30 microinches gold substitute K126 for A197. Example: DDMP24C7SJ K126
 boardlock, and signa
removed for clarity
Screw lock, boardlock, and coaxial contact removed for clarity


Screw lock, boardlock, and signal contacts -

Note: Dimension varies with alternate bracket configuration, See Reader's Resource page 226.

## Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 66,93 (2,635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

[^10]- Connector footprint measured from the rear shell.

13C3 Special - Receptacle only

Receptacle $\quad \frac{\text { Finishes }}{\text { Signal and Coaxial }} \quad$| Part Number |
| :--- |

## Reader's Resource

For contact cavity arrangements, see page 223.
For P.C. hole patterns, see page 236 (Rear shell REF. is 0,76 (.030) from front shell). For panel cutouts, see page 221.

Signal and Coaxial

Note: For additional materials and finishes, see introduction page 43.

Engaging Face


3 3C3 Shielded Special - Receptacle only


| Materials and F |  | Part Number |
| :---: | :---: | :---: |
| Body Material: | Znc | DAM53512-1405 |
| Body Finish: | Tin |  |
| Coaxial Center Contact Finish: | $30 \mu$ inches Gold |  |
| Note: For additional page 43. | and finishes, see introduction |  |

## Reader's Resource

For contact cavity arrangements, see page 223.
For P.C. hole patterns, see page 231.
For panel cutouts, see page 221.


Note: Connector supplied with boardlocks.
Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,17 (.243) |

## Coaxial $90^{\circ}$ - European Footprint $10,2 \bullet$ or $9,4 \mathrm{~mm} \bullet$ * (Sizes DE-DC)



## Reader's Resource

For contact cavity arrangements,
see page 222.
For P.C. hole patterns, see page 234-235.
For panel cutouts, see page 221.
For alternate bracket configuration (when connectors are supplied without boardlocks), see page 226 .
For alternate 50 Ohm coaxial configuration, see page 225.

75 Ohm Part Numbers* with Metal Bracket and Rivnut \# 4-40 UNC

| Shell Size | Layout | Part Number <br> Without Screw Locks <br> Without Boardlocks | Part Number <br> Without Screw Locks <br> With Boardlocks | Part Number <br> With Screw Locks <br> Without Boardlocks | Part Number <br> With Screw Locks <br> With Boardlocks |
| :---: | :---: | :--- | :--- | :--- | :--- |
| DE | $5 W 1$ | DEMP5C1PVK87 | DEMC5C1PVK87 | DEMD5C1PVK87 | DEMG5C1PVK87 |
| DA | 7W2 | DAMP7C2PVK87 | DAMC7C2PVK87 | DAMD7C2PVK87 | DAMG7C2PVK87 |
| DA | $11 W 1$ | DAMP11C1PVK87 | DAMC11C1PVK87 | DAMD11C1PVK87 | DAMG11C1PVK87 |
| DA | $3 W 3$ | DAMP3C3PVK87 | DAMC3C3PVK87 | DAMD3C3PVK87 | DAMG3C3PVK87 |
| DA | $3 W K 3 \& ~$ | DAMP3CK3PVK87TM | DAMC3CK3PVK87TM | DAMD3CK3PVK87TM | DAMG3CK3PVK87TM |
| DB | $5 W 5$ | DBMP5C5PVK87 | DBMC5C5PVK87 | DBMD5C5PVK87 | DBMG5C5PVK87 |
| DB | $9 W 4 ~$ | DBMP9C4PVK87 | DBMC9C4PVK87 | DBMD9C4PVK87 | DBMG9C4PVK87 |
| DB | $13 W 3$ | DBMP13C3PVK87 | DBMC13C3PVK87 | DBMD13C3PVK87 | DBMG13C3PVK87 |
| DB | $17 W 2 ~$ | DBMP17C2PVK87 | DBMC17C2PVK87 | DBMD17C2PVK87 | DBMG17C2PVK87 |
| DB | $21 W 1 ~$ | DBMP21C1PVK87 | DBMC21C1PVK87 | DBMD21C1PVK87 | DBMG21C1PVK87 |
| DC | $8 W 8$ | DCMP8C8PVK87 | DCMC8C8PVK87 | DCMD8C8PVK87 | DCMG8C8PVK87 |
| DC | $13 W 6 ~$ | DCMP13C6PVK87 | DCMC13C6PVK87 | DCMD13C6PVK87 | DCMG13C6PVK87 |
| DC | $17 W 5 ~$ | DCMP17C5PVK87 | DCMC17C5PVK87 | DCMD17C5PVK87 | DCMG17C5PVK87 |
| DC | $21 W A 4 ~$ | DCMP21CA4PVK87 | DCMC21CA4PVK87 | DCMD21CA4PVK87 | DCMG21CA4PVK87 |
| DC | $25 W 3 ~$ | DCMP25C3PVK87 | DCMC25C3PVK87 | DCMD25C3PVK87 | DCMG25C3PVK87 |
| DC | $27 W 2 ~$ | DCMP27C2PVK87 | DCMC27C2PVK87 | DCMD27C2PVK87 | DCMG27C2PVK87 |

For M3 threads replace MP with MS, MC with ML, MD with MO, MG with MJ
Notes: * For 50 Ohm Coaxial substitute X for C. Example: DEMP5X1PVK87
For tin plated PC tails add A226 (signal contacts only). Example: DEMP5C1PVK87A226
For performance class 2 substitute K127 for K87. Example: DEMP5C1PVK127
For DD shell sizes (Standard footprint) see page 46.
of Keyed


Note: Dimension varies with alternate bracket configuration, see Reader's Resource page 226.
Dimensions

| Shell Size | $\begin{gathered} A \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} { }^{C} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathbf{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \text { L } \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

- Connector footprint measured from the front shell.
- Connector footprint measured from the rear shell.

| Coaxial $90^{\circ}$ - European Footprint 10,2 ${ }^{\text {a }}$ 9,4 mm * (Sizes DE-DC) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Receptacle | 75 Ohm Part Numbers* with Metal Bracket and Rivnut \# 4-40 UNC |  |  |  |  |  |
|  | Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks Without Boardlocks | Part Number With Screw Locks With Boardlocks |
|  | DE | 5W1 | DEMP5C1SVA197 | DEMC5C1SVA197 | DEMD5C1SVA197 | DEMG5C1SVA197 |
|  | DA | 7W2 | DAMP7C2SVA197 | DAMC7C2SVA197 | DAMDTC2SVA197 | DAMG7C2SVA197 |
|  | DA | 11W1 | DAMP11C1SVA197 | DAMC11C1SVA197 | DAMD11C1SVA197 | DAMG11C1SVA197 |
|  | DA | 3W3 | DAMP3C3SVA197 | DAMC3C35VA197 | DAMD3C3SVA197 | DAMG3C3SVA197 |
|  | DA | 3WK3¢ | DAMP3CK3SVA197TM | DAMC3CK3SVA197TM | DAMD3CK3SVA197TM | DAMG3CK3SVA197TM |
|  | DB | 5W5 | DBMP5C55VA197 | DBMC5C55VA197 | DBMD5C55VA197 | DBMG5C55VA197 |
|  | DB | 9W4 | DBMP9C4SVA197 | DBMC9C4SVA197 | DBMD9C4SVA197 | DBMG9C4SVA197 |
| Reader's Resource | DB | 13W3 | DBMP13C3SVA197 | DBMC13C3SVA197 | DBMD13C3SVA197 | DBMG13C3SVA197 |
| For contact cavity arrangements, | DB | 17W2 | DBMP17C2SVA197 | DBMC17C2SVA197 | DBMD17C2SVA197 | DBMG17C2SVA197 |
| see page 223. | DB | 21W1 | DBMP21C1SVA197 | DBMC21C1SVA197 | DBMD21C1SVA197 | DBMG21C1SVA197 |
| For P.C. hole patterns, see pages 236-237. | DC | 8W8 | DCMP8C8SVA197 | DCMC8C8SVA197 | DCMD8C8SVA197 | DCMG8C8SVA197 |
| For panel cutouts, see page 221. | DC | 13W6 | DCMP13C6SVA197 | DCMC13C6SVA197 | DCMD13C6SVA197 | DCMG13C6SVA197 |
| For alternate bracket configuration (when | DC | 17W5 | DCMP17C5SVA197 | DCMC17C5SVA197 | DCMD17C5SVA197 | DCMG17C5SVA197 |
| connectors are supplied without boardlocks), | DC | 21WA4 | DCMP21CAASVA197 | DCMC21CAASVA197 | DCMD21CAASVA197 | DCMG21CAASVA197 |
| For alternate 50 Ohm coaxial configuration, | DC | 25W3 | DCMP25C3SVA197 | DCMC25C3SVA197 | DCMD25C3SVA197 | DCMG25C3SVA197 |
| see page 225 . | DC | 27W2 | DCMP27C2SVA197 | DCMC27C2SVA197 | DCMD27C2SVA197 | DCMG27C2SVA197 |

For M3 threads replace MP with MS, MC with ML, MD with MO, MG with MJ.
Notes: * For 50 Ohm Coaxial substitute X for C. Example: DEMP5X1SVA197
For performance class 2 substitute K126 for A197. Example: DEMP5C1SVK126
For DD shell sizes (standard footprint) see page 47.
of Keyed.


Screw lock, boardlock, and signal contacts removed for clarity


Screw lock, boardlock, and coaxial contact removed for clarity

Note: Dimension varies with alternate bracket configuration, see Reader's Resource page 226.
Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{B} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

- Connector footprint measured from the front shell.
- Connector footprint measured from the rear shell.


## Coaxial Straight - Standard PC Tails (Sizes DE-DC)

Plug


## Reader's Resource

For contact cavity arrangements,
see page 222.
For P.C. hole patterns, see pages 238-239.
For panel cutouts, see page 221.
For alternate 50 Ohm coaxial configuration, see page 225 .

75 Ohm Part Numbers* with Standoff \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEMV5C1PNK87 | DEMZCC1PNK87 | DEMN5C1PNK87 |
| DA | 7W2 | DAMV7C2PNK87 | DAMZ7C2PNK87 | DAMN7C2PNK87 |
| DA | 11W1 | DAMV11C1PNK87 | DAMZ11C1PNK87 | DAMN11C1PNK87 |
| DA | 3W3 | DAMV3C3PNK87 | DAMZ3C3PNK87 | DAMN3C3PNK87 |
| DA | 3WK3¢ | DAMV3CK3PNK87TM | DAMZ3CK3PNK87TM | DAMN3CK3PNK87TM |
| DB | 5W5 | DBMV5C5PNK87 | DBMZ5C5PNK87 | DBMN5C5PNK87 |
| DB | 9W4 | DBMV9C4PNK87 | DBMZ9C4PNK87 | DBMN9C4PNK87 |
| DB | 13W3 | DBMV13C3PNK87 | DBMZ13C3PNK87 | DBMN13C3PNK87 |
| DB | 17W2 | DBMV17C2PNK87 | DBMZ17C2PNK87 | DBMN17C2PNK87 |
| DB | 21W1 | DBMV21C1PNK87 | DBMZ21C1PNK87 | DBMN21C1PNK87 |
| DC | 8W8 | DCMV8C8PMK87 | DCMZ8C8PNK87 | DCMN8C8PNK87 |
| DC | 13W6 | DCMV13C6PNK87 | DCMZ13C6PNK87 | DCMN13C6PNK87 |
| DC | 17W5 | DCMV17C5PNK87 | DCMZ17C5PNK87 | DCMN17C5PNK87 |
| DC | 21WA4 | DCMV21CA4PNK87 | DCMZ21CA4PNK87 | DCMN21CA4PNK87 |
| DC | 25W3 | DCMV25C3PNK87 | DCMZ25C3PNK87 | DCMN25C3PNK87 |
| DC | 27W2 | DCMV27C2PNK87 | DCMZ27C2PNK87 | DCMN27C2PNK87 |

Notes: * For 50 Ohm Coaxial substitute X for C. Example: DEMV5X1PNK87
For contacts with 30 microinches gold substitute K127 for K87. Example: DEMN5C1PNK127
For DD shell sizes, see page 54.
\& Keyed.

Engaging Face



Screw lock, boardlock, and signal contacts removed for clarity


Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \text { L } \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

## Coaxial Straight - Standard PC Tails (Sizes DE-DC)

Receptacle


## Reader's Resource

For contact cavity arrangements, see page 223.
For P.C. hole patterns, see pages 241-242.
For panel cutouts, see page 221.
For alternate 50 Ohm coaxial configuration, see page 225.

75 Ohm Part Numbers* with Standoff \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEMV5C1SNA197 | DEMZ5C15NA197 | DEMN5C1SNA197 |
| DA | 7W2 | DAMV7C2SNA197 | DAMZ7C2SNA197 | DAMN7C2SNA197 |
| DA | 11W1 | DAMV11C1SNA197 | DAMZ11C1SNA197 | DAMN11C1SNA197 |
| DA | 3W3 | DAMV3C3SNA197 | DAMZ3C3SNA197 | DAMN3C3SNA197 |
| DA | 3WK3\% | DAMV3CK3SNA197TM | DAMZ3CK3SNA197TM | DAMN3CK3SNA197TM |
| DB | 5W5 | DBMV5C5SNA197 | DBMZ5C5SNA197 | DBMN5C5SNA197 |
| DB | 9W4 | DBMV9C4SNA197 | DBMZOC4SNA197 | DBMN9C4SNA197 |
| DB | 13W3 | DBMV13C3SNA197 | DBMZ13C3SNA197 | DBMN13C3SNA197 |
| DB | 17W2 | DBMV17C2SNA197 | DBMZ17C2SNA197 | DBMN17C2SNA197 |
| DB | 21W1 | DBMV21C1SNA197 | DBMZ21C1SNA197 | DBMN21C1SNA197 |
| DC | 8W8 | DCMV8C8SNA197 | DCMZ8C8SNA197 | DCMN8C8SNA197 |
| DC | 13W6 | DCMV13C6SNA197 | DCMZ13C6SNA197 | DCMN13C6SNA197 |
| DC | 17W5 | DCMV17C5SNA197 | DCMZ17C55NA197 | DCMN17C55NA197 |
| DC | 21WA4 | DCMV21CA4SNA197 | DCMZ21CA4SNA197 | DCMN21CA4SNA197 |
| DC | 25W3 | DCMV25C3SNA197 | DCMZ25C3SNA197 | DCMN25C35NA197 |
| DC | 27W2 | DCMV27C2SNA197 | DCMZ27C2SNA197 | DCMN27C2SNA197 |

Notes: * For 50 Ohm Coaxial substitute X for C. Example: DEMV5X1SNA197
For contacts with 30 microinches gold substitute K126 for A197. Example: DEMN5C1SNK126
For DD shell sizes, see page 55 .
\& Keyed.


## Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{F} \\ 0,25(.010) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |


| Coaxial Straight - Standard PC Tails (Size DD) |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Reader's Resource

For contact cavity arrangements,
see page 222.
For P.C. hole patterns, see page 240.
For panel cutouts, see page 221.
For alternate 500 hm coaxial configuration,
see page 225.

Notes: * For 50 Ohm Coaxial substitute X for C. Example: DDMV24X7PNK87
For contacts with 30 microinches gold substitute K127 for K87. Example: DDMN24C7PNK127

## D Subminiature

## Coaxial Straight - Standard PC Tails (Size DD)

Receptacle


75 Ohm Part Numbers* with Standoff \# 4-40 UNC

| Shell Size | Layout | Part Number <br> Without ccrew Locks <br> Without Boardlocks | Part Number <br> Without crew Locks <br> With Boardlocks | Part Number <br> With Screw Locks <br> With Boardlocks |
| :---: | :---: | :---: | :---: | :---: |
| $D D$ | $24 W 7$ | DDMV24C7SNA197 | DDMZ24C7SNA197 | DDMN24C7SNA197 |
| $D D$ | 36W4 | DDMV36CASNA197 | DDMZ36CASNA197 | DDMN36CASNA197 |
| $D D$ | $43 W 2$ | DDMV43C2SNA197 | DDMZ43C2SNA197 | DDMN43C2SNA197 |
| $D D$ | $47 W 1$ | DDMV47C1SNA197 | DDMZ47C1SNA197 | DDMN47C1SNA197 |

Notes: * For 50 Ohm Coaxial substitute X for C. Example: DDMV24X7SNA197
For contacts with 30 microinches gold substitute K126 for A197. Example: DDMN24C7SNK126

## Reader's Resource

For contact cavity arrangements,
see page 223.
For P.C. hole patterns, see page 243.
For panel cutouts, see page 221.
For alternate 50 Ohm coaxial configuration, see page 225 .


## Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 66,93 (2,635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

## Coaxial Straight - European PC Tails (Sizes DE-DC)



## Reader's Resource

For contact cavity arrangements, see page 222.
For P.C. hole patterns, see pages 238-239. For panel cutouts, see page 221.
For alternate 50 Ohm coaxial configuration, see page 225.

## 75 Ohm Part Numbers* with Standoff \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEMV5C1PYK87 | DEMZ5C1PYK87 | DEM N5C1PYK87 |
| DA | 7W2 | DAMV7C2PYK87 | DAMZ7C2PYK87 | DAMN7C2PYK87 |
| DA | 11W1 | DAMV11C1PYK87 | DAMZ11C1PYK87 | DAMN11C1PYK87 |
| DA | 3W3 | DAMV3C3PYK87 | DAMZ3C3PYK87 | DAMN3C3PYK87 |
| DA | 3WK3\% | DAMV3CK3PYK87TM | DAMZ3CK3PYK87TM | DAMN3CK3PYK87TM |
| DB | 5W5 | DBMV5C5PYK87 | DBMZ5C5PYK87 | DBMN5C5PYK87 |
| DB | 9W4 | DBMV9C4PYK87 | DBMZ9C4PYK87 | DBMN9C4PYK87 |
| DB | 13W3 | DBMV13C3PYK87 | DBMZ13C3PYK87 | DBMN13C3PYK87 |
| DB | 17W2 | DBMV17C2PYK87 | DBMZ17C2PYK87 | DBMN17C2PYK87 |
| DB | 21W1 | DBMV21C1PYK87 | DBMZ21C1PYK87 | DBMN21C1PYK87 |
| DC | 8W8 | DCMV8C8PYK87 | DCMZ8C8PYK87 | DCMN8C8PYK87 |
| DC | 13W6 | DCMV13C6PYK87 | DCMZ13C6PYK87 | DCMN13C6PYK87 |
| DC | 17W5 | DCMV17C5PYK87 | DCMZ17C5PYK87 | DCMN17C5PYK87 |
| DC | 21WA4 | DCMV21CA4PYK87 | DCMZ21CA4PYK87 | DCMN21CA4PYK87 |
| DC | 25W3 | DCMV25C3PYK87 | DCMZ25C3PYK87 | DCMN25C3PYK87 |
| DC | 27W2 | DCMV27C2PYK87 | DCMZ27C2PYK87 | DCMN27C2PYK87 |

For M3 threads replace MV with MT, MZ with MQ, MN with MU.
Notes: * For 50 Ohm Coaxial substitute X for C. Example: DEMV5X1PYK87
For tin plated PC tails add A226 (signal contacts only). Example: DEMV5C1PYK87A226
For performance class 2 substitute K127 for K87. Example: DEMV5C1PYK127
For DD shell sizes, see page 58.
of Keyed.


Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \mathbf{F} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \text { L } \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

## Coaxial Straight - European PC Tails (Sizes DE-DC)

## Receptacle



## Reader's Resource

For contact cavity arrangements, see page 223.
For P.C. hole patterns, see pages 241-242.
For panel cutouts, see page 221.
For alternate 50 Ohm coaxial configuration, see page 225.

75 Ohm Part Numbers* with Standoff \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEMV5C1SYA197 | DEMZ5C1SYA197 | DEMN5C1SYA197 |
| DA | 7W2 | DAMV7C2SYA197 | DAMZ7C2SYA197 | DAMN7C2SYA197 |
| DA | 11W1 | DAMV11C1SYA197 | DAMZ11C1SYA197 | DAMN11C1SYA197 |
| DA | 3W3 | DAMV3C3SYA197 | DAMZ3C3SYA197 | DAMN3C3SYA197 |
| DA | 3WK3¢ | DAMV3CK3SYA197TM | DAMZ3CK3SYA197TM | DAMN3CK3SYA197TM |
| DB | 5W5 | DBMV5C55YA197 | DBMZ5C55YA197 | DBMN5C55YA197 |
| DB | 9W4 | DBMV9C4SYA197 | DBMZ9C4SYA197 | DBMN9C4SYA197 |
| DB | 13W3 | DBMV13C3SYA197 | DBMZ13C3SYA197 | DBMN13C3SYA197 |
| DB | 17W2 | DBMV17C2SYA197 | DBMZ17C2SYA197 | DBMN17C2SYA197 |
| DB | 21W1 | DBMV21C1SYA197 | DBMZ21C15YA197 | DBMN21C1SYA197 |
| DC | 8W8 | DCMV8C8SYA197 | DCMZ8C8SYA197 | DCMN8C85YA197 |
| DC | 13W6 | DCMV13C6SYA197 | DCMZ13C65YA197 | DCMN13C6SYA197 |
| DC | 17W5 | DCMV17C5SYA197 | DCMZ17C55YA197 | DCMN17C5SYA197 |
| DC | 21WA4 | DCMV21CA4SYA197 | DCMZ21CA4SYA197 | DCMN21CA4SYA197 |
| DC | 25W3 | DCMV25C3SYA197 | DCMZ25C35YA197 | DCMN25C3SYA197 |
| DC | 27W2 | DCMV27C2SYA197 | DCMZ27C25YA197 | DCMN27C2SYA197 |

For M3 threads replace MV with MT, MZ with MQ, MN with MU.
Notes: * For 50 Ohm Coaxial substitute X for C. Example: DEMV5X1SYA197
For performance class 2 substitute K126 for A197. Example: DEMV5C1SYK126
For DD shell sizes, see page 59.
\&o Keyed.


Hardware and signal contacts
removed for clarity


Hardware and coaxial contact removed for clarity

Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0.38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { L } \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |


| Coaxial Straight - European PC Tails (Size DD) |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

For M3 threads replace MV with MT, MZ with MQ, MN with MU.
Notes: * For 50 Ohm Coaxial substitute X for C. Example: DDMV24X7PYK87
For tin plated PC tails add A226 (signal contacts only). Example: DDMV24C7PYK87A226
For performance class 2 substitute K127 for K87. Example: DDMV24C7PYK127

## Reader's Resource

For contact cavity arrangements, see page 222.
For P.C. hole patterns, see page 240.
For panel cutouts, see page 221.
For alternate 50 Ohm coaxial configuration,
see page 225.

## Engaging Face



Hardware and signal contacts removed for clarity



Hardware and coaxial contact removed for clarity

Dimensions

| Shell Size | $\begin{gathered} A \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | 6,84 (.269) | 0,99 (.039) |

## D Subminiature

## Coaxial Straight - European PC Tails (Size DD)

## Receptacle



75 Ohm Part Numbers* with Standoff \# 4-40 UNC

| Shell Size | Layout | Part Number <br> Without Screw Locks <br> Without Boardlocks | Part Number <br> Without Screw Locks <br> With Boardlocks | Part Number <br> With Screw Locks <br> With Boardlocks |
| :---: | :---: | :---: | :---: | :---: |
| DD | $24 W 7$ | DDMV24C7SYA197 | DDMZ24C7SYA197 | DDMN24C7SYA197 |
| DD | 36 W4 | DDMV36C4SYA197 | DDMZ36C4SYA197 | DDMN36C4SYA197 |
| DD | $43 W 2$ | DDMV43C2SYA197 | DDMZ43C2SYA197 | DDMN43C2SYA197 |
| DD | $47 W 1$ | DDMV47C1SYA197 | DDMZ47C1SYA197 | DDMN47C1SYA197 |

For M3 threads replace MV with MT, MZ with MQ, MN with MU.
Notes: * For 50 Ohm Coaxial substitute X for C. Example: DDMV24X7SYA197
For performance class 2 substitute K126 for A197. Example: DDMV24C7SYK126

## Reader's Resource

For contact cavity arrangements,
see page 223.
For P.C. hole patterns, see page 243.
For panel cutouts, see page 221.
For alternate 50 Ohm coaxial configuration,
see page 225.


Hardware and signal contacts removed for clarity


Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 66,93 (2,635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

## 40 A High Power $90^{\circ}-$ Standard Footprint $.489 *$ or .454 inch * (Sizes DE-DC)



## Reader's Resource

For contact cavity arrangements, see page 222 .
For P.C. hole patterns, see pages 244-245. For panel cutouts, see page 221.
For alternate bracket configuration (when connectors are supplied without boardlocks), see page 226 .

Part Numbers with Metal Bracket and Rivnut \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks Without Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEMP5H1PJ K87 | DEMC5H1PJ K87 | DEMD5H1PJ K87 | DEMG5H1PJ K87 |
| DA | 7W2 | DAMP7H2PJ K87 | DAMC7H2PJ K87 | DAMD7H2PJ K87 | DAMG7H2PJ K87 |
| DA | 11W1 | DAMP11H1PJ K87 | DAMC11H1PJ K87 | DAMD11H1PJ K87 | DAMG11H1PJ K87 |
| DA | 3W3 | DAMP3H3PJ K87 | DAMC3H3PJ K87 | DAMD3H3PJ K87 | DAMG3H3PJ K87 |
| DA | 3WK3¢ | DAMP3HK3PJ K87TM | DAMC3HK3PJ K87TM | DAMD3HK3PJ K87TM | DAMG3HK3PJ K87TM |
| DB | 5W5 | DBMP5H5PJ K87 | DBMC5H5PJ K87 | DBMD5H5PJ K87 | DBMG5H5PJ K87 |
| DB | 9W4 | DBMP9H4PJ K87 | DBMC9H4PJ K87 | DBMD9H4PJ K87 | DBMG9H4PJ K87 |
| DB | 13W3 | DBMP13H3PJ K87 | DBMC13H3PJ K87 | DBMD13H3PJ K87 | DBMG13H3PJ K87 |
| DB | 17W2 | DBMP17H2PJ K87 | DBMC17H2PJ K87 | DBMD17H2PJ K87 | DBMG17H2PJ K87 |
| DB | 21W1 | DBMP21H1PJ K87 | DBMC21H1PJ K87 | DBMD21H1PJ K87 | DBMG21H1PJ K87 |
| DC | 8W8 | DCMP8H8PJ K87 | DCMC8H8PJ K87 | DCMD8H8PJ K87 | DCMG8H8PJ K87 |
| DC | 13W6 | DCMP13H6PJ K87 | DCMC13H6PJ K87 | DCMD13H6PJ K87 | DCMG13H6PJ K87 |
| DC | 17W5 | DCMP17H5PJ K87 | DCMC17H5PJ K87 | DCMD17H5JJ K87 | DCMG17H5PJ K87 |
| DC | 21WA4 | DCMP21HA4PJ K87 | DCMC21HA4PJ K87 | DCMD21HA4PJ K87 | DCMG21HA4P K87 |
| DC | 25W3 | DCMP25H3PJ K87 | DCMC25H3PJ K87 | DCMD25H3PJ K87 | DCMG25H3PJ K87 |
| DC | 27W2 | DCMP27H2PJ K87 | DCMC27H2PJ K87 | DCMD27H2PJ K87 | DCMG27H2PJ K87 |

Note: For contacts with 30 microinches gold substitute K127 for K87. Example: DEMP5H1PJ K127
For DD shell sizes, see page 62
of Keyed.


Screw lock, boardlock, and signal contacts removed for clarity


Screw lock, boardlock, and high power contact removed for clarity

Note: Dimension varies with alternate bracket configuration, see Reader's Resource page 226.
Dimensions

| Shell Size | $\begin{gathered} A \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} { }^{C} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} D \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathbf{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \text { L } \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

- Connector footprint measured from the front shell.
- Connector footprint measured from the rear shell.


## 40 A High Power $90^{\circ}-$ Standard Footprint $.489 *$ or .454 inch * (Sizes DE-DC)



## Reader's Resource

For contact cavity arrangements,
see page 223.
For P.C. hole patterns, see pages 247-248.
For panel cutouts, see page 221.
For alternate bracket configuration (when connectors are supplied without boardlocks), see page 226.

Part Numbers with Metal Bracket and Rivnut \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks Without Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEMP5H1SJA197 | DEMC5H1SJA197 | DEMD5H1SJ A197 | DEMG5H1SJA197 |
| DA | 7W2 | DAMP7H2SJA197 | DAMC7H2SJA197 | DAMD7H2SJA197 | DAMG7H2SJ A197 |
| DA | 11W1 | DAMP11H1SJ A197 | DAMC11H1SJA197 | DAMD11H1SJA197 | DAMG11H1SJA197 |
| DA | 3W3 | DAMP3H3SJ A197 | DAMC3H3SJ A197 | DAMD3H3SJA197 | DAMG3H3SJ A197 |
| DA | 3WK309 | DAMP3HK3SJ A197TM | DAMC3HK3SJ A197TM | DAMD3HK3SJ A197TM | DAMG3HK3SJ A197TM |
| DB | 5W5 | DBMP5H5SJA197 | DBMC5H5SJ A197 | DBMD5H5SJA197 | DBMG5H5SJA197 |
| DB | 9W4 | DBMP9H4SJA197 | DBMC9H4SJ A197 | DBMD9H4SJA197 | DBMG9H4SJ A197 |
| DB | 13W3 | DBMP13H3SJ A197 | DBMC13H3SJ A197 | DBMD13H3SJ A197 | DBMG13H3SJ A197 |
| DB | 17W2 | DBMP17H2SJA197 | DBMC17H2SJ A197 | DBMD17H2SJA197 | DBMG17H2SJA197 |
| DB | 21W1 | DBMP21H1SJA197 | DBMC21H1SJA197 | DBMD21H1SJA197 | DBMG21H1SJ A197 |
| DC | 8W8 | DCMP8H8SJA197 | DCMC8H8SJ A197 | DCMD8H8SJA197 | DCMG8H8SJA197 |
| DC | 13W6 | DCMP13H6SJ A197 | DCMC13H6SJ A197 | DCMD13H6SJ A197 | DCMG13H6SJ A197 |
| DC | 17W5 | DCMP17H5SJA197 | DCMC17H5SJ A197 | DCMD17H5SJ A197 | DCMG17H5SJ A197 |
| DC | 21WA4 | DCMP21HA4SJ A197 | DCMC21HA4SJ A197 | DCMD21HA4SJ A197 | DCMG21HA4SJ A197 |
| DC | 25W3 | DCMP25H3SJA197 | DCMC25H3SJ A197 | DCMD25H3SJ A197 | DCMG25H3SJ A197 |
| DC | 27W2 | DCMP27H2SJ A197 | DCMC27H2SJ A197 | DCMD27H2SJ A197 | DCMG27H2SJ A197 |

Note: For contacts with 30 microinches of gold substitute K126 for A197. Example: DEMP5H1SJ K126
For DD shell sizes, see page 63.
of Keyed.


Screw lock, boardlock, and high power contact removed for clarity

Note: Dimension varies with alternate bracket configuration, see Reader's Resource page 226.

## Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} D \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathbf{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

- Connector footprint measured from the front shell.
- Connector footprint measured from the rear shell.


## 40 A High Power $90^{\circ}-$ Standard Footprint $489 *$ or . 454 inch * * (Size DD)



Part Numbers with Metal Bracket and Rivnut \# 4-40 UNC

| Shell Size | Layout | Part Number <br> Without Screw Locks <br> Without Boardlocks | Part Number <br> Without Screw Locks <br> With Boardlocks | Part Number <br> With Screw Locks <br> Without Boardlocks | Part Number <br> With Screw Locks <br> With Boardlocks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 24 W7 | DDMP24H7PJ K87 | DDMC24H7PJ K87 | DDMD24H7PJ K87 | DDMG24H7PJ K87 |
| DD | 36W4 | DDMP36H4PJ K87 | DDMC36H4PJ K87 | DDMD36H4PJ K87 | DDMG36H4PJ K87 |
| DD | 43 W2 | DDMP43H2PJ K87 | DDMC43H2PJ K87 | DDMD43H2PJ K87 | DDMG43H2PJ K87 |
| DD | $47 W 1$ | DDMP47H1PJ K87 | DDMC47H1PJ K87 | DDMD47H1PJ K87 | DDMG47H1PJ K87 |

Note: For contacts with 30 microinches gold substitute K127 for K87. Example: DDMP24H7PJ K127

## Reader's Resource

For contact cavity arrangements,
see page 222.
For P.C. hole patterns, see page 246.
For panel cutouts, see page 221.
For alternate bracket configuration (when
connectors are supplied without boardlocks),
see page 226.



Screw lock, boardlock, and signal contacts removed for clarity


Screw lock, boardlock, and high power contact removed for clarity

Note: Dimension varies with alternate bracket configuration, see Reader's Resource page 226.
Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathbf{F} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | 6,84 (.269) | 0,99 (.039) |

[^11]- Connector footprint measured from the rear shell.


## 40 A High Power $90^{\circ}$ - Standard Footprint . 489 • or . 454 inch * * (Size DD)

## Receptacle



Part Numbers with Metal Bracket and Rivnut \# 4-40 UNC

| Shell Size | Layout | Wart Number <br> Without Screw Locks <br> Without Boardlocks | Part Number <br> Without Screw Locks <br> With Boardlocks | Part Number <br> With Screw Locks <br> Without Boardlocks | Part Number <br> With Screw Locks <br> With Boardlocks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DD | $24 W 7$ | DDMP24H7SJA197 | DDMC24H7SJA197 | DDMD24H7SJA197 | DDMG24H7SJA197 |
| DD | 36W4 | DDMP36H4SJA197 | DDMC36H4SJA197 | DDMD36H4SJA197 | DDMG36H4SJA197 |
| DD | $43 W 2$ | DDMP43H2SJA197 | DDMC43H2SJA197 | DDMD43H2SJA197 | DDMG43H2SJA197 |
| DD | $47 W 1$ | DDMP47H1SJA197 | DDMC47H1SJA197 | DDMD47H1SJA197 | DDMG47H1SJA197 |

Note: For contacts with 30 microinches gold substitute K126 for A197. Example: DDMP24H7SJ K126

## Reader's Resource

For contact cavity arrangements,
see page 223.
For P.C. hole patterns, see page 249.
For panel cutouts, see page 221.
For alternate bracket configuration (when connectors are supplied without boardlocks),
see page 226.


Screw lock, boardlock, and signal contacts removed for clarity


Screw lock, boardlock, and high power contact removed for clarity

Note: Dimension varies with alternate bracket configuration, see page 226.
Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{B} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

- Connector footprint measured from the front shell.
- Connector footprint measured from the rear shell.


Part Numbers with Metal Bracket and Rivnut \# 4-40 UNC
$\left.\begin{array}{ccllll}\hline \text { Shell Size } & \text { Layout } & \begin{array}{c}\text { Withoutt Screw Locks } \\ \text { Without Boardlocks }\end{array} & \begin{array}{c}\text { Part Number } \\ \text { Without Screw Locks } \\ \text { With }\end{array} & \begin{array}{c}\text { Part Nuardlocks }\end{array} & \begin{array}{c}\text { With Screwber Locks } \\ \text { Without Boardlocks }\end{array}\end{array} \begin{array}{c}\text { Part Number } \\ \text { With Screw Locks } \\ \text { With Boardlocks }\end{array}\right]$

For M3 threads replace MP with MS, MC with ML, MD with MO, MG with MJ.
Notes: For tin plated PC tails add A226 (signal contacts only). Example DEMP5P1PVK87A226
For performance class 2 substitute K127 for K87. Example: DEMP5P1PVK127
\& Keyed.

## Reader's Resource

For contact cavity arrangements,
see page 222.
For P.C. hole patterns, see pages 250-251.
For panel cutouts, see page 221.
For alternate bracket configuration (when connectors are supplied without boardlocks), see page 226.


Note: Dimension varies with alternate bracket configuration, see Reader's Resource page 226

## Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(, 010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

- Connector footprint measured from the front shell.
- Connector footprint measured from the rear shell.


## 40 A High Power $90^{\circ}$ - European Footprint $10,2 \bullet$ or $9,4 \mathrm{~mm} *$ • (Sizes DE-DC)



## Reader's Resource

For contact cavity arrangements,
see page 223.
For P.C. hole patterns, see pages 252-253.
For panel cutouts, see page 221.
For alternate bracket configuration (when connectors are supplied without boardlocks), see page 226.

Part Numbers with Metal Bracket and Rivnut \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks Without Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEMP5P1SVA197 | DEMC5P1SVA197 | DEMD5P1SVA197 | DEMG5P1SVA197 |
| DA | 7W2 | DAMP7P2SVA197 | DAMC7P2SVA197 | DAMD7P2SVA197 | DAMG7P2SVA197 |
| DA | 11W1 | DAMP11P1SVA197 | DAMC11P1SVA197 | DAMD11P1SVA197 | DAMG11P1SVA197 |
| DA | 3W3 | DAMP3P3SVA197 | DAMC3P3SVA197 | DAMD3P3SVA197 | DAMG3P3SVA197 |
| DA | 3WK3\% | DAMP3PK3SVA197TM | DAMC3PK3SVA197TM | DAMD3PK3SVA197TM | DAMG3PK3SVA197TM |
| DB | 5W5 | DBMP5P5SVA197 | DBMC5P5SVA197 | DBMD5P5SVA197 | DBMG5P5SVA197 |
| DB | 9W4 | DBMP9P4SVA197 | DBMC9P4SVA197 | DBMD9P4SVA197 | DBMG9P4SVA197 |
| DB | 13W3 | DBMP13P3SVA197 | DBMC13P3SVA197 | DBMD13P3SVA197 | DBMG13P3SVA197 |
| DB | 17W2 | DBMP17P2SVA197 | DBMC17P2SVA197 | DBMD17P2SVA197 | DBMG17P2SVA197 |
| DB | 21W1 | DBMP21P1SVA197 | DBMC21P1SVA197 | DBMD21P1SVA197 | DBMG21P1SVA197 |
| DC | 8W8 | DCMP8P8SVA197 | DCMC8P8SVA197 | DCMD8P8SVA197 | DCMG8P8SVA197 |
| DC | 13W6 | DCMP13P6SVA197 | DCMC13P6SVA197 | DCMD13P6SVA197 | DCMG13P6SVA197 |
| DC | 17W5 | DCMP17P5SVA197 | DCMC17P5SVA197 | DCMD17P5SVA197 | DCMG17P5SVA197 |
| DC | 21WA4 | DCMP21PA4SVA197 | DCMC21PA4SVA197 | DCMD21PA4SVA197 | DCMG21PA4SVA197 |
| DC | 25W3 | DCMP25P3SVA197 | DCMC25P3SVA197 | DCMD25P3SVA197 | DCMG25P3SVA197 |
| DC | 27W2 | DCMP27P2SVA197 | DCMC27P2SVA197 | DCMD27P2SVA197 | DCMG27P2SVA197 |

For M3 threads replace MP with MS, MC with ML, MD with MO, MG with MJ.
Notes: For performance class 2 substitute K126 for A197. Example: DEMP5P1SVK126 \& Keyed.


## Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0.76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

- Connector footprint measured from the front shell.
- Connector footprint measured from the rear shell.


## 40 A High Power Straight - Standard PC Tails (Sizes DE-DC)



## Reader's Resource

For contact cavity arrangements, see page 222.
For P.C. hole patterns, see pages 254-255. For panel cutouts, see page 221.

Part Numbers with Standoff \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEMV5H1PNK87 | DEMZ5H1PNK87 | DEMN5H1PNK87 |
| DA | 7W2 | DAMV7H2PNK87 | DAMZ7H2PNK87 | DAMN7H2PNK87 |
| DA | 11W1 | DAMV11H1PNK87 | DAMZ11H1PNK87 | DAMN11H1PNK87 |
| DA | 3W3 | DAMV3H3PNK87 | DAMZ3H3PNK87 | DAMN3H3PNK87 |
| DA | 3WK30\% | DAMV3HK3PNK87TM | DAMZ3HK3PNK87TM | DAMN3HK3PNK87TM |
| DB | 5W5 | DBMV5H5PNK87 | DBMZ5H5PNK87 | DBMN5H5PNK87 |
| DB | 9W4 | DBMV9H4PNK87 | DBMZ9H4PNK87 | DBMN9H4PNK87 |
| DB | 13W3 | DBMV13H3PNK87 | DBMZ13H3PNK87 | DBMN13H3PNK87 |
| DB | 17W2 | DBMV17H2PNK87 | DBMZ17H2PNK87 | DBMN17H2PNK87 |
| DB | 21W1 | DBMV21H1PNK87 | DBMZ21H1PNK87 | DBMN21H1PNK87 |
| DC | 8W8 | DCMV8H8PNK87 | DCMZ8H8PNK87 | DCMN8H8PNK87 |
| DC | 13W6 | DCMV13H6PNK87 | DCMZ13H6PNK87 | DCMN13H6PNK87 |
| DC | 17W5 | DCMV17H5PNK87 | DCMZ17H5PNK87 | DCMN17H5PNK87 |
| DC | 21WA4 | DCMV21HA4PNK87 | DCMZ21HA4PNK87 | DCMN21HA4PNK87 |
| DC | 25W3 | DCMV25H3PNK87 | DCMZ25H3PNK87 | DCMN25H3PNK87 |
| DC | 27W2 | DCMV27H2PNK87 | DCMZ27H2PNK87 | DCMN27H2PNK87 |

Note: For contacts with 30 microinches gold substitute K127 for K87. Example: DEMV5H1PNK127
For DD shell sizes, see page 68
of Keyed.
Dimensions

| Shell Size | $\begin{gathered} A \\ \pm 0,38(, 015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \quad D \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathbf{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} F \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(, 0145) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

## 40 A High Power Straight - Standard PC Tails (Sizes DE-DC)



## Reader's Resource

For contact cavity arrangements,
see page 223.
For P.C. hole patterns, see pages 257-258.
For panel cutouts, see page 221.

Part Numbers with Standoff \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEMV5H1SNA197 | DEMZ5H1SNA197 | DEMN5H1SNA197 |
| DA | 7W2 | DAMV7H2SNA197 | DAMZ7H2SNA197 | DAMN7H2SNA197 |
| DA | 11W1 | DAMV11H1SNA197 | DAMZ11H1SNA197 | DAMN11H1SNA197 |
| DA | 3W3 | DAMV3H3SNA197 | DAMZ3H3SNA197 | DAMN3H3SNA197 |
| DA | 3WK3\% | DAMV3HK3SNA197TM | DAMZ3HK3SNA197TM | DAMN3HK3SNA197TM |
| DB | 5W5 | DBMV5H5SNA197 | DBMZ5H5SNA197 | DBMN5H5SNA197 |
| DB | 9W4 | DBMV9H4SNA197 | DBMZ9H4SNA197 | DBMN9H4SNA197 |
| DB | 13W3 | DBMV13H3SNA197 | DBMZ13H3SNA197 | DBMN13H3SNA197 |
| DB | 17W2 | DBMV17H2SNA197 | DBMZ17H2SNA197 | DBMN17H2SNA197 |
| DB | 21W1 | DBMV21H1SNA197 | DBMZ21H1SNA197 | DBMN21H1SNA197 |
| DC | 8W8 | DCMV8H8SNA197 | DCMZ8H8SNA197 | DCMN8H8SNA197 |
| DC | 13W6 | DCMV13H6SNA197 | DCMZ13H6SNA197 | DCMN13H6SNA197 |
| DC | 17W5 | DCMV17H5SNA197 | DCMZ17H5SNA197 | DCMN17H5SNA197 |
| DC | 21WA4 | DCMV21HA4SNA197 | DCMZ21HA4SNA197 | DCMN21HA4SNA197 |
| DC | 25W3 | DCMV25H3SNA197 | DCMZ25H3SNA197 | DCMN25H3SNA197 |
| DC | 27W2 | DCMV27H2SNA197 | DCMZ27H2SNA197 | DCMN27H2SNA197 |

Note: For contacts with 30 microinches gold substitute K126 for A197. Example: DEMV5H1SNK126
For DD shell sizes, see page 69.
of Keyed.



Screw lock, boardlock and high power contact removed for clarity

Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \quad \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

## 40 A High Power Straight - Standard PC Tails (Size DD)



Part Numbers with Standoff \# 4-40 UNC

| Shell Size | Layout | Part Number <br> Without Screw Locks <br> Without Boardlocks | Part Number <br> WithoutScrew Locks <br> With Boardlocks | Part Number <br> With Screw Locks <br> With Boardlocks |
| :---: | :---: | :---: | :---: | :---: |
| DD | 24 W7 | DDMV24H7PNK87 | DDMZ24H7PNK87 | DDMN24H7PNK87 |
| DD | $36 W 4$ | DDMV36H4PNK87 | DDMZ36H4PNK87 | DDMN36H4PNK87 |
| DD | $43 W 2$ | DDMV43H2PNK87 | DDMZ43H2PNK87 | DDMN43H2PNK87 |
| DD | $47 W 1$ | DDMV47H1PNK87 | DDMZ47H1PNK87 | DDMN47H1PNK87 |

Reader's Resource
For contact cavity arrangements,
see page 222.
For P.C. hole patterns, see page 256.
For panel cutouts, see page 221.



Screw lock, boardlock, and high power contact removed for clarity

Dimensions

| Shell Size | $\begin{gathered} A \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(, 010) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | 6,84 (.269) | 0,99 (.039) |

## D Subminiature

## 40 A High Power Straight - Standard PC Tails (Size DD)

Receptacle


Part Numbers with Standoff \# 4-40 UNC

| Shell Size | Layout | Part Number <br> Without Screw Locks <br> Without Boardlocks | Part Number <br> Without Screw Locks <br> With Boardlocks | Part Number <br> With Screw Locks <br> With Boardlocks |
| :---: | :---: | :---: | :---: | :---: |
| DD | 24W7 | DDMV24H7SNA197 | DDMZ24H7SNA197 | DDMN24H7SNA197 |
| DD | 36W4 | DDMV36H4SNA197 | DDMZ36H4SNA197 | DDMN36H4SNA197 |
| DD | 43W2 | DDMV43H2SNA197 | DDMZ43H2SNA197 | DDMN43H2SNA197 |
| DD | 47W1 | DDMV47H1SNA197 | DDMZ47H1SNA197 | DDMN47H1SNA197 |

Note: For contacts with 30 microinches gold substitute K126 for A197. Example: DDMV24H7SNK126

Reader's Resource
For contact cavity arrangements, see page 223.
For P.C. hole patterns, see page 259.
For panel cutouts, see page 221.



Screw lock, boardlock and high power contact removed for clarity

Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} C \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 66,93 (2,635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

## 40 A High Power Straight - European PC Tails (Sizes DE-DC)

Plug


## Reader's Resource

For contact cavity arrangements,
see page 222.
For P.C. hole patterns, see pages 254-255.
For panel cutouts, see page 221.
Part Numbers with Standoff \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEMV5H1PYK87 | DEMZ5H1PYK87 | DEMN5H1PYK87 |
| DA | 7W2 | DAMV7H2PYK87 | DAMZ7H2PYK87 | DAMN7H2PYK87 |
| DA | 11W1 | DAMV11H1PYK87 | DAMZ11H1PYK87 | DAMN11H1PYK87 |
| DA | 3W3 | DAMV3H3PYK87 | DAMZ3H3PYK87 | DAMN3H3PYK87 |
| DA | 3WK3\% | DAMV3HK3PYK87TM | DAMZ3HK3PYK87TM | DAMN3HK3PYK87TM |
| DB | 5W5 | DBMV5H5PYK87 | DBMZ5H5PYK87 | DBMN5H5PYK87 |
| DB | 9W4 | DBMV9H4PYK87 | DBMZ9H4PYK87 | DBMN9H4PYK87 |
| DB | 13W3 | DBMV13H3PYK87 | DBMZ13H3PYK87 | DBMN13H3PYK87 |
| DB | 17W2 | DBMV17H2PYK87 | DBMZ17H2PYK87 | DBMN17H2PYK87 |
| DB | 21W1 | DBMV21H1PYK87 | DBMZ21H1PYK87 | DBMN21H1PYK87 |
| DC | 8W8 | DCMV8H8PYK87 | DCMZ8H8PYK87 | DCMN8H8PYK87 |
| DC | 13W6 | DCMV13H6PYK87 | DCMZ13H6PYK87 | DCMN13H6PYK87 |
| DC | 17W5 | DCMV17H5PYK87 | DCMZ17H5PYK87 | DCMN17H5PYK87 |
| DC | 21WA4 | DCMV21HA4PYK87 | DCMZ21HA4PYK87 | DCMN21HA4PYK87 |
| DC | 25W3 | DCMV25H3PYK87 | DCMZ25H3PY87 | DCMN25H3PYK87 |
| DC | 27W2 | DCMV27H2PYK87 | DCMZ27H2PYK87 | DCMN27H2PYK87 |

For M3 threads replace MV with MT, MZ with MQ, MN with MU.
Notes: For tin plated PC tails add A226 (signal contacts only). Example: DEMV5H1PYK87A226
For performance class 2 substitute K127 for K87. Example: DEMV5H1PYK127
For DD shell sizes, see page 72.
\& Keyed.



Screw lock, boardlock, and high power contact removed for clarity

Dimensions

| Shell Size | $\begin{gathered} A \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

## 40 A High Power Straight - European PC Tails (Sizes DE-DC)



## Reader's Resource

For contact cavity arrangements, see page 223.
For P.C. hole patterns, see pages 257-258.
For panel cutouts, see page 221.
Part Numbers with Standoff \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEMV5H1SYA197 | DEMZ5H1SYA197 | DEMN5H1SYA197 |
| DA | 7W2 | DAMV7H2SYA197 | DAMZ7H2SYA197 | DAMN7H2SYA197 |
| DA | 11W1 | DAMV11H1SYA197 | DAMZ11H15YA197 | DAMN11H1SYA197 |
| DA | 3W3 | DAMV3H3SYA197 | DAMZ3H3SYA197 | DAMN3H3SYA197 |
| DA | 3WK3¢ | DAMV3HK3SYA197TM | DAMZZHK3SYA197TM | DAMN3HK3SYA197TM |
| DB | 5W5 | DBMV5H5SYA197 | DBMZ5H5SYA197 | DBMN5H55YA197 |
| DB | 9W4 | DBMV9H4SYA197 | DBMZ9H4SYA197 | DBMN9H4SYA197 |
| DB | 13W3 | DBMV13H3SYA197 | DBMZ13H35YA197 | DBMN13H3SYA197 |
| DB | 17W2 | DBMV17H2SYA197 | DBMZ17H2SYA197 | DBMN17H2SYA197 |
| DB | 21W1 | DBMV21H15YA197 | DBMZ21H15YA197 | DBMN21H1SYA197 |
| DC | 8W8 | DCMV8H8SYA197 | DCMZ8H8SYA197 | DCMN8H8SYA197 |
| DC | 13W6 | DCMV13H6SYA197 | DCMZ13H65YA197 | DCMN13H6SYA197 |
| DC | 17W5 | DCMV17H5SYA197 | DCMZ17H55YA197 | DCMN17H5SYA197 |
| DC | 21WA4 | DCMV21HA4SYA197 | DCM221HA4SYA197 | DCMN21HA4SYA197 |
| DC | 25W3 | DCMV25H3SYA197 | DCMZ25H3SYA197 | DCMN25H3SYA197 |
| DC | 27W2 | DCMV27H2SYA197 | DCMZ27H2SYA197 | DCMN27H2SYA197 |

For M3 threads replace MV with MT, MZ with MQ, MN with MU.
Notes: For performance class 2 substitute K126 for A197. Example: DEMV5H1SYK126
For DD shell sizes, see page 73.
\& Keyed.

## Engaging Face




Screw lock, boardlock, and high power contact removed for clarity

## Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

## 40 A High Power Straight - European PC Tails (Size DD)



Part Numbers with Standoff \# 4-40 UNC

| Shell Size | Layout | Part Number <br> Without Screw Locks <br> Without Boardlocks | Part Number <br> Without Screw Locks <br> With Boardlocks | Part Number <br> With Screw Locks <br> With Boardlocks |
| :---: | :---: | :--- | :--- | :--- |
| DD | $24 W 7$ | DDMV24H7PYK87 | DDMZ24H7PYK87 | DDMN24H7PYK87 |
| DD | 36W4 | DDMV36H4PYK87 | DDMZ36H4PYK87 | DDMN36H4PYK87 |
| DD | 43W2 | DDMV43H2PYK87 | DDMZ43H2PYK87 | DDMN43H2PYK87 |
| DD | $47 W 1$ | DDMV47H1PYK87 | DDMZ47H1PYK87 | DDMN47H1PYK87 |

For M3 threads replace MV with MT, MZ with MQ, MN with MU.
Notes: For tin plated PC tails add A226 (signal contacts only). Example DDMV24H7PYK87A226
For performance class 2 substitute K127 for K87. Example: DDMV24H7PYK127

## Reader's Resource

For contact cavity arrangements,
see page 222.
For P.C. hole patterns, see page 256.
For panel cutouts, see page 221.

## Engaging Face



Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(, 016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(, 010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | 6,84 (.269) | 0,99 (.039) |


| 40 A High Power Straight - European PC Tails (Size DD) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Receptacle | Part Numbers with Standoff \# 4-40 UNC |  |  |  |  |
|  | Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | $\begin{gathered} \text { Part Number } \\ \text { With Screw Locks } \\ \text { With Boardlocks } \end{gathered}$ |
|  | DD | 24W7 | DDMV24H75YA197 | DDM224H75YA197 | DDMN24H7YA197 |
|  | DD | 36 W 4 | DDMV36H45YA197 | DDMZ36H4SYA197 | DDMN36H4SYA197 |
|  | DD | 43W2 | DDMV43H2SYA197 | DDM233H25YA197 | DDMN43H2SYA197 |
|  | DD | 47W1 | DDMV47H15YA197 | DDMZ47H15YA197 | DDMN47H15YA197 |

For M3 threads replace MV with MT, MZ with MQ, MN with MU.
Note: For performance class 2 substitute K126 for A197. Example: DDMV24H7SYK126

## Reader's Resource

For contact cavity arrangements,
see page 223.
For P.C. hole patterns, see page 259.
For panel cutouts, see page 221.

## Engaging Face




Screw lock, boardlock, and high power contact removed for clarity

## Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{array}{r} \text { B } \\ \pm 0,13(.005) \\ \hline \end{array}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{array}{r} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{array}$ | $\begin{gathered} \mathrm{F} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{W} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{array}{r} \hline \mathrm{L} \\ \pm 0,25(.010) \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

## $90^{\circ}$ PC Tail - European Footprint 10,2 * or 9,4 mm * (Sizes DE-DD)

Plug


Reader's Resource
For contact cavity arrangements,
see page 222.
For P.C. hole patterns, see pages 260-262.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.

Part Numbers

| Shell Size | Layout | PartNumber Without Hardware | Part Number Metal Bracket With \#4-40 Nut |
| :---: | :---: | :---: | :---: |
| DE | 5W1 | DEM-5W1P-1AON-K87 | DEM-5W1P-1ATN-K87 |
| DA | 7W2 | DAM-7W2P-1A0N-K87 | DAM-7W2P-1A7N-K87 |
| DA | 11W1 | DAM-11W1P-1AON-K87 | DAM-11W1P-1A7N-K87 |
| DA | 3W3 | DAM-3W3P-1AON-K87 | DAM-3W3P-1ATN-K87 |
| DA | 3WK3¢ | DAM-3WK3P-1AON-K87 | DAM-3WK3P-1A7N-K87 |
| DB | 5W5 | DBM-5W5P-1AON-K87 | DBM-5W5P-1A7N-K87 |
| DB | 9W4 | DBM-9W4P-1AON-K87 | DBM-9W4P-1A7N-K87 |
| DB | 13W3 | DBM-13W3P-1AON-K87 | DBM-13W3P-1A7N-K87 |
| DB | 17W2 | DBM-17W2P-1AON-K87 | DBM-17W2P-1A7N-K87 |
| DB | 21W1 | DBM-21W1P-1AON-K87 | DBM-21W1P-1A7N-K87 |
| DC | 8W8 | DCM-8W8P-1AON-K87 | DCM-8W8P-1ATN-K87 |
| DC | 13W6 | DCM-13W6P-1AON-K87 | DCM-13W6P-1A7N-K87 |
| DC | 17W5 | DCM-17W5P-1AON-K87 | DCM-17W5P-1A7N-K87 |
| DC | 21WA4 | DCM-21WA4P-1AON-K87 | DCM-21WA4P-1ATN-K87 |
| DC | 25W3 | DCM-25W3P-1AON-K87 | DCM-25W3P-1A7N-K87 |
| DC | 27W2 | DCM-27W2P-1AON-K87 | DCM-27W2P-1A7-K87 |
| DD | 24W7 | DDM-24W7P-1AON-K87 | DDM-24W7P-1A7N-K87 |
| DD | 36W4 | DDM-36W4P-1AON-K87 | DDM-36W4P-1A7N-K87 |
| DD | 43W2 | DDM-43W2P-1AON-K87 | DDM-43W2P-1A7N-K87 |
| DD | 47W1 | DDM-47W1P-1AON-K87 | DDM-47W1P-1A7N-K87 |

Note: Performance class 3 standard, for performance class 2 add -A191. Example: DEM-5W1P-1AON-A191-K87 \& Keyed.


Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B }{ }^{(0013}(.005) \\ \hline 0 \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{array}{r} \hline D \\ \pm 0,13(.005) \\ \hline \end{array}$ | $\begin{array}{r} \mathrm{E}(.015) \\ \pm 0,38(.) \\ \hline \end{array}$ | $\begin{gathered} \mathrm{F} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{W} \\ \pm 0,368(.0145) \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { W } \\ \pm 0,41(.016) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,317(.0125) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \hline \mathrm{L}(.010) \\ \pm 0,25(.010 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,366 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (2635) | - | 1,206 (.0475) |  | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |

- Connector footprint measured from the front shell.
- Connector footprint measured from the rear shell.

| Receptacle | Part Numbers |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Shell Size | Layout | Part Number Without Hardware | Part Number Metal Bracket With \#4-40 Nut |
|  | DE | 5W1 | DEM-5W1S-1AON-A197 | DEM-5W1S-1A7N-A197 |
|  | DA | 7W2 | DAM-7W2S-1AON-A197 | DAM-7W2S-1A7N-A197 |
|  | DA | 11W1 | DAM-11W1S-1AON-A197 | DAM-11W1S-1ATN-A197 |
|  | DA | 3W3 | DAM-3W3S-1AON-A197 | DAM-3W3S-1A7N-A197 |
|  | DA | 3WK3¢ | DAM-3WK3S-1AON-A197 | DAM-3WK3S-1A7N-A197 |
|  | DB | 5W5 | DBM-5W5S-1AON-A197 | DBM-5W5S-1A7N-A197 |
|  | DB | 9W4 | DBM-9W4S-1AON-A197 | DBM-9W4S-1A7N-A197 |
|  | DB | 13W3 | DBM-13W3S-1AON-A197 | DBM-13W3S-1A7N-A197 |
|  | DB | 17W2 | DBM-17W2S-1AON-A197 | DBM-17W2S-1A7N-A197 |
|  | DB | 21W1 | DBM-21W1S-1AON-A197 | DBM-21W1S-1A7N-A197 |
| Reader's Resource | DC | 8W8 | DCM-8W8S-1AON-A197 | DCM-8W8S-1A7N-A197 |
| For contact cavity arrangements, | DC | 13W6 | DCM-13W6S-1AON-A197 | DCM-13W65-1A7N-A197 |
|  | DC | 17W5 | DCM-17W5S-1A0N-A197 | DCM-17W5S-1A7N-A197 |
| For P.C. hole patterns, see pages 263-265. | DC | 21WA4 | DCM-21WA4S-1AON-A197 | DCM-21WA4S-1A7N-A197 |
| For panel cutouts, see page 221. | DC | 25W3 | DCM-25W3S-1AON-A197 | DCM-25W3S-1A7N-A197 |
| For hardware views (European), | DC | 27W2 | DCM-27W2S-1AON-A197 | DCM-27W2S-1A7N-A197 |
| see page 227. | DD | 24W7 | DDM-24W7S-1AON-A197 | DDM-24W7-1A7N-A197 |
|  | DD | 36W4 | DDM-36W4S-1AON-A197 | DDM-36W4S-1ATN-A197 |
|  | DD | 43W2 | DDM-43W2S-1AON-A197 | DDM-43W2S-1A7N-A197 |
|  | DD | 47W1 | DDM-47W1S-1AON-A197 | DDM-47W1S-1ATN-A197 |

Note: Performance class 3 standard, for performance class 2 add -A191. Example: DEM-5W1S-1AON-A191-A197 \& Keyed.


Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,318(.0125) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |

Connector footprint measured from the front shell.

- Connector footprint measured from the rear shell.

Straight PC Tails - European (Sizes DE-DD)


## Reader's Resource

For contact cavity arrangements, see page 222.
For P.C. hole patterns, see pages 266-268.
For panel cutouts, see page 221.
For hardware views (European), see page 227.

Part Numbers

| Shell Size | Layout | $\begin{gathered} \hline \text { Part Number } \\ X \\ 4,60(, 181) \end{gathered}$ | $\begin{gathered} \hline \text { Part Number } \\ \text { X } \\ 6,05(.238) \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| DE | 5W1 | DEM-5W1P-0L2-K87 | DEM-5W1P-0L4-K87 |
| DA | 7W2 | DAM-7W2P-0L2-K87 | DAM-7W2P-0L4-K87 |
| DA | 11W1 | DAM-11W1P-0L2-K87 | DAM-11W1P-0L4-K87 |
| DA | 3W3 | DAM-3W3P-OL2-K87 | DAM-3W3P-0L4-K87 |
| DA | 3WK3\% | DAM-3WK3P-0L2-K87 | DAM-3WK3P-0L4-K87 |
| DB | 5W5 | DBM-5W5P-OL2-K87 | DBM-5W5P-0L4-K87 |
| DB | 9W4 | DBM-9W4P-OL2-K87 | DBM-9W4P-0L4-K87 |
| DB | 13W3 | DBM-13W3P-OL2-K87 | DBM-13W3P-0L4-K87 |
| DB | 17W2 | DBM-17W2P-0L2-K87 | DBM-17W2P-0L4-K87 |
| DB | 21W1 | DBM-21W1P-0L2-K87 | DBM-21W1P-0L4-K87 |
| DC | 8W8 | DCM-8W8P-OL2-K87 | DCM-8W8P-0L4-K87 |
| DC | 13W6 | DCM-13W6P-0L2-K87 | DCM-13W6P-0L4-K87 |
| DC | 17W5 | DCM-17W5P-0L2-K87 | DCM-17W5P-0L4-K87 |
| DC | 21WA4 | DCM-21WA4P-OL2-K87 | DCM-21WA4P-0L4-K87 |
| DC | 25W3 | DCM-25W3P-0L2-K87 | DCM-25W3P-0L4-K87 |
| DC | 27W2 | DCM-27W2P-0L2-K87 | DCM-27W2P-0L4-K87 |
| DD | 24W7 | DDM-24W7P-0L2-K87 | DDM-24W7P-0L4-K87 |
| DD | 36W4 | DDM-36W4P-0L2-K87 | DDM-36W4P-0L4-K87 |
| DD | 43W2 | DDM-43W2P-0L2-K87 | DDM-43W2P-0L4-K87 |
| DD | 47W1 | DDM-47W1P-0L2-K87 | DDM-47W1P-0L4-K87 |

Note: Performance class 3 standard, for performance class 2 add -A191. Example: DEM-5W1P-OL2-A191-K87 \& Keyed.


Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{B} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} E \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} K \\ \pm 0,317(.0125) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(, 010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |

## D Subminiature

Combo D


## Reader's Resource

For contact cavity arrangements,
see page 223.
For P.C. hole patterns, see pages 269-271.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.

Part Numbers

| Shell Size | Layout | Part Number $X$ <br> 4.60 (.181) | $\begin{gathered} \hline \text { Part Number } \\ \text { X } \\ 6.05(.238) \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| DE | 5W1 | DEM-5W1S-0L2-A197 | DEM-5W1S-0L4-A197 |
| DA | 7W2 | DAM-7W2S-0L2-A197 | DAM-7W2S-0L4-A197 |
| DA | 11W1 | DAM-11W15-OL2-A197 | DAM-11W1S-0L4-A197 |
| DA | 3W3 | DAM-3W3S-0L2-A197 | DAM-3W3S-0L4-A197 |
| DA | 3WK3¢ | DAM-3WK3S-OL2-A197 | DAM-3WK3S-0L4-A197 |
| DB | 5W5 | DBM-5W5S-0L2-A197 | DBM-5W5S-0L4-A197 |
| DB | 9W4 | DBM-9W4S-0L2-A197 | DBM-9W4S-0L4-A197 |
| DB | 13W3 | DBM-13W3S-OL2-A197 | DBM-13W3S-0L4-A197 |
| DB | 17W2 | DBM-17W2S-OL2-A197 | DBM-17W2S-0L4-A197 |
| DB | 21W1 | DBM-21W1S-OL2-A197 | DBM-21W15-0L4-A197 |
| DC | 8W8 | DCM-8W8S-0L2-A197 | DCM-8W8S-0L4-A197 |
| DC | 13W6 | DCM-13W65-0L2-A197 | DCM-13W6S-0L4-A197 |
| DC | 17W5 | DCM-17W55-0L2-A197 | DCM-17W5S-0L4-A197 |
| DC | 21WA4 | DCM-21WA4S-OL2-A197 | DCM-21WA4S-OL4-A197 |
| DC | 25W3 | DCM-25W35-0L2-A197 | DCM-25W3S-0L4-A197 |
| DC | 27W2 | DCM-27W2S-OL2-A197 | DCM-27W2S-0L4-A197 |
| DD | 24W7 | DDM-24W75-0L2-A197 | DDM-24W7S-0L4-A197 |
| DD | 36W4 | DDM-36W45-0L2-A197 | DDM-36W4S-0L4-A197 |
| DD | 43W2 | DDM-43W2S-0L2-A197 | DDM-43W2S-0L4-A197 |
| DD | 47W1 | DDM-47W15-0L2-A197 | DDM-47W1S-0L4-A197 |

Note: Performance class 3 standard, for performance class 2 add -A191. Example: DEM-5W1S-OL2-A191-A197 of Keyed.


## Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \mathbf{F} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathrm{W} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,318(.0125) \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { L } \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76(.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76(030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |

## Solder Cup (Sizes DE-DD)

## Plug



## Reader's Resource

For contact cavity arrangements, see page 222.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.
Part Numbers

| Shell Size | Layout | Through Hole | Dual Float Mount | Clinch Nut \# 4-40 UNC |
| :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEM5W1PK87 | DEMY5W1PK87 | DEME5W1PK87 |
| DA | 7W2 | DAM7W2PK87 | DAMY7W2PK87 | DAME7W2PK87 |
| DA | 11W1 | DAM11W1PK87 | DAMY11W1PK87 | DAME11W1PK87 |
| DA | 3W3 | DAM3W3PK87 | DAMY3W3PK87 | DAME3W3PK87 |
| DA | 3WK3¢ | DAM3WK3PK87 | DAMY3WK3PK87 | DAME3WK3PK87 |
| DB | 5W5 | DBMP5W5PK87 | DBMY5W5PK87 | DBME5W5PK87 |
| DB | 9W4 | DBM9W4PK87 | DBMY9W4PK87 | DBME9W4PK87 |
| DB | 13W3 | DBM13W3PK87 | DBMY13W3PK87 | DBME13W3PK87 |
| DB | 17W2 | DBM17W2PK87 | DBMY17W2PK87 | DBME17W2PK87 |
| DB | 21W1 | DBM21W1PK87 | DBMY21W1PK87 | DBME21W1PK87 |
| DC | 8W8 | DCM8W8PK87 | DCMY8W8PK87 | DCME8W8PK87 |
| DC | 13W6 | DCM13W6PK87 | DCMY13W6PK87 | DCME13W6PK87 |
| DC | 17W5 | DCM17W5PK87 | DCMY17W5PK87 | DCME17W5PK87 |
| DC | 21WA4 | DCM21WA4PK87 | DCMY21WA4PK87 | DCME21WA4PK87 |
| DC | 25W3 | DCM25W3PK87 | DCMY25W3PK87 | DCME25W3PK87 |
| DC | 27W2 | DCM27W2PK87 | DCMY27W2PK87 | DCME27W2PK87 |
| DD | 24W7 | DDM24W7PK87 | DDMY24W7PK87 | DDME24W7PK87 |
| DD | 36W4 | DDM36W4PK87 | DDMY36W4PK87 | DDME36W4PK87 |
| DD | 43W2 | DDM43W2PK87 | DDMY43W2PK87 | DDME43W2PK87 |
| DD | 47W1 | DDM47W1PK87 | DDMY47W1PK87 | DDME47W1PK87 |

For contacts with 30 microinches gold substitute K127 for K87. Example: DEM5W1PK127
For M3 clinch nuts substitute X for E. Example: DEMX5W1PK87
\& Keyed.


DD Configuration



Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} E \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \mathbf{F} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{W} \\ \pm 0,368(.0145) \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathrm{W} \\ \pm 0,41(.016) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,317(.0125) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{l} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |

## Solder Cup (Sizes DE-DD)

Receptacle


## Reader's Resource

For contact cavity arrangements, see page 223.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.

Part Numbers

| Shell Size | Layout | Through Hole | $\begin{gathered} \hline \text { Dual } \\ \text { Float Mount } \end{gathered}$ | $\begin{aligned} & \text { Clinch Nut } \\ & \# 4-40 \text { UNC } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEM5W1SA197 | DEMY5W1SA197 | DEME5W1SA197 |
| DA | 7W2 | DAM7W2SA197 | DAMY7W2SA197 | DAME7W2SA197 |
| DA | 11W1 | DAM11W1SA197 | DAMY11W1SA197 | DAME11W1SA197 |
| DA | 3W3 | DAM3W3SA197 | DAMY3W3SA197 | DAME3W3SA197 |
| DA | 3WK3¢ | DAM3WK3SA197 | DAMY3WK3SA197 | DAME3WK3SA197 |
| DB | 5W5 | DBM5W5SA197 | DBMY5W5SA197 | DBME5W5SA197 |
| DB | 9W4 | DBM9W4SA197 | DBMY9W4SA197 | DBME9W4SA197 |
| DB | 13W3 | DBM13W3SA197 | DBMY13W3SA197 | DBME13W3SA197 |
| DB | 17W2 | DBM17W2SA197 | DBMY17W2SA197 | DBME17W2SA197 |
| DB | 21W1 | DBM21W1SA197 | DBMY21W1SA197 | DBME21W1SA197 |
| DC | 8W8 | DCM8W85A197 | DCMY8W85A197 | DCME8W85A197 |
| DC | 13W6 | DCM13W6SA197 | DCMY13W6SA197 | DCME13W6SA197 |
| DC | 17W5 | DCM17W5SA197 | DCMY17W5SA197 | DCME17W5SA197 |
| DC | 21WA4 | DCM21WA4SA197 | DCMY21WA4SA197 | DCME21WA4SA197 |
| DC | 25W3 | DCM25W3SA197 | DCMY25W3SA197 | DCME25W3SA197 |
| DC | 27W2 | DCM27W2SA197 | DCMY27W2SA197 | DCME27W2SA197 |
| DD | 24W7 | DDM24W7SA197 | DDMY24W7SA197 | DDME24W7SA197 |
| DD | 36W4 | DDM36W4SA197 | DDMY36W4SA197 | DDME36W4SA197 |
| DD | 43W2 | DDM43W2SA197 | DDMY43W2SA197 | DDME43W2SA197 |
| DD | 47W1 | DDM47W1SA197 | DDMY47W1SA197 | DDME47W1SA197 |

For contacts with 30 microinches gold substitute K126 for A197. Example: DEM5W1SK126
For M3 clinch nuts substitute X for E. Example: DEMX5W1SA197
\& Keyed.


## Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{array}{r} \hline \text { D } \\ \pm 0,13(.005) \\ \hline \end{array}$ | $\begin{array}{r} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{array}$ | $\begin{gathered} \mathrm{F} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,318(.0125) \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { L } \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.123) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76(.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76(.030) |

## Crimp Cable Connectors without Contacts (Sizes DA-DD)

Plug


## Reader's Resource

For contact cavity arrangements, see page 222.
For panel cutouts, see page 221.

Part Numbers

| Shell Size | Layout | Part Number |
| :---: | :---: | :---: |
| DA | 7W2 | DAA7W2PK87F0 |
| DA | 11W1 | DAA11W1PK87F0 |
| DA | 3W3 | DAA3W3PK87F0 |
| DB | 5W5 | DBA5W5PK87F0 |
| DB | 9W4 | DBA9W4PK87F0 |
| DB | 13W3 | DBA13W3PK87F0 |
| DB | 17W2 | DBA17W2PK87F0 |
| DB | 21W1 | DBA21W1PK87F0 |
| DC | 8W8 | DCA8W8PK87F0 |
| DC | 21WA4 | DCA21WA4PK87F0 |
| DC | 25W3 | DCA25W3PK87F0 |
| DD | $24 W 7$ | DDA24W7PK87F0 |
| DD | 36W4 | DDA36W4PK87F0 |

Note: For crimp (Size 20) contacts and tooling, see pages $83 \& 275$.


## Engaging Face



Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathbf{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \\ \hline \end{gathered}$ | $\begin{gathered} W \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,317(.0125) \end{gathered}$ | $\begin{gathered} \text { K } \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |

## D Subminiature

## Crimp Cable Connectors without Contacts (Sizes DA-DD)

| Receptacle | Part Numbers |  |  |
| :---: | :---: | :---: | :---: |
|  | Shell Size | Layout | PartNumber |
|  | DA | 7W2 | DAA7W2SA197F0 |
|  | DA | $11 W 1$ | DAA11W1SA197F0 |
|  | DA | 3W3 | DAA3W3SA197F0 |
|  | DB | 5W5 | DBA5W5SA197F0 |
|  | DB | 9W4 | DBA9W4SA197F0 |
| Reader's Resource <br> For contact cavity arrangements, see page 223. <br> For panel cutouts, see page 221. | DB | 13W3 | DBA13W3SA197F0 |
|  | DB | 17W2 | DBA17W2SA197F0 |
|  | DB | 21W1 | DBA21W1SA197F0 |
|  | DC | 8W8 | DCA8W8SA197F0 |
|  | DC | 21WA4 | DCA21WA4SA197F0 |
|  | DD | 24W7 | DDA24W7SA197F0 |
|  | DD | 36W4 | DDA36W4SA197F0 |

Note: For crimp (Size 20) contacts and tooling, see pages $83 \& 275$.


## Dimensions

| Shell Size | $\stackrel{\mathrm{A}}{ \pm 0,38(.015)}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} C \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \mathbf{F} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathrm{W} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,317(.0125) \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { L } \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |

## Shield Cans <br> 

| $\varnothing$ Cable | Ferrule <br> $\varnothing$ A | Ferrule <br> Part Number | Crimp Tool <br> Part Number | Crimp Tool <br> Position |
| :---: | :---: | :---: | :---: | :---: |
| $4,8 \cdot 5,5$ | $6,25(.246)$ | $304-8810-000$ | D115433-1 | B |
| $5,5-6,2$ | $6,25(.246)$ | $304-8810-000$ | D115433-1 | A |
| $6,2 \cdot 7,2$ | $8,20(.323)$ | $304-8811-000$ | D115433-2 | B |
| $7,2 \cdot 8,2$ | $8,20(.323)$ | $304-8811-000$ | D115433-2 | A |
| $8,2 \cdot 9,5$ | $11,50(.452)$ | $304-8812-000$ | D115433-3 | B |
| $9,5-11,1$ | $11,50(.452)$ | $304-8813-000$ | D115433-3 | A |

## Part Numbers

| Top Can (B size): | $348-8946-000$ |
| :--- | :--- |
| Bottom Can (B size): | $348-8945-000$ |

Note: For other available can sizes, consult factory for details.
Order 1 top can, 1 bottom can, 1 ferrule per connector.


## Ferrule

## Wire Trim Dimensions




| Materials and Finishes |  |
| :--- | :--- |
| Shield Can and Ferrule |  |
| Material: | Steel |
| Finish: | Tin |



## Crimp Tool Positions



## D Subminiature

## Crimp (Size 20) Contacts

## Loose Contacts

Stamped contacts with insulation support are supplied loose for use with hand crimp tooling. Two sizes are available to accommodate wire ranges 20-26 AWG.

| Finish |
| :---: |
| $30 \mu$ inches Gold over Nickel |

For tooling, see this page.

## Pin Contact



| Part Number <br> Pin Contact |  |  |
| :---: | :---: | :---: |
| 24-26 AWG | 20-24 AWG |  |
| $030-2487-017$ | $030-2487-016$ |  |

## Socket Contact



Reeled Contacts (5,000 Pieces per Reel)
Stamped contacts with insulation support are supplied on reels of 5,000 for use with semiautomatic strip and crimp machines. Two sizes are available to accommodate wire ranges 20-26 AWG.

| Finish |
| :--- |
| Gold over Nickel |
| $30 \mu$ inches Gold over Nickel |

For semi-automatic tooling, see page 275.

## Pin Contacts



| Part Number <br> Pin Contact |  |
| :---: | :---: |
| 24-26 AWG | 20-24 AWG |
| $980-2000-925$ | $980-2000-924$ |
| $980-2000-946$ | $980-2000-945$ |

## Socket Contacts


$\qquad$

Pin Contacts


## Socket Contacts



## Tooling

| CCT-D*A-1 | Hand Crimp Tool |  |  |
| :---: | :---: | :---: | :---: |
|  | Description | Part Number |  |
|  | CCT-D*A-1 | 995-2000-000 |  |
|  | Extraction Tool |  |  |
|  | Description | Part Number | Wire Size |
|  | CIET-D*A-20-24 | 980-0008-135 | $20-24$ AWG |
|  | CIET-D*A-24-26 | 980-0008-136 | 24-26 AWG |

For semi-automatic tooling, see page 275.

## Stamped Crimp/Crimp



## Recommended Wire Trim Dimensions



## Kit (Body, Ferrule, Center Contact)

| Stamped Crimp/Crimp | Kit <br> Gold over Ni | Kit <br> $30 \mu$ in. Gold over Ni | Kit <br> $50 \mu$ in. $\mathbf{G o l d}$ over Ni | RG Cable Number |
| :--- | :---: | :---: | :---: | :---: |

Loose Components for High Volume (3 Pieces - Body, Ferrule, Center Contact)

| Stamped Crimp/Crimp | Body | Ferrule | Center Contact Gold over Ni 10,000 Reel | Center Contact $30 \mu$ in. Gold over Ni 10,000 Reel |
| :---: | :---: | :---: | :---: | :---: |
| Plug | 249-2272-000 | 304-0444-000 | 110238-1015 | 110238-1012 |
| Receptacle | 249-2271-000 | 304-0444-000 | 110238-1014 | 110238-1013 |

## Tooling for Stamped Crimp/Crimp



| Description | Crimping Tool |  |
| :---: | :---: | :--- |
| Stamped Center | Hand Crimp, "B" Crimp | Tool Number |
| Conductor | Semi-Automatic Crimper | CCTP-750HM |
| Stamped Outer | Hand Tool, Hex Crimp | ABT-607 (Leased) |
| Conductor | Pneumatic Hex Crimp | CCTP-DM |

For semi-automatic tooling, see page 275.

Cable (Size 8) Loose Contacts - Coaxial 75 Ohm - $90^{\circ}$


Tooling for $90^{\circ}$ Crimp Braid


| Description | Part Number |
| :---: | :---: |
| Hand Tool: | $995-0001-761$ |
| Die Set: | $995-2000-110$ |

Cable (Size 8) Loose Contacts - Coaxial 50 Ohm - Straight

## Straight Crimp Braid




Plug


Receptacle

Note: Dimensions include outer sleeve.

|  | Part Number Gold Over Nickel | $\begin{aligned} & \text { Part Number } \\ & 50 \mu \text { in. } \\ & \text { Gold Over Copper } \end{aligned}$ | $\begin{gathered} \text { A } \\ \text { max. } \end{gathered}$ | $\underset{\text { max. }}{B}$ | $\underset{\text { min. }}{\mathrm{D}}$ | Old RG Cable Number ${ }_{\text {New }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plug | DM53740 | DM53740-17 | 18,80 (.739) | 24,00 (.945) | 1,00 (.040) | 196/U | 1788/U |
| Plug | DM53740-1 | DM53740-15 | 18,80 (.739) | 24,00 (.945) | 1,70 (.067) | $\begin{aligned} & 187 / \cup \\ & 188 / U \end{aligned}$ | $\begin{aligned} & \text { 179B/U } \\ & 316 B / U \end{aligned}$ |
| Plug | DM53740-35 | - | 18,80 (.739) | 24,00 (.945) | 1,70 (.067) | - | RD316 |
| Plug | DM53740-3 | DM53740-16 | 21,50 (.847) | 26,34 (1.037) | 2,79 (.110) | 195/U | 180B/U |
| Plug | DM53740-5 | DM53740-18 | 21,50 (.847) | 26,34 (1.037) | 3,18(.125) | 58/U | 58B/U |
| Receptacle | DM53742 | DM53742-18 | 18,80 (.739) | 24,00 (.945) | 1,00 (.040) | 196/U | 1788/U |
| Receptacle | DM53742-1 | DM53742-16 | 18,80 (.739) | 24,00 (.945) | 1,70 (.067) | $\begin{aligned} & \hline \text { 187/U } \\ & \text { 188/U } \end{aligned}$ | $\begin{aligned} & \text { 179B/U } \\ & 3168 / U \end{aligned}$ |
| Receptacle | DM53742-36 | - | 18,80 (.739) | 24,00 (.945) | 1,70 (.067) | - | RD316 |
| Receptacle | DM53742-3 | DM53742-17 | 21,50 (.847) | 26,34 (1.037) | 2,79 (.110) | 195/U | 180B/U |
| Receptacle | DM53742-5 | DM53742-19 | 21,50 (.847) | 26,34 (1.037) | 3,18 (.125) | 58/U | 58B/U |

For crimp tooling, see page 89.

## Straight Solder Braid




Plug


Receptacle

|  | Part Number Gold Over Nickel | $\begin{aligned} & \text { Part Number } \\ & 50 \mu \text { in. } \\ & \text { Gold Over Copper } \end{aligned}$ | A max. | $\underset{\text { max. }}{\mathrm{B}}$ | $\underset{\min .}{\text { D }}$ | Old RG Cable Number ${ }^{\text {New }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plug | DM53740-5008 | DM53740-5105 | 18,80 (.739) | 24,00 (.945) | 1,00 (.040) | 196/U | 178B/U |
| Plug | DM53740-5001 | DM53740-5099 | 18,80 (.739) | 24,00 (.945) | 1,70 (.067) | $\begin{aligned} & \hline \text { 187/U } \\ & \text { 188/U } \end{aligned}$ | $\begin{aligned} & \hline 179 \mathrm{~B} / \mathrm{U} \\ & 316 \mathrm{~B} / \mathrm{U} \end{aligned}$ |
| Plug | DM53740-5145 | - | 18,80 (.739) | 24,00 (.945) | 1,70 (.067) | - | RD316 |
| Plug | DM53740-5002 | DM53740-5104 | 21,50 (.847) | 26,34 (1.037) | 2,79 (.110) | 195/U | 180B/U |
| Plug | DM53740-5005 | DM53740-5101 | 21,50 (.847) | 26,34 (1.037) | 3,18 (.125) | 58/U | 58/U |
| Plug (Short Type) | DM53740-5000 | DM53740-5100 | 17,00 (.670) | 22,20 (.874) | 1,14 (.045) | 196/U | 178B/U |
| Receptacle | DM53742-5006 | DM53742-5092 | 18,80 (.739) | 24,00 (.945) | 1,00 (.040) | 196/U | 178B/U |
| Receptacle | DM53742-5001 | DM53742-5089 | 18,80 (.739) | 24,00 (.945) | 1,70 (.067) | $\begin{aligned} & \text { 187/U } \\ & \text { 188/U } \end{aligned}$ | $\begin{aligned} & 179 \mathrm{~B} / \mathrm{U} \\ & 316 \mathrm{~B} / \mathrm{U} \end{aligned}$ |
| Receptacle | DM53742-5126 | - | 18,80 (.739) | 24,00 (.945) | 1,70 (.067) | - | RD316 |
| Receptacle | DM53742-5002 | DM53742-5091 | 21,50 (.847) | 26,34 (1.037) | 2,79 (.110) | 195/U | 180B/U |
| Receptacle | DM53742-5004 | DM53742-5086 | 21,50 (.847) | 26,34 (1.037) | 3,18 (.125) | 58/U | 58/U |
| Receptacle (Short Type) | DM53742-5000 | DM53742-5085 | 17,00 (.670) | 22,20 (.874) | 1,14 (.045) | 196/U | 178B/U |

Cable (Size 8) Loose Contacts - Coaxial 50 Ohm - $90^{\circ}$

## $90^{\circ}$ Crimp Braid




Plug


Receptacle

Note: Dimensions include outer sleeve.

|  | Part Number Gold Over Nickel | Part Number $50 \mu$ in. Gold Over Copper | $\underset{\max .}{ }$ | $\begin{gathered} \mathrm{B} \\ \max . \end{gathered}$ | C | $\begin{gathered} D \\ \pm 0,13(.005) \end{gathered}$ | RG Cable NumberOldNew |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plug | DM53741 | DM53741-12 | 13,46 (.530) | 18,92 (.745) | 15,10 (.594) | 1,14 (.045) | 196/U | 178B/U |
| Plug | DM53741-1 | DM53741-11 | 13,46 (.530) | 18,92 (.745) | 15,10 (.594) | 1,83 (.072) | $\begin{aligned} & \text { 187/U } \\ & \text { 188/U } \end{aligned}$ | $\begin{aligned} & 179 \mathrm{~B} / \mathrm{U} \\ & 316 \mathrm{~B} / \mathrm{U} \end{aligned}$ |
| Plug | DM53741-3 | DM53741-10 | 13,46 (.530) | 18,92 (.745) | 16,00 (.630) | 2,79 (.110) | 195/U | 180B/U |
| Plug | DM53741-4 | DM53741-13 | 13,46 (.530) | 18,92 (.745) | 16,00 (.630) | 3,18 (.125) | 58/U | 58B/U |
| Receptacle | DM53743-2 | DM53743-18 | 13,46 (.530) | 18,92 (.745) | 15,09 (.594) | 1,14 (.045) | 196/U | 178B/U |
| Receptacle | DM53743-3 | DM53743-16 | 13,46 (.530) | 18,92 (.745) | 15,09 (.594) | 1,83 (.072) | $\begin{aligned} & \hline \text { 187/U } \\ & 188 / U \end{aligned}$ | $\begin{aligned} & 179 B / U \\ & 316 B / U \end{aligned}$ |
| Receptacle | DM53743-5 | DM53743-17 | 13,46 (.530) | 18,92 (.745) | 16,00 (.630) | 2,79 (.110) | 195/U | 180B/U |
| Receptacle | DM53743-6 | DM53743-19 | 13,46 (.530) | 18,92 (.745) | 16,00 (.630) | 3,18 (.125) | 58/U | 58B/U |

For crimp tooling, see page 89.
$90^{\circ}$ Solder Braid



Plug


Receptacle

|  | Part Number Gold Over Nickel | Part Number $50 \mu$ in. Gold Over Copper | $\underset{\max }{\mathrm{A}}$ | $\begin{gathered} \mathrm{B} \\ \max . \end{gathered}$ | C | $\underset{\min }{\mathrm{D}}$ |  | ber New |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plug | DM53741-5000 | DM53741-5059 | 13,46 (.530) | 18,92 (.745) | 15,10 (.594) | 1,00 (.040) | 196/U | 178B/U |
| Plug | DM53741-5001 | DM53741-5062 | 13,46 (.530) | 18,92 (.745) | 15,10 (.594) | 1,70 (.067) | $\begin{aligned} & \text { 187/U } \\ & \text { 188/U } \end{aligned}$ | $\begin{aligned} & 179 \mathrm{~B} / \mathrm{U} \\ & 316 \mathrm{~B} / \mathrm{U} \end{aligned}$ |
| Plug | DM53741-5003 | DM53741-5063 | 13,46 (.530) | 18,92 (.745) | 16,00 (.630) | 2,79 (.110) | 195/U | 180B/U |
| Plug | DM53741-5004 | DM53741-5060 | 13,46 (.530) | 18,92 (.745) | 16,00 (.630) | 3,18 (.125) | 58/U | 58/U |
| Receptacle | DM53743-5000 | DM53743-5073 | 13,46 (.530) | 18,92 (.745) | 15,09 (.594) | 1,00 (.040) | 196/U | 178B/U |
| Receptacle | DM53743-5001 | DM53743-5076 | 13,46 (.530) | 18,92 (.745) | 15,09 (.594) | 1,70 (.067) | $\begin{aligned} & \hline \text { 187/U } \\ & \text { 188/U } \end{aligned}$ | $\begin{aligned} & \hline 179 \mathrm{~B} / \mathrm{U} \\ & 316 \mathrm{~B} / \mathrm{U} \end{aligned}$ |
| Receptacle | DM53743-5003 | DM53743-5077 | 13,46 (.530) | 18,92 (.745) | 16,00 (.630) | 2,79 (.110) | 195/U | 180B/U |
| Receptacle | DM53743-5004 | DM53743-5074 | 13,46 (.530) | 18,92 (.745) | 16,00 (.630) | 3,18 (.125) | 58/U | 58B/U |

Insertion/Extraction Instructions for Coaxial, High Power and High Voltage Contacts

## Insertion Tool

No insertion tool is required. The contact is easily snapped in from the rear of the connector manually.

## Insertion Instructions



## Extraction Tool

## CET-C6B-2



The CET-C6B-2 tool extracts all coaxial, high power and high voltage contacts (plug and receptacle).

| Description | PartNumber |
| :---: | :---: |
| CET-C6B-2 | $070064-0002$ |

Operating Instructions


To extract the coaxial contact, hold the tool by the body and insert the tip into the front of the contact cavity until it bottoms and closes the coaxial retaining ring. Holding the body in this position
securely enough to keep coaxial retaining ring closed, push the plunger; contact will be pushed out of the rear of the assembly.

## Coaxial Assembly Instructions

## Straight and $90^{\circ}$ Coaxial Assembly STEP 1:

Slide the outer ring over the cable jacket. Trim the cable as specified in the table of Coaxial Cable Trim Dimensions (see this page). Insert the cable dielectric and center conductor into the inside diameter of the inner sleeve. Then solder the center conductor to the coaxial center contact.

Straight Coaxial

$90^{\circ}$ Coaxial


## Straight and $90^{\circ}$ Coaxial Assembly

## STEP 2:

Slide the outer ring forward until it is flush with the coaxial shell containing the braid between the outer ring and the inner sleeve. For solder type coaxes, soft solder the outer ring to the assembly through the cross-drilled solder hold. For crimp type coaxes, crimp with the appropriate tool in the area defined.

## Straight Coaxial



## $90^{\circ}$ Coaxial



SHELLAFTER CABLE ASSEMBLY ON $90^{\circ}$ TYPE COAXES

## Coaxial Cable Trim Dimensions



Hand tool with integral die setfor all coaxial straight crimp braid.

| RG Cable Number | Straight Coaxial |  |  | $90^{\circ}$ Coaxial |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \mathrm{N} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{array}{r} 0 \\ \pm 0,25(.010) \\ \hline \end{array}$ | $\begin{gathered} \hline \mathrm{P} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{N} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{P} \\ \pm 0,25(.010) \end{gathered}$ |
| 196/U, 178B/U, 187/U, 188/U, 179B/U, 316B/U | 7,92 (.312) | 6,35 (.250) | 1,98(.078) | 9,52 (.375) | 5,94 (.234) | 1,57 (.062) |
| 195/U, 180B/U, 58/U, 58B/U | 9,52 (.375) | 7,92 (.312) | 1,98(.078) | 10,69 (.422) | 7,92 (.312) | 2,39 (.094) |


| RG Cable Number | Tool Part Number | Description | Closure |
| :---: | :---: | :---: | :---: |
| $196 / \mathrm{U}, 178 \mathrm{~B} / \mathrm{U}$ | $070051-0000$ | CCT-DM | C |
| $187 / U, 179 \mathrm{~B} / \mathrm{U}$, |  |  |  |
| $188 / \mathrm{U}, 316 \mathrm{~B} / \mathrm{U}$ | $070051-0000$ | CCT-DM | B |
| $195 / \mathrm{U}, 180 \mathrm{~B} / \mathrm{U}$, | $070051-0000$ | CCT-DM | A |
| $58 / \mathrm{L} 58 \mathrm{~B} / \mathrm{U}$ |  |  |  |



Cable (Size 8) Loose Contacts - High Power - Crimp
Plug

| Receptacle |  |  | Recommended Wire Trim Length |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Part Number Gold Over Nickel | Part Number $30 \mu$ in. Gold over Ni | Part Number $50 \mu$ in. Gold over Ni | $\varnothing$ A <br> max. | $\begin{aligned} & \hline \varnothing B \\ & \text { max. } \end{aligned}$ | Current Rating | Wire Size |
|  | DM130341-4 | DM130341 | DM130341-1 | 4,60 (.181) | 5,84 (.230) | 40 A | 8 AWG |
|  | DM130342-4 | DM130342 | DM130342-1 | 2,54 (.100) | 5,54 (.218) | 20 A | 12 AWG |
|  | DM130343-4 | DM130343 | DM130343-1 | 1,07 (.067) | 2,59 (.102) | 10 A | 16 AWG |

High Power Crimp Tooling

| M300-BT | Crimp Tool/Locator |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Wire } \\ & \text { Size } \end{aligned}$ | $\begin{gathered} \hline \text { Crimp } \\ \text { Tool } \end{gathered}$ | Tool Setting Number | Locator |
|  | 8 AWG | M300-BT | 6 | TP968 |
|  | 10 AWG | M300-BT | 5 | TP968 |
|  | 12/14 AWG | M $300-\mathrm{BT}$ | 1 | TP968 |
|  | 16 AWG | FT-8 | 6 | TH554 |
|  | 18 AWG | FT-8 | 5 | TH554 |

## D Subminiature

Cable (Size 8) Loose Contacts - High Voltage - Straight
Plug


For tooling, see page 88.

| Part Number <br> Gold over Ni | Part Number <br> $50 \mu$ in. Gold | Wire <br> Size |
| :---: | :---: | :---: |
| DM51157 | DM51157-8 | 20 AWG |

## Receptacle



| Part Number | Part Number | Wire |
| :---: | :---: | :---: |
| Gold over Ni | $50 \mu$ in. Gold | Size |
| DM51155 | DM51155-7 | 20 AWG |

Cable (Size 8) Loose Contacts - High Voltage - $90^{\circ}$
Plug


For tooling, see page 88.

| Part Number <br> Gold over Ni | Part Number <br> $50 \mu$ in. Gold | Wire <br> Size |
| :---: | :---: | :---: |
| DM51157-5000 | DM51157-5005 | 20 AWG |

## Receptacle



For tooling, see page 88.

| Part Number <br> Gold over Ni | Part Number <br> $50 \mu$ in. Gold | Wire <br> Size |
| :---: | :---: | :---: |
| DM51155-5000 | DM51155-5004 | 20 AWG |

PCB (Size 8) Loose Contacts - Coaxial 75 Ohm - Straight
Plug


PCB (Size 8) Loose Contacts - Coaxial 75 Ohm - $90^{\circ}$

## Plug



| Description | Part Number |
| :---: | :---: |
| Plug | DM130352-2 |



## Receptacle



## D Subminiature

Combo ${ }^{\text {® }}$

PCB (Size 8) Loose Contacts - High Power - Straight


| Description | Part Number |
| :---: | :---: |
| Socket | DM53744-98 |



PCB (Size 8) Loose Contacts - High Power - $90^{\circ}$
Pin


| Shell Size | Part Number | $\pm \mathbf{A}$ | B |  |
| :--- | :---: | :---: | :---: | :---: |
| $\mathbf{0 , 2 5 ( . 0 1 0 )}$ | $\pm 0,25(.010)$ | $\varnothing C$ <br> $\pm 0,13(.005)$ |  |  |
| $D E, D A, D B, D C$ | DM53745-104 | $10,62(.418)$ | $26,64(1.049)$ | $3,18(.125)$ |
| $D$ | DM53745-107 | $13,41(.528)$ | $26,64(1.049)$ | $3,18(.125)$ |
| European Footprint DE, DA, DB, DC, DD | DM53745-120 | $18,06(.711)$ | $11,00(.433)$ | $2,90(.114)$ |

## Socket



PCB (Size 8) Loose Contacts - High Voltage - Straight
Plug


| Part Number | Part Number |
| :---: | :---: |
| Gold over Ni | 50 $\mu$ in. Gold |
| DM51157-13 | DM51157-14 |

## Receptacle




| Part Number <br> Gold over Ni | Part Number <br> $50 \mu$ in. Gold |
| :---: | :---: |
| DM51155-12 | DM51155-13 |

## PCB Guide Pin and Socket



Installs into any Combo D, Size 8 cavity. This guide pin and socket system is ideal for blind mate applications where space is limited.

Selection Index Page
Commercial Shielded M icro D
An Introduction ..... 97
Locking/Latching Options ..... 98
Cable Assemblies - Pigtail. ..... 98
PCB Connector $90^{\circ}$ - Single or Stacked. ..... 99
Cable Connectors (Unassembled Components) ..... 100
Crimp Contacts ..... 100
Tooling. ..... 101
MDSM SSA Compatible Cable Assemblies ..... 102

## D Subminiature

MDSM is the commercial industry's smallest D-type connector for shielded I/O wire-to-board applications. Requiring less than $1 / 3$ the area of a traditional D Subminiature connector, MDSM is designed for situations where space and EMI shielding are the primary design drivers.

Unlike other micro connectors, MDSM's rugged construction and unique contact design combined with a PdNi contact finish provide durability of 10,000 mating cycles. All of this comes in a sleek package that includes a snap together shield can and a slide over boot producing a cable assembly with an overmolded look and a low assembled cost. MDSM is an ideal solution for applications where size, shielding, durability and aesthetics are key design criteria.

## Applications:

Electronic Notepads
VME Cards
Multiplexors
Serial Storage Devices
Computer Workstations
Hand Held Devices
Bar Code Scanners

## Product Features

1,27 (.050) Pitch / Saves Space
Fully Shielded / Reduces EMI
Crimp Contacts / Applied Cost Savings
Accessories Included / Fewer Part Numbers
PdNi Plating / 10,000 Mating Cycles


## Specifications

| Temperature Rating | $-55^{\circ} \mathrm{C}$ to $125^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Current Rating | 1 A - temp dependent |
| Contact Resistance | $20 \mathrm{~m} \Omega \mathrm{Max}$. |
| Insulation Resistance | $5000 \mathrm{M} \Omega$ Min. |
| Dielectric Withstanding Voltage | 350 V at Sea Level |
| Durability | 10,000 Mating Cycles |
| Shock / Vibration | 50 G / / 50 G 's |
| Wire Size | 26 to 30 AWG |

## Materials and Finishes

| Description | Material | Finish |
| :--- | :--- | :--- |
| Shell | Steel | Nickel |
| Shield Can | Steel | Tin |
| Cover | Steel | Tin |
| Insulator | Thermoplastic, UL94 V-0 | None |
| Contacts | Copper Alloy | Gold flash over 30 microinches PdNi in mating area, Tin on balance |

## Contact Arrangements

(Face View of Pin Insert - Use Mirror Image for Socket Side)



The jackscrew locking system is designed for applications which require a secure connection. Utilize thumbscrews when the connectors are infrequently unmated.

## Push/Pull



The push/pull latching system is designed for applications which require a quick connect and dis connect. A spring retention mechanism latches to a post on the board side to prevent unintentional unmatings.

Z10 Jackpost


Note: Two Jackposts supplied with boardside connectors.

## PCB Connector $90^{\circ}$ - Single



Note: Standard jackpost offering recommended for use with .060 panel.

| No. of Contacts | Part Numbers - Single |  | A max. | B | $\underset{\text { max. }}{C}$ | $\underset{\text { max. }}{\mathrm{D}}$ | E | $\begin{gathered} \mathrm{F} \\ \pm 0,05(.002) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thumbscrew | Push/Pull |  |  |  |  |  |  |
| 9 | MDSM-9PE-Z10-VR25* | MDSM-9E-Z42-VR25* | 19,90 (.783) | 14,35 (.565) | 8,60 (.339) | 9,00 (.354) | 5,08 (.200) | 10,24 (.403) |
| 15 | MDSM-15PE-Z10-VR22 | MDSM-15PE-Z42-VR22 | 23,60 (.929) | 18,16 (.715) | 12,30 (.484) | 12,90 (.508) | 8,89 (.350) | 14,01 (.551) |
| 25 | MDSM-25PE-Z10-VR17 | MDSM-25PE-Z42-VR17 | 29,95 (1.179) | 24,51 (.965) | 18,65 (.734) | 19,25 (.758) | 15,24 (.600) | 20,35 (.801) |

*For use with SSA applications

## PCB Connector $90^{\circ}$ - Stacked



| No. of Contacts | Part Numbers - Stacked |  | A max. | B | $\underset{\text { max. }}{C}$ | $\underset{\max .}{D}$ | E | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thumbscrew | Push/Pull |  |  |  |  |  |  |
| 18 | MDSM-18PE-Z10-VR25* | MDSM-18PE-Z42-VR25* | 19,90 (.783) | 14,35 (.565) | 8,60 (.339) | 9,00 (.354) | 5,08(.200) | 10,24 (.403) |
| 30 | MDSM-30PE-Z10-VR22 | MDSM-30PE-Z42-VR22 | 23,50 (.925) | 18,16 (.715) | 12,30 (.484) | 12,71 (.500) | 8,89 (.350) | 14,00 (.551) |

[^12]
## Cable Connectors (Unassembled Components)

J ackscrew


Cable connectors are supplied as complete kits with insulator, hood, shell/shield assembly, and cover, bulk packaged.


## Crimp Contacts



|  | Part Numbers |  |  |
| :--- | :---: | :---: | :---: |
|  | 1,000 Piece Reel | 10,000 Piece Reel |  |
| Socket | MDS-S-TS | MDS-S-RL |  |

For crimp tooling, see page 101.

## Contact Crimping Tools



Contact Insertion/Extraction Tools

J ackpost Tool


Part Number: CIET-MDSM
Note: For use with Z10 J ackpost.

Insertion Tool


Part Number: 120090-0102
Note: Contacts cannot be removed from MDSM connectors.

Shield Crimp Tooling

Shield crimping requires four items; one press, one locator, and one each of the two dies listed below.
Locator and Dies for Shield Termination Ordered Separately

|  | Part Numbers |  |
| :---: | :---: | :---: |
| Layout | Locator | Die |
| 9 | $317-8666-013$ | $274-8649-332 / 274-8649-333$ |
| 15 | $317-8666-014$ | $274-8649-334 / 274-8649-335$ |
| 25 | $317-8666-016$ | $274-8649-338 / 274-8649-339$ |

Note: For assembly instructions and crimping information, refer to Manual \# MY-1/190.

Hand Press


Part Number: CHP-MDSM-SR

Pneumatic Press

$\qquad$


ITT Cannon's 9 position MDSM connectors have been designed into the ANSI specification called SSA, "Serial Storage Architecture," as the external I/O. SSA is a new serial interface for interconnecting storage devices, storage subsystems, servers and workstations. Storage subsystems are increasing in function, availability, density and performance. With this comes the trend for them to become more complex and ITT Cannon has the interconnect system which meets SSA's high performance requirements.

SSA is an architecture which allows these new subsystems to be implemented more easily and at lower costs than other new high speed parallel
interfaces. SSA permits the transfer of data at progressively higher speeds - $20 \mathrm{MB} /$ sec interface currently available with $40 \mathrm{MB} / \mathrm{sec}$ becoming available in 1997/98. ITT Cannon's MDSM connector not only functions at these high speeds, but also brings to SSA smaller, less cumbersome and higher reliability cables and connectors than current options.

ITT Cannon is offering SSA compatable external cable assemblies in six different lengths to meet your needs. These assemblies consist of two MDSM 9SC type cable connectors terminated to SSA specified external cable.


Note: Cables shown with Z 50 thumbscrews.

| Part Number | $\underset{\text { Meter (Feet) }}{\substack{\text { and }}}$ | Tolerance |
| :---: | :---: | :---: |
| CA112104 | 0,50 (1.600) | $\pm 25,00$ (1.000) |
| CA112104-1 | 1,00 (2.200) | $\pm 25,00$ (1.000) |
| CA112104-2 | 3,00 (9.800) | $\pm 25,00$ (1.000) |
| CA112104-3 | 5,00 (16.400) | $\pm 64,00$ (2.500) |
| CA112104-4 | 10,00 (32.800) | $\pm 64,00$ (2.500) |
| CA112104-5 | 20,00 (65.600) | $\pm 64,00$ (2.500) |

Note: For push/pull assemblies or other thumbscrews, please consult the factory.
Crimp dies for SSA applications will be offered by ITT Cannon. Consult factory for details.


Note: Shield connected to both shells.

## External Cable Pinouts

|  | P1 |  |  | P2 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Pin | Signal Name |  | Pin |  |  |
| 2 | LineOut |  | 4 | Signal Name |  |
| 6 | LineOut + |  | 9 | Lineln - |  |
| 4 | Lineln - | 2 | Lineln + |  |  |
| 9 | Lineln + | 6 | LineOut- |  |  |
|  |  |  | LineOut + |  |  |

Note: Pins 1, 3, 5, 7 and 8 are not connected.

## SSA External Cable Wire Cross Section (For Reference Only)



Transfer Impedance Performance
Requirements for External SSA Connections

| Frequency MHz | Value (dB-Ohm)(max.) |
| :---: | :---: |
| 30 | -25 |
| 159 | -16 |
| 500 | -10 |

Selection Index ..... Page
Filter D
An Introduction to D*J K and D*J T ..... 105
D*JK Filter Performance and Electrical Data ..... 106
D*JT Filter Performance and Electrical Data ..... 107
D*JK Connectors
Standard Footprint . 318 * or $.283^{\star}$ inches $90^{\circ}$ PC Tails ..... 108
$90^{\circ}$ PC Tails, Metal Brackets ..... 112
European Footprint 10,2 * or 9,4 * mm$90^{\circ}$ PC Tails110
$90^{\circ}$ PC Tails, Metal Brackets ..... 114
$90^{\circ}$ PC Tails, Plastic Brackets \& Grounding Straps ..... 116
$90^{\circ}$ PC Tails, Plastic Brackets ..... 118
Straight PC Tails ..... 120
D*J T Connectors
Solder Cup ..... 122
Combo - High Power $90^{\circ}$. ..... 124
Combo - High Power Straight. ..... 126
Combo - High Power Solder Cup ..... 128

## D*JK/D*JT

Filter connectors series $\mathrm{D}^{*} \mathrm{~J} K$ and $\mathrm{D}^{*} \mathrm{~J}$ T from ITT Cannon especially designed for commercial applications provide excellent protection against EMI and RFI.

Using D Subminiature standard components a cost-effective production can be achieved as well as $100 \%$ compatibility with equivalent products according to DIN 41652. D Subminiature standard accessories can be used.

High quality tubular ceramic capacitors are assembled onto the $D^{*} \mathrm{~J}$ K contacts and soldered to contact and backshell while series D*JT connectors apply planar array filters.

## Applications:

EMI/RFI Sensitive Electronics
Test \& Measurement Equipment
Computer Equipment
Medical Equipment
Telecommunication Transmission


## Product Features

HF-tightness and mechanical stability by closed backshell
Free-stamped grounding fingers (pin connector only)

Straight and $90^{\circ}$ solder pins ( $\mathrm{D}^{*} \mathrm{~J} \mathrm{~K}$ ) Solder cups, straight and $90^{\circ}$ solder pins (D*JT)

Versatile mounting possibilities (brackets, captive nuts)
Contact finsh according to performance class 2 (standard) or class 1

## Specifications

Temperature Range Per DIN IEC 68 Part $1 \quad-55^{\circ} \mathrm{C}$ to $125^{\circ} \mathrm{C}$

## Materials and Finishes

| Description | Material | Finish |
| :--- | :--- | :--- |
| Shell | Steel | Tin |
| Insulator | Thermoplastic, UL 94V-0 | None |
| Contacts | Copper Alloy | Gold over Nickel |

Mechanical Data

| Coupling | Friction, accessories |
| ---: | :--- |
| Polarization | Keystone shape of shell |
| Termination | PC tails, straight and $90^{\circ}$ |
|  | Solder cups |



## D*JK Electrical Data

Voltage rating (working) 100 VDC
Current rating 5 A
Insulation resistance,
electrification time 30 s , temperature $25^{\circ} \mathrm{C} \quad 5000 \mathrm{M} \Omega \mathrm{min} . / 100 \mathrm{~V}$
Dielectric Withstanding Voltage (Sea Level) 500 micro amps max. charge/discharge 250 VDC

Filter Type C Capacitor
Filter Symbol per DIN


| Filter designation | 5 | 4 | 3 | 2 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Capacitance, type at $1 \mathrm{KHz}, 0,1 \mathrm{Vrms}, 25^{\circ} \mathrm{C}$ | 1500 pF | 1000 pF | 680 pF | 470 pF | 330 pF |
| Frequency MHz | Attenuation db min. | Attenuation db min. | Attenuation db min. | Attenuation db min. | Attenuation db min. |
| 10 | 3 | - | - | - | - |
| 30 | 20 | 14 | 10 | 7 | 2 |
| 100 | 31 | 27 | 22 | 18 | 9 |
| 300 | 39 | 35 | 30 | 27 | 18 |
| 1000 | 47 | 42 | 37 | 32 | 28 |
| 2000 | 51 | 46 | 42 | 36 | 31 |

Attenuation per MIL-STD-220 at $25^{\circ} \mathrm{C}$ with no applied voltage or current

## D*JT Filter Performance



## D*JT Electrical Data

| Voltage rating (working) | $200 \mathrm{VDC} / 120 \mathrm{Vrms}, 400 \mathrm{~Hz}$ |
| :---: | :---: |
| Current rating | 5 A (Size 20 contacts), 30 A (Size 8 contacts) |
| Insulation resistance, me 30 s , temperature $25^{\circ} \mathrm{C}$ | $\underline{10,000 ~ M ~} \Omega$ min. $/ 100 \mathrm{~V}$ |
| anding Voltage (Sea Level) ps max. charge/discharge | 500 VDC |
| Filter type C | Capacitor |
| Filter symbol per DIN |  |


| Filter designation | 9 | 5 | 4 | 6 | 1 | 2 | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Capacitance, type <br> at 1 KHz, 0,1 Vrms, $25^{\circ} \mathrm{C}$ | 47000 pF | 5000 pF | 2000 pF | 1500 pF | 1000 pF | 500 pF | 250 pF |
| Frequency <br> MHz | Attenuation <br> db min. | Attenuation <br> db min. | Attenuation <br> db min. | Attenuation <br> db min. | Attenuation <br> db min. | Attenuation <br> db min. | Attenuation <br> db min. |
| 5 | 30 | 11 | 6 | 2 | - | - | - |
| 10 | 37 | 16 | 10 | 7 | 5 | 2 | 1 |
| 100 | 50 | 35 | 27 | 23 | 20 | 16 | 14 |
| 1000 | 45 | 54 | 48 | 46 | 42 | 37 | 35 |
| 2000 | - | 64 | 60 | - | 60 | 60 | 60 |
| 5000 | - | 64 | 64 | - | 64 | 64 | 64 |

[^13]


## Reader's Resource

For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 272.
For panel cutouts, see page 221. For hardware views (European), see page 227.

Part Numbers

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| Shell Size | Layout | Through Hole | Clinch Nut |
| \#E4-4 UNC |  |  |  |

* Insert filter designator. Example: DEJ K9P4-1U0N (For 1000 pF Filter Capacitance)

Note: For performance class 1 add -A190. Example: DEJ K9P1-1UON-A190

| Filter Designator* | Filter Capacitance |
| :---: | :---: |
| 1 | 330 pF |
| 2 | 470 pF |
| 3 | 680 pF |
| 4 | 1000 pF |
| 5 | 1500 pF |

For electrical data, see page 106.

Engaging Face


Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,37(.015) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,69 (.264) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,69 (.264) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | - | 6,84 (.269) | 0,99 (.039) |

- Connector footprint measured from the front shell.
- Connector footprint measured from the rear shell.


## D*JK - $90^{\circ}$ PC Tails - Standard Footprint $.318 *$ or .283 inch **

| Receptacle | Part Numbers |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Shell Size | Layout | Through Hole | Clinch Nut $\# 4-40$ UNC |
|  | DE | 9 | DEJK9S*.1U0N | DEJKE9S*.1UON |
|  | DA | 15 | DAJ K155*-1U0N | DAJ KE155*-1UON |
| ( $)^{\text {a }}$, , | DB | 25 | DBJ K255*-1U0N | DBJ KE255*-1U0N |
| (4)) | DC | 37 | DCJK375*-1U0N | DCJ KE375*-1UON |

* Insert filter designator. Example: DEJ K9S4-1U0N (for 1000 pF Filter Capacitance)

Note: For performance class 1, add -A190. Example: DEJ K9S1-1UON-A190

| Filter Designator* | Filter Capacitance |
| :---: | :---: |
| 1 | 330 pF |
| 2 | 470 pF |
| 3 | 680 pF |
| 4 | 1000 pF |
| 5 | 1500 pF |

For electrical data, see page 106.

Engaging Face


Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

[^14]- Connector footprint measured from the rear shell.

D*JK - $90^{\circ}$ PC Tails - European Footprint 10,2 * or 9,4 mm**


For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware options (European), see page 227.

Part Numbers

| Shell Size | Layout | Through Hole | $\begin{aligned} & \text { Clinch Nut } \\ & \# 4-40 \text { UNC } \end{aligned}$ | Clinch Nut M3 |
| :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DEJK9P*-1AON | DEJ KE9P*-IAON | DEJKX9P*-1AON |
| DA | 15 | DAJ K15P*-1AON | DAJ KE15P*-1AON | DAJ KX15P*-1AON |
| DB | 25 | DBJ K25P*-1AON | DBJ KE25P*-1AON | DBJ KX25P*-1AON |
| DC | 37 | DCJ K37P*-1AON | DCJ KE37P*-1AON | DCJ KX37P*-1AON |

* Insert filter designator. Example: DEJ K9P4-1AON (For 1000 pF Filter Capacitance)

Modifier: For performance class 1 add -A190. Example: DEJ K9P1-1A0N-A190

| Filter Designator* | Filter Capacitance |
| :---: | :---: |
| 1 | 330 pF |
| 2 | 470 pF |
| 3 | 680 pF |
| 4 | 1000 pF |
| 5 | 1500 pF |

For electrical data, see page 106.

Engaging Face


## Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathbf{F} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,37(.015) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \text { L } \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,69 (.264) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,69 (.264) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | - | 6,84 (.269) | 0,99 (.039) |

- Connector footprint measured from the front shell.
- Connector footprint measured from the rear shell.


## D*JK - $90^{\circ}$ PC Tails - European Footprint 10,2• or 9,4 mm**



Part Numbers

| Shell Size | Layout | Through Hole | $\begin{aligned} & \hline \text { Clinch Nut } \\ & \# 4-40 \text { UNC } \end{aligned}$ | Clinch Nut M3 |
| :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DEJK9**-1AON | DEJ KE9S*-1AON | DEJKX95*-1AON |
| DA | 15 | DAJ K155*-1AON | DAJ KE155*-1AON | DAJ KX155*-1AON |
| DB | 25 | DBJ K255*-1AON | DBJ KE255*-1AON | DBJ KX255*-1AON |
| DC | 37 | DCJ K375*-1AON | DCJ KE375*-1AON | DCJ KX375*-1AON |

* Insert filter designator. Example: DEJ K9S4-1AON (for 1000 pF Filter Capacitance)

Note: For performance class 1, add -A190. Example: DEJ K9S1-1A0N-A190

| Filter Designator* | Filter Capacitance |
| :---: | :---: |
| 1 | 330 pF |
| 2 | 470 pF |
| 3 | 680 pF |
| 4 | 1000 pF |
| 5 | 1500 pF |

For electrical data, see page 106.



- Connector footprint measured from the front shell.
- Connector footprint measured from the rear shell.


## D*JK - $90^{\circ}$ PC Tails and Metal Brackets - Standard Footprint . 318 * or . 283 inch **

## Plug

## Reader's Resource

For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.
For alternate bracket configuration (when connectors are supplied without boardlocks), see page 226.
For pushfit/boardlock configuration, see page 225.

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| Shell Size | Layout | $\begin{aligned} & \text { Bracket, } \\ & \# 4-40 \text { Nut } \end{aligned}$ | Bracket, \# 4-40 Nut, Boardlock |
| DE | 9 | DEJK9P*.1U7N | DEJ K9P*-1U7N-146 |
| DA | 15 | DAJ K15P*.1U7N | DAJ K15P*.1U7N-146 |
| DB | 25 | DBJ K25P*-1U7N | DBJ K25P*-1U7N-146 |
| DC | 37 | DCJ K37P*-1U7N | DCJ K37P*-1U7N-146 |

Insert filter designator *. Example: DEJ K9P4-1U7N-146 (For 1000 pF Filter Capacitance) Note: For performance class 1, add -A190. Example: DEJ K9P4-1U7N-A190-146

| Filter Designator** | Filter Capacitance |
| :---: | :---: |
| 1 | 330 pF |
| 2 | 470 pF |
| 3 | 680 pF |
| 4 | 1000 pF |
| 5 | 1500 pF |

For electrical data, see page 106.

Engaging Face


Boardlock removed for clarity

## Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{B} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{W} \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} \hline \mathrm{W} \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \hline \text { L } \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

[^15]- Connector footprint measured from the rear shell.


## D*JK - $90^{\circ}$ PC Tails and Metal Brackets - Standard Footprint . 318 * or . 283 inch**

## Receptacle

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.
For alternate bracket configuration (when connectors are supplied without boardlocks), see page 226 .
For pushfit/boardlock configuration,
see page 225.

## Part Numbers

| Shell Size | Layout | Bracket, <br> $\# 4-40$ Nut | Bracket, <br> \#4-40 Nut, <br> Boardlock |
| :---: | :---: | :---: | :---: |
| $D E$ | 9 | DEJ K9S*-1U7N | DEJK95*-1U7N-146 |
| $D A$ | 15 | DAJ K155*-1U7N | DAJ K155*-1U7N-146 |
| $D B$ | 25 | DBJ K25S*-1U7N | DBJ K255*-1U7N-146 |
| $D C$ | 37 | $D C J K 37 S^{*}$-1U7N | DCJK375*-1U7N-146 |

Insert filter designator *. Example DEJ K9S4-1U7N-146 (For 1000 pF Filter Capacitance) Note: For performance class 1, add -A190. Example: DEJ K9S4-1U7N-A190-146

| Filter Designator* | Filter Capacitance |
| :---: | :---: |
| 1 | 330 pF |
| 2 | 470 pF |
| 3 | 680 pF |
| 4 | 1000 pF |
| 5 | 1500 pF |

For electrical data, see page 106.


Boardlock removed for clarity

Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathbf{E} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \mathbf{F} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { L } \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

- Connector footprint measured from the front shell.
- Connector footprint measured from the rear shell.

D*JK - $90^{\circ}$ PC Tails and Metal Brackets - European Footprint 10,2• or 9,4 mm* *

## Plug



## Reader's Resource

For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.
For alternate bracket configuration (when connectors are supplied without boardlocks), see page 226.
For pushfit/boardlock configuration, see page 225.

Part Numbers

| Bushing with <br> Through Hole | Captive Nut <br> $\# 4-40$ UNC | Captive Nut <br> M3 | Post <br> $\# 4-40 ~ U N C ~$ | Post <br> M3 |
| :---: | :---: | :---: | :---: | :---: |
| DEJ K9P*-1AFN | DEJ K9P*-1A7N | DEJ K9P*-1A9N | DEJ K9P*-1A8N | DEJ K9P*-1AHN |
| DAJ K15P*-1AFN | DAJ K15P*-1A7N | DAJ K15P*-1A9N | DAJ K15P*-1A8N | DAJ K15P*-1AHN |
| DBJ K25P*-1AFN | DBJ K25P*-1A7N | DBJ K25P*-1A9N | DBJ K25P*-1A8N | DBJ K25P*-1AHN |
| DCJK37P*-1AFN | DCJK37P*-1A7N | DCJK37P*-1A9N | DCJ K37P*-1A8N | DCJ K37P*-1AHN |

* Insert filter designator. Example: DEJ K9P4-1A7N (For 1000 pF capacitance)

Notes: For performance class 1 add -A190. Example: DEJ K9P1-1AFN-A190
For pushfit/boardlocks add -146. Example: DEJ K9P1-1AFN-A190-146

| Filter Designator* | Filter Capacitance |
| :---: | :---: |
| 1 | 330 pF |
| 2 | 470 pF |
| 3 | 680 pF |
| 4 | 1000 pF |
| 5 | 1500 pF |

For electrical data, see page 106.



Boardlock removed for clarity

Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

- Connector footprint measured from the front shell.
- Connector footprint measured from the rear shell.


## D*JK - $90^{\circ}$ PC Tails and Metal Brackets - European Footprint 10,2* or 9,4 mm**

## Receptacle



## Reader's Resource

For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.
For alternate bracket configuration (when connectors are supplied without boardlocks), see page 226.
For pushfithboardlock configuration,
see page 225.

Part Numbers

| Bushing with Through Hole | Captive Nut \# 4-40 UNC | Captive Nut M3 | $\begin{gathered} \text { Post } \\ \# 4-40 \text { UNC } \end{gathered}$ | $\begin{aligned} & \text { Post } \\ & \text { M3 } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| DEJ K9S*-1AFN | DEJ K9S*-1A7N | DEJ K9S*-1A9N | DEJ K95*-1A8N | DEJ K9S*-1AHN |
| DAJ K15S*-1AFN | DAJK155*-1A7N | DAJK15S*-1A9N | DAJ K155*-1A8N | DAJ K15S*-1AHN |
| DBJ K25S*-1AFN | DBJ K25S*-1A7N | DBJ K25S*-1A9N | DBJ K255*-1A8N | DBJ K25S*-1AHN |
| DCJ K375*-1AFN | DCJ K375*-1A7N | DCJ K375*-1A9N | DCJK37S*-1A8N | DCJK375*-1AHN |

* Insert filter designator. Example: DEJ K9S4-1A7N (For 1000 pF capacitance)

Notes: For performance class 1 add -A190. Example: DEJ K9S1-1AFN-A190
For pushfit/boardlocks add -146. Example: DEJ K9S1-1AFN-A190-146

| Filter Designator* | Filter Capacitance |
| :---: | :---: |
| 1 | 330 pF |
| 2 | 470 pF |
| 3 | 680 pF |
| 4 | 1000 pF |
| 5 | 1500 pF |

For electrical data, see page 106.



Boardlock removed for clarity

Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathbf{E} \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { K } \\ \pm 0,318(, 0125) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |

- Connector footprint measured from the front shell.
- Connector footprint measured from the rear shell.


## D*JK - $90^{\circ}$ PC Tails \& Plastic Brackets with Grounding Straps - European Footprint 10,2• or 9,4 mm *

## Plug



## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.
For pushfittboardlock configuration, see page 225.

Part Numbers

| Bushing with <br> Through Hole | Captive Nut <br> \#4-40 UNC | Captive Nut <br> M3 | Post <br> \# 4-40 UNC | Post <br> M3 |
| :---: | :---: | :---: | :---: | :---: |
| DEJ K9P*_1ADN | DEJ K9P*_1AWN | DEJ K9P*-1AVN | DEJ K9P*-1AJN | DEJ K9P*-1AGN |
| DAJ K15P*-1ADN | DAJ K15P*-1AWN | DAJ K15P*-1AVN | DAJ K15P*-1AJN | DAJ K15P*-1AGN |
| DBJ K25P*-1ADN | DBJ K25P*-1AWN | DBJ K25P*-1AVN | DBJ K25P*-1AJN | DBJ K25P*-1AGN |
| DCJ K37P*-1ADN | DCJ K37P*-1AWN | DCJ K37P*-1AVN | DCJ K37P*-1AJN | DCJ K37P*-1AGN |

* Insert filter designator. Example: DEJ K9P4-1AWN (For 1000 pF capacitance)

Notes: For performance class 1 add -A190. Example: DEJ K9P1-1ADN-A190
For pushfit/boardlocks add -146. Example: DEJ K9P1-1ADN-A190-146

| Filter Designator* | Filter Capacitance |
| :---: | :---: |
| 1 | 330 pF |
| 2 | 470 pF |
| 3 | 680 pF |
| 4 | 1000 pF |
| 5 | 1500 pF |

For electrical data, see page 106.

Engaging Face


Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(, 015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(, 0145) \\ \hline \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

- Connector footprint measured from the front shell.
- Connector footprint measured from the rear shell.


## D*JK - $90^{\circ}$ PC Tails \& Plastic Brackets with Grounding Straps - European Footprint 10,2• or 9,4 mm *

## Receptacle



## Reader's Resource

For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (European), see page 227.
For pushfit/boardlock configuration, see page 225.

Part Numbers

| Bushing with Through Hole | Captive Nut \# 4-40 UNC | Captive Nut M3 | $\begin{gathered} \text { Post } \\ \# 4-40 \text { UNC } \end{gathered}$ | $\begin{aligned} & \text { Post } \\ & \text { M3 } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| DEJ K9S*-1ADN | DEJK9S*-1AWN | DEJ K9S*-1AVN | DEJ K9S*-1AJN | DEJK9S*-1AGN |
| DAJ K15S*-1ADN | DAJK15S*-1AWN | DAJK15S*-1AVN | DAJ K155*-1AJ N | DAJ K155*-1AGN |
| DBJ K25S*-1ADN | DBJ K25S*-1AWN | DBJ K25S*-1AVN | DBJ K255*-1AJ N | DBJK255*-1AGN |
| DCJ K375*-1ADN | DCJ K37S*-1AWN | DCJ K375*-1AVN | DCJ K37S*-1AJ N | DCJK375*-1AGN |

* Insert filter designator. Example: DEJ K9S4-1AWN (For 1000 pF capacitance)

Notes: For performance class 1 add -A190. Example: DEJ KS1-1ADN-A190
For pushfit/boardlocks add -146. Example: DEJ K9P1-1ADN-A190-146

| Filter Desginator* | Filter Capacitance |
| :---: | :---: |
| 1 | 330 pF |
| 2 | 470 pF |
| 3 | 680 pF |
| 4 | 1000 pF |
| 5 | 1500 pF |

For electrical data, see page 106.


Dimensions

|  | A | B | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ | $\mathbf{F}$ | $\mathbf{F}$ | W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shell Size | $\pm 0,38(.015)$ | $\pm 0,13(.005)$ | $\pm 0,13(.005)$ | $\pm 0,13(.005)$ | $\pm 0,38(.015)$ | $\pm 0,25(.010)$ | $\pm 0,38(.015)$ | $\pm 0,25(.010)$ |
| DE | $30,81(1.213)$ | $16,33(.643)$ | $24,99(.984)$ | $7,90(.311)$ | $12,55(.494)$ | $10,90(.429)$ | $6,94(.273)$ | $0,76(.030)$ |
| DA | $39,14(1.541)$ | $24,66(.971)$ | $33,32(1.312)$ | $7,90(.311)$ | $12,55(.494)$ | $10,90(.429)$ | $6,94(.273)$ | $0,76(.030)$ |
| DB | $53,04(2.088)$ | $38,38(1.511)$ | $47,04(1.852)$ | $7,90(.311)$ | $12,55(.494)$ | $10,90(.429)$ | $6,94(.273)$ | $0,76(.030)$ |
| DC | $69,32(2.729)$ | $54,84(2.159)$ | $63,50(2.500)$ | $7,90(.311)$ | $12,55(.494)$ | $10,90(.429)$ | $6,94(.273)$ | $0,76(.030)$ |

[^16]
## D*JK - $90^{\circ}$ PC Tails \& Plastic Brackets - European Footprint 10,2 * or 9,4 mm**



Part Numbers

| Bushing with <br> Through Hole | Captive Nut <br> \# 4-40 UNC | Captive Nut <br> M3 | Post <br> \#4-40 UNC | Post <br> M3 |
| :---: | :---: | :---: | :---: | :---: |
| DEJ K9P*-1A5N | DEJ K9P*-1AUN | DEJ K9P*-1ATN | DEJ K9P*-1A6N | DEJ K9P*-1APN |
| DAJ K15P*-1A5N | DAJ K15P*-1AUN | DAJ K15P*-1ATN | DAJ K15P*-1A6N | DAJK15P*-1APN |
| DBJ K25P*-1A5N | DBJ K25P*-1AUN | DBJK25P*-1ATN | DBJ K25P*-1A6N | DBJ K25P*-1APN |
| DCJK37P*-1A5N | DCJK37P*-1AUN | DCJK37P*-1ATN | DCJ K37P*-1A6N | DCJ K37P*-1APN |

* Insert filter designator. Example: DEJ K9P4-1A5N (For 1000 pF filter capacitance)

Notes: For performance class 1 add -A190. Example: DEJ K9P1-1A5N-A190
For pushfit/boardlocks add-146. Example: DEJ K9P1-1A5N-A190-146

## Reader's Resource

For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.
For pushfit/boardlock configuration, see page 225.

| Filter Designator* | Filter Capacitance |
| :---: | :---: |
| 1 | 330 pF |
| 2 | 470 pF |
| 3 | 680 pF |
| 4 | 1000 pF |
| 5 | 1500 pF |

For electrical data, see page 106.


Dimensions

| Shell Size | $\begin{gathered} A \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{B} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0.13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,37(, 015) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,69 (.264) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,69 (.264) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

- Connector footprint measured from the front shell.
- Connector footprint measured from the rear shell.


## D*JK - $90^{\circ}$ PC Tails and Plastic Brackets - European Footprint 10,2 * or 9,4 mm *

## Receptacle



## Reader's Resource

For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.
For pushfit/boardlock configuration, see page 225.

Part Numbers

| Bushing with Through Hole | Captive Nut \# 4-40 UNC | Captive Nut M3 | $\begin{gathered} \text { Post } \\ \# 4-40 \text { UNC } \end{gathered}$ | $\begin{aligned} & \text { Post } \\ & \text { M3 } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| DEJ K9S*-1A5N | DEJ K9S*-1AUN | DEJ K9S*-1ATN | DEJ K9S*-1A6N | DEJ K9S*-1APN |
| DAJ K15S*-1A5N | DAJK15S*-1AUN | DAJ K15S*-1ATN | DAJ K155*-1A6N | DAJ K155*-1APN |
| DB] K25S*-1A5N | DBJ K25S*-1AUN | DBJ K255*-1ATN | DBJ K255*-1A6N | DBJK255*-1APN |
| DCJ K37S*-1A5N | DCJ K375*-1AUN | DCJ K375*-1ATN | DCJK375*-1A6N | DCJK375*-1APN |

* Insert filter designator. Example: DEJ K9S4-1A5N (for 1000 pF filter capacitance)

Notes: For performance class 1 add -A190. Example: DE K9S1-1A5N-A190
For pushfit/boardlocks add -146. Example: DEJ K9S1-1A5N-A190-146

| Filter Designator* | Filter Capacitance |
| :---: | :---: |
| 1 | 330 pF |
| 2 | 470 pF |
| 3 | 680 pF |
| 4 | 1000 pF |
| 5 | 1500 pF |

For electrical data, see page 106.

## Engaging Face



Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

Connector footprint measured from the front shell.

- Connector footprint measured from the rear shell.


## D*JK - Straight P.C. Tails



For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 274. For panel cutouts, see page 221. For Hardware views (European), see page 227.
For pushfit/boardlock configuration, see page 225 .

Part Numbers

| Shell Size | Layout | Through Hole | Clinch Nut \# 4-40 UNC | $\begin{gathered} \text { Clinch Nut } \\ \text { M3 } \end{gathered}$ | Pushfit/Boardlock \# 4-40 UNC | Pushfit/Boardlock M3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DE] K9P*.0L4 | DEJ KE9P*-OL4 | DEJKX9P*-0L4 | DEJ KE9P*.0L4-146 | DEJ KX9P**0L4-146 |
| DA | 15 | DAJ K15P*.0L4 | DAJ KE15P*.0L4 | DAJ KX15P*.OL4 | DAJ KE15P*.OL4-146 | DAJ KX15P*.OL4-146 |
| DB | 25 | DBJ K25P*.OL4 | DBJ KE25P*.0L4 | DBJKX25P*.OL4 | DBJ KE25P*.OL4-146 | DBJ KX25P*.0L4-146 |
| DC | 37 | DCJ K37P*.OL4 | DCJ KE37P*.0L4 | DCJ KX37P*.0L4 | DCJ KE37P*.0L4-146 | DCJ KX37P*.0L4-146 |
| DD | 50 | DJJ K50P*. OL4 | DJ KE50P*.0L4 | DDJ KX50P*.OL4 | DDJ KE50P*.0L4-146 | DDJ KX50P*.0L4-1 |

* Insert filter designator. Example: DEJ K9P4-0L4 (for 1000 pF filter capacitance)

Note: For performance class 1 add -A190. Example: DEJ K9P1-OL4-A190

| Filter Designator* | Filter Capacitance |
| :---: | :---: |
| 1 | 330 pF |
| 2 | 470 pF |
| 3 | 680 pF |
| 4 | 1000 pF |
| 5 | 1500 pF |

For electrical data, see page 106.

## Engaging Face

DD Configuration



## Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \mathrm{B} \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(, 0145) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.439) | 15,37 (.607) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

## D*JK - Straight P.C. Tails

Part Numbers

| Shell Size | Layout | Through Hole | $\begin{aligned} & \text { Clinch Nut } \\ & \# 4-40 \text { UNC } \end{aligned}$ | Clinch Nut M3 | Pushfit/Boardlock \# 4-40 UNC | Pushfit\|Boardlock M3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DEJK9S*.OL4 | DEJ KE9S*-0L4 | DEJKX95*-OL4 | DEJKE95*-OL4-146 | DEJ KX99**OL4-146 |
| DA | 15 | DAJ K155*-OL4 | DAJ KE155*-OL4 | DAJ KX155*-OL4 | DAJ KE155*-0L4-146 | DAJ KX155*-0L4-146 |
| DB | 25 | DBJ K255*-OL4 | DBJKE255*-OL4 | DBJKX255*-OL4 | DBJ KE255*-0L4-146 | DBJ KX255*-0L4-146 |
| DC | 37 | DCJ K375*-OL4 | DCJ KE375*-OL4 | DCJ KX375**OL4 | DCJ KE375*-0L4-146 | DCJ KX375*-0L4-146 |

* Insert filter designator. Example: DEJ K9S4-OL4 (for 1000 pF filter capacitance)

Note: For performance class 1 add -A190. Example: DEJ K9S1-OL4-A190

| Filter Designator* | Filter Capacitance |
| :---: | :---: |
| 1 | 330 pF |
| 2 | 470 pF |
| 3 | 680 pF |
| 4 | 1000 pF |
| 5 | 1500 pF |

For electrical data, see page 106.


For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 274.
For panel cutouts, see page 221.
For Hardware views (European),
see page 227.
For pushfit/boardlock configuration, see page 225.
.

## Engaging Face



## Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\underset{ \pm 0,13(.005)}{\text { C }}$ | $\underset{ \pm 0,13(.005)}{\mathrm{D}}$ | $\begin{gathered} E \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{F} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\underset{ \pm 0,25(.010)}{\mathrm{L}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33(.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66(.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |



Part Numbers

| Shell Size | Layout | Through Hole | Clinch Nut \# 4-40 UNC | Clinch Nut M3 |
| :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DEJT9P* | DEJ TE9P* | DEJ TX9P* |
| DA | 15 | DAJT15P* | DAJ TE15P* | DAJ TX15P* |
| DB | 25 | DBJT25P* | DBJTE25P* | DBJ TX25P* |
| $D C$ | 37 | DJJT37P* | DCJ TE37P* | DCJ TX37P* |

* Insert filter designator. Example: DCJ T37P4 (for 2000 pF filter capacitance)

Note: For performance class 1 add -A190. Example: DCJ T37P1-A190

| Filter Designator* | Filter Capacitance |
| :---: | :---: |
| 1 | 1000 pF |
| 2 | 500 pF |
| 3 | 250 pF |
| 4 | 2000 pF |
| 5 | 5000 pF |

For electrical data, see page 107.


Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{B} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0.13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,37(.015) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,69 (.264) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,69 (.264) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

## D*JT - Solder Cup



For contact cavity arrangements, see page 224.
For panel cutouts, see page 221. For hardware views (European), see page 227.

Part Numbers

| Shell Size | Layout | Through Hole | Clinch Nut \# 4-40 UNC | Clinch Nut M3 |
| :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DE T9S* | DEJTE9S* | DEJ TX9S* |
| DA | 15 | DAJ T155* | DAJ TE155* | DAJ TX155* |
| DB | 25 | DB] T255* | DBJ TE255* | DBJ TX25S* |
| DC | 37 | DCJ T375* | DCJ TE375* | DCJ TX375* |

* Insert filter designator. Example: DEJ T9S4 (for 2000 pF filter capacitance)

Note: For performance class 1 add -A190. Example: DEJ T9S1-A190

| Filter Designator* | Filter Capacitance |
| :---: | :---: |
| 1 | 1000 pF |
| 2 | 500 pF |
| 3 | 250 pF |
| 4 | 2000 pF |
| 5 | 5000 pF |

For electrical data, see page 107.

## Engaging Face



Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \mathbf{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(, 010) \\ \hline \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

## D*JT Combo - High Power $90^{\circ}$

| Plug | Part Numbers |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Reader's Resource <br> For contact cavity arrangements, see page 222. <br> For P.C. hole patterns, see page 250. For panel cutouts, see page 221. For hardware views (European), see page 227. | Filter Capacitance | Through Hole | $\begin{aligned} & \text { Clinch Nut } \\ & \text { \# 4-40 UNC } \end{aligned}$ | Clinch Nut M3 |
|  | 1000 pF | DAJ T3W3P1-1AON | DAJ TE3W3P1-1AON | DAJ TX3W3P1-1AON |
|  | 1500 pF | DAJ T3W3P6-1AON | DAJ TE3W3P6-1AON | DAJ TX3W3P6-1AON |
|  | 5000 pF | DAJ T3W3P5-1AON | DAJ TE3W3P5-1AON | DAJ TX3W3P5-1AON |
|  | 47000 pF | DAJ T3W3P9-1AON | DAJ TE3W3P9-1AON | DAJ TX3W3P9-1AON |
|  | Note: For performance | 90. Example: DAJ T3W | -A190 |  |
|  | Part Numbers - | guration |  |  |
|  | Filter Capacitance | Through Hole | $\begin{aligned} & \text { Clinch Nut } \\ & \# 4-40 \text { UNC } \end{aligned}$ | Clinch Nut M3 |
|  | 1000 pF | DAJT3WK3P1-1AON | DAJ TE3WK3P1-1AON | DAJ TX3W3KP1-1AON |
|  | 1500 pF | DAJ T3WK3P6-1AON | DAJ TE3WK3P6-1AON | DAJ TX3WK3P6-1AON |
|  | 5000 pF | DAJ T3WK3P5-1AON | DAJ TE3WK3P5-1AON | DAJ TX3WK3P5-1AON |
|  | 47000 pF | DAJT3WK3P9-1AON | DAJ TE3WK3P9-1AON | DAJ TX3WK3P9-1AON |

Note: For performance class 1 add -A190. Example: DAJ T3WK3P6-1A0N-A190
For electrical data, see page 107.


Dimensions

|  | A | B | C | D | E | F | W | W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shell Size | $\pm 0,38(.015)$ | $\pm 0,13(.005)$ | $\pm 0,13(.005)$ | $\pm 0,13(.005)$ | $\pm 0,38(.015)$ | $\pm 0,25(.010)$ | $\pm 0,368(.0145)$ | $\pm 0,25(.010)$ |
| DA | $39,14(1.541)$ | $25,25(.994)$ | $33,32(1.312)$ | $8,36(.329)$ | $12,55(.494)$ | $10,72(.422)$ | $6,693(.2635)$ | $0,76(.030)$ |

## D*JT Combo - High Power $90^{\circ}$

## Receptacle

## Reader's Resource

For contact cavity arrangements,
see page 223.
For P.C. hole patterns, see page 252.
For panel cutouts, see page 221.
For hardware views (European), see page 227.


Note: For performance class 1 add -A190. Example: DAJ T3W3S9-1AON-A190
Part Numbers - Keyed Configuration

| Filter <br> Capacitance | Through Hole | Clinch Nut <br> \#4-40 UNC | Clinch Nut <br> M3 |
| :---: | :---: | :---: | :---: |
| 1000 pF | DAJ T3WK3S1-1AON | DAJ TE3WK3S1-1AON | DAJ TX3WK3S1-1A0N |
| 1500 pF | DAJ T3WK3S6-1AON | DAJ TE3WK3S6-1AON | DAJTX3WK3S6-1AON |
| 5000 pF | DAJ T3WK3S5-1AON | DAJ TE3WK3S55-1AON | DAJTX3WK3S5-1AON |
| 47000 pF | DAJ T3WK3S9-1AON | DAJ TE3WK3S9-1AON | DAJTX3WK3S9-1AON |

Note: For performance class 1 add -A190. Example: DAJ T3WK3S9-1AON-A190 For electrical data, see page 107.


Keyed Configuration
Engaging Face


Dimensions

|  | A | B | C | D | E | W | F | W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shell Size | $\pm 0,38(.015)$ | $\pm 0,13(.005)$ | $\pm 0,13(.005)$ | $\pm 0,13(.005)$ | $\pm 0,38(.015)$ | $\pm 0,25(.010)$ | $\pm 0,38(.015)$ | $\pm 0,25(.010)$ |
| $D A$ | $39,14(1.541)$ | $24,66(.971)$ | $33,32(1.312)$ | $7,90(.311)$ | $12,55(.494)$ | $10,90(.429)$ | $6,94(.273)$ |  |

## D*JT Combo - High Power Straight

Reader's Resource

## Reader's Resource

For contact cavity arrangements, see page 222.
For P.C. hole patterns, see page 254.
For panel cutouts, see page 221.
For hardware views (European), see page 227.

Part Numbers

| Filter <br> Capacitance | Through Hole | Clinch Nut <br> \#4-40 UNC | Clinch Nut <br> M3 |
| :---: | :---: | :---: | :---: |
| 1000 pF | DAJ T3W3P1-0L4 | DAJ TE3W3P1-OL4 | DAJ TX3W3P1-OL4 |
| 1500 pF | DAJ T3W3P6-0L4 | DAJ TE3W3P6-OL4 | DAJ TX3W3P6-OL4 |
| 5000 pF | DAJ T3W3P5-OL4 | DAJ TE3W3P5-OL4 | DAJ TX3W3P5-OL4 |
| 47000 pF | DAJ T3W3P9-0L4 | DAJ TE3W3P9-OL4 | DAJ TX3W3P9-OL4 |

Note: For performance class 1 add -A190. Example: DAJ T3W3P6-OL4-A190
Part Numbers - Keyed Configuration

| Filter <br> Capacitance | Through Hole | Clinch Nut <br> \# 4-40 UNC | Clinch Nut <br> M3 |
| :---: | :---: | :---: | :---: |
| 1000 pF | DAJ T3WK3P1-0L4 | DAJ TE3WK3P1-OL4 | DAJ TX3WK3P1-0L4 |
| 1500 pF | DAJ T3WK3P6-0L4 | DAJ TE3WK3P6-0L4 | DAJ TX3WK3P6-0L4 |
| 5000 pF | DAJ T3WK3P5-0L4 | DAJ TE3WK3P5-0L4 | DAJ TX3WK3P5-0L4 |
| 47000 pF | DAJ T3WK3P9-0L4 | DAJ TE3WK3P9-0L4 | DAJ TX3WK3P9-0L4 |

Note: For performance class 1 add -A190. Example: DAJ T3WK3P6-OL4-A190
For electrical data, see page 107.


Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} \text { L } \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | 0,76 (.030) |

## D*JT Combo - High Power Straight

## Receptacle

## Reader's Resource

For contact cavity arrangements, see page 223.
For P.C. hole patterns, see page 257.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.

| Part Numbers |  |  |  |  |  |  |  |  |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Filter <br> Capacitance | Through Hole | Clinch Nut <br> \#-40 UNC | Clinch Nut |  |  |  |  |  |
| M3 |  |  |  |  |  |  |  |  |

Note: For performance class 1 add -A190. Example: DAJT3W3S6-OL4-A190
Part Numbers - Keyed Configuration

| Filter <br> Capacitance | Through Hole | Clinch Nut <br> \# 4-40 UNC | Clinch Nut <br> M3 |
| :---: | :---: | :---: | :---: |
| 1000 pF | DAJ T3WK3S1-OL4 | DAJ TE3WK3S1-OL4 | DAJ TX3WK3S1-0L4 |
| 1500 pF | DAJ T3WK3S6-OL4 | DAJ TE3WK3S6-OL4 | DAJ TX3WK3S6-0L4 |
| 5000 pF | DAJ T3WK3S5-OL4 | DAJ TE3WK3S5-OL4 | DAJ TX3WK3S5-OL4 |
| 47000 pF | DAJ T3WK3S9-OL4 | DAJ TE3WK3S9-OL4 | DAJTX3WK3S9-OL4 |

Note: For performance class 1 add -A190. Example: DAJ T3WK3S-OL4-A190 For electrical data, see page 107.


Keyed Configuration Engaging Face


Dimensions

|  | A | B |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shell Size | $\pm 0,38(.015)$ | $\pm 0,13(.005)$ | $\pm 0,13(.005)$ | $\pm 0,13(.005)$ | $\pm 0,38(.015)$ | $\pm \mathbf{F}$ | $\pm 0,25(.010)$ | $\pm \mathbf{W}$ |
| DA | $39,14(1.541)$ | $24,66(.971)$ | $33,32(1.312)$ | $7,90(.311)$ | $12,55(.494)$ | $10,90(.429)$ | $6,94(.273)$ | $\pm 0,25(.010)$ |

## D*JT Combo - High Power Solder Cup

## Reader's Resource

For contact cavity arrangements, see page 222.
For panel cutouts, see page 221. For hardware views (European), see page 227.

Part Numbers

| Filter <br> Capacitance | Through Hole | Clinch Nut <br> \#4-40 UNC | Clinch Nut <br> M3 |
| :---: | :---: | :---: | :---: |
| 1000 pF | DAJ T3W3P1 | DAJ TE3W3P1 | DAJ TX3W3P1 |
| 1500 pF | DAJ T3W3P6 | DAJ TE3W3P6 | DAJ TX3W3P6 |
| 5000 pF | DAJ T3W3P5 | DAJ TE3W3P5 | DAJ TX3W3P5 |
| 47000 pF | DAJ T3W3P9 | DAJ TE3W3P9 | DAJ TX3W3P9 |

Note: For performance class 1 add -A190. Example: DAJ T3W3P6-A190
Part Numbers - Keyed Configuration

| Filter <br> Capacitance | Through Hole | Clinch Nut <br> $\# 4-40$ UNC | Clinch Nut <br> M3 |
| :---: | :---: | :---: | :---: |
| 1000 pF | DAJ T3WK3P1 | DAJ TE3WK3P1 | DAJ TX3WK3P1 |
| 1500 pF | DAJ T3WK3P6 | DAJ TE3WK3P6 | DAJ TX3WK3P6 |
| 5000 pF | DAJ T3WK3P5 | DAJ TE3WK3P5 | DAJ TX3WK3P5 |
| 47000 pF | DAJ T3WK3P9 | DAJ TE3WK3P9 | DAJ TX3WK3P9 |

Note: For performance class 1 add -A190. Example: DAJ T3WK3P6-A190 For electrical data, see page 107.



Keyed Configuration
Engaging Face



Dimensions

| Shell Size | $\begin{gathered} A \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | 0,76 (.030) |

## D*JT Combo - High Power Solder Cup



## Reader's Resource

For contact cavity arrangements, see page 223.
For panel cutouts, see page 221. For hardware views (European), see page 227.

Part Numbers

| Filter <br> Capacitance | Through Hole | Clinch Nut <br> \# 4-40 UNC | Clinch Nut |
| :---: | :---: | :---: | :---: |
| M3 |  |  |  |

Note: For performance class 1 add -A190. Example: DAJT3W3S6-A190
Part Numbers - Keyed Configuration

| Filter <br> Capacitance | Through Hole | Clinch Nut <br> \# 4-40 UNC | Clinch Nut <br> M3 |
| :---: | :---: | :---: | :---: |
| 1000 pF | DAJ T3WK3S1 | DAJ TE3WK3S1 | DAJ TX3WK3S1 |
| 1500 pF | DAJ T3WK3S6 | DAJ TE3WK3S6 | DAJ TX3WK3S6 |
| 5000 pF | DAJ T3WK3S5 | DAJ TE3WK3S5 | DAJ TX3WK3S5 |
| 47000 pF | DAJ T3WK3S9 | DAJ TE3WK3S9 | DAJ TX3WK3S9 |

Note: For performance class 1 add -A190. Example: DAJ T3WK3S6-A190
For electrical data, see page 107.


| Dimensions |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shell Size | $\pm 0,38(.015)$ | $\pm 0,13(.005)$ | $\pm 0,13(.005)$ | $\pm 0,13(.005)$ | $\pm 0,38(.015)$ | $\pm 0,25(.010)$ | $\pm 0,38(.015)$ | $\pm 0,25(.010)$ |
| DA | $39,14(1.541)$ | $24,66(.971)$ | $33,32(1.312)$ | $7,90(.311)$ | $12,55(.494)$ | $10,90(.429)$ | $6,94(.273)$ | $0,76(.030)$ |

Selection Index ..... Page
M ilitary/H igh Reliability
An Introduction ..... 130
Standard Layout
$90^{\circ}$ PC Tail with Plastic Bracket ..... 132
$90^{\circ}$ PC Tail. ..... 134
Straight PC Tail ..... 136
Wrap Post Connector ..... 138
Solder Cup Connector ..... 140
24308-Style Cross Reference .....  142
MIL-C-39028 Crimp Contacts ..... 143
HE501/D*M Cross Reference ..... 144
MIL-24308 Test Data ..... 145
Combo D ${ }^{\otimes}$ PCB Connectors with Coaxial 75 Ohm Contacts ( 50 Ohm Option)
Coaxial $90^{\circ}$ (Sizes DE-DC) ..... 146
Coaxial $90^{\circ}$ (Size DD) ..... 148
Coaxial Straight (Sizes DE-DC) ..... 150
Coaxial Straight (Size DD). ..... 152
Combo D ${ }^{\circledR}$ PCB Connectors with High Power Contacts
40 A High Power $90^{\circ}$ (Sizes DE-DC). ..... 154
40 A High Power $90^{\circ}$ (Size DD) ..... 156
40 A High Power Straight (Sizes DE-DC) ..... 158
40 A High Power Straight (Size DD) ..... 160
Combo D ${ }^{\otimes}$ PCB Connectors with High Voltage Contacts High Voltage Straight (Sizes DE-DC) ..... 162
High Voltage Straight (Size DD). ..... 164
Combo D ${ }^{\circledR}$ PCB Connectors with (Size 20) Signal Contacts Only Cable Solder Cup (Sizes DE-DD) ..... 166

## D Subminiature

TT Cannon Military/High Reliability D Subminiature connectors are used in many applications, including aerospace, transportation, communication systems, information systems and testequipment. Being the inventor of the D Subminiature connector, ITT Cannon is able to use its extensive design expertise and high quality manufacturing processes to insure the optimum performance and reliability.
The D Subminiature connectors with fixed contacts in solder cup, straight and $90^{\circ} \mathrm{PC}$ contact terminations are designed to be comparable to MIL-C-24308 (see cross reference, pages 142-143). These highreliability D Subminiature connectors are the finest quality connectors available at the most competitive prices in the market.

## Applications:

Aerospace
Transportation
Communication Systems
Information Systems
Test Equipment

## Product Features

Suitable for a variety of cable and printed circuit board options


## Specifications

| Temperature Rating | $-55^{\circ} \mathrm{C}$ to $125^{\circ} \mathrm{C}$ | Coaxial VSWR | Less than $1.30+.03 \mathrm{~F}$ for F up to 500 MHz |
| :---: | :---: | :---: | :---: |
| Signal Contact Current Rating | 7.5 A current capacity | Coaxial Insertion Loss | .3dB loss at 500 MHz |
| Signal Contact Resistance | 55 millivolt max. at 7.5 test current | High Power Current Rating | Up to 40 A |
| Signal Contact Dielectric Withstanding Voltage | 1250 VAC at Sea Level | High Power Dielectric Withstanding Voltage | 1000 VAC at Sea Level |
| Coaxial Current Rating | 5 A | High Voltage Current Rating | 5 A |
| Coaxial Dielectric Withstanding Voltage | 1000 VAC at Sea Level | High Voltage Contact |  |
| Coaxial Impedance | $75 \Omega$ or $50 \Omega$ | Dielectric Withstanding Voltage | $\underline{2800 \mathrm{~V} \text { at Sea Level }}$ |

## Materials and Finishes

| Description Material | Finish/Treatment |  |
| :--- | :--- | :--- |
| Shell | Steel | Yellow Chromate over Znc <br> (Cadmium available upon request; order code -A101) |
| Insulator | Polyester, UL 94V-0, Color: Green | None |
| Contacts (Military) | Copper Alloy | 50 microinches of Gold over Nickel in mating area, Gold over Nickel on balance |
| Contacts (Commercial) | Copper Alloy | Gold over Nickel on mating area, Tin on balance |
| Dual Float Mount Hardware | Stainless Steel | Passivated |
| Clinch Nut Hardware | Stainless Steel with plastic insert | Passivated |
| Standoff | Stainless Steel | Passivated |
| Plastic Bracket | Thermoplastic, UL 94V-0 | None |
| Metal Bracket | Steel | Znc (Tin if boardlocks are attached) |

Coaxial/High Power/High Voltage Contact Assemblies

| Contacts and Outer Shells | Copper Alloy | Gold over Nickel |
| :--- | :--- | :--- |
| Ring, Retaining | Copper Alloy | Nickel |
| Insulator (Coaxial Only) | Teflon | None |
| Insulator (High Voltage Only) | Thermoplastic | None |

## $90^{\circ}$ PC Tail with Plastic Bracket

| Plug | Part Numbers |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Military Part Numbers |  |  |  |  |  |
|  |  |  | $\begin{gathered} \not \subset Y \\ 0,76(.030) \\ \hline \end{gathered}$ |  |  | $\begin{gathered} \not \subset \mathbf{Y} \\ 1,02(.040) \\ \hline \end{gathered}$ |  |  |
|  | $\begin{aligned} & \hline \text { Shell } \\ & \text { Size } \end{aligned}$ | Layout | $\begin{gathered} \mathrm{X} \\ 3,23(.127) \\ \hline \end{gathered}$ | $\begin{gathered} x \\ 4,01(.158) \end{gathered}$ | $\begin{gathered} \hline \mathrm{X} \\ 4,65(.183) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{X} \\ 3,23(.127) \\ \hline \end{gathered}$ | $\begin{gathered} X \\ 4,01(.158) \end{gathered}$ | $\begin{gathered} \mathrm{X} \\ 4,65(.183) \end{gathered}$ |
|  | DE | 9 | DEMM9PD | DEMM9PL | DEMM9PS | DEMM9PA | DEMM9PG | DEMM9PW |
|  | DA | 15 | DAMM15PD | DAMM15PL | DAMM15PS | DAMM15PA | DAMM15PG | DAMM15PW |
|  | DB | 25 | DBMM25PD | DBMM25PL | DBMM25PS | DBMM25PA | DBMM25PG | DBMM25PW |
|  | DC | 37 | DCMM37PD | DCMM37PL | DCMM37PS | DCMM37PA | DCMM37PG | DCMM37PW |
|  | DD | 50 | DDMM50PD | DDMM50PL | DDMM50PS | DDMM50PA | DDMM50PG | DDMM50PW |
| Reader's Resource <br> For contact cavity arrangements, see page 224. For P.C. hole patterns, see page 272. For panel cutouts, see page 221. |  |  |  |  |  |  |  |  |
|  |  |  | Commercial Part Numbers |  |  |  |  |  |
|  |  |  | $\begin{gathered} \not \subset \mathbf{Y} \\ 0,76(.030) \\ \hline \end{gathered}$ |  |  | $\begin{gathered} \not \subset Y \\ 1,02(.040) \\ \hline \end{gathered}$ |  |  |
|  | $\begin{aligned} & \hline \text { Shell } \\ & \text { Size } \\ & \hline \end{aligned}$ | Layout | $\begin{gathered} \hline \text { X } \\ 3,23(.127) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{X} \\ 4,01(.158) \end{gathered}$ | $\begin{gathered} \mathrm{X} \\ 4,65(.183) \end{gathered}$ | $\begin{gathered} \hline \mathrm{X} \\ 3,23(.127) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{X} \\ 4,01(.158) \end{gathered}$ | $\begin{gathered} \text { X } \\ 4,65(.183) \end{gathered}$ |
|  | DE | 9 | DEM9PD | DEM9PL | DEM9PS | DEM9PA | DEM9PG | DEM9PW |
|  | DA | 15 | DAM15PD | DAM15PL | DAM15PS | DAM15PA | DAM15PG | DAM15PW |
|  | DB | 25 | DBM25PD | DBM25PL | DBM25PS | DBM25PA | DBM25PG | DBM25PW |
|  | DC | 37 | DCM37PD | DCM37PL | DCM37PS | DCM37PA | DCM37PG | DCM37PW |
|  | DD | 50 | DDM50PD | DDM50PL | DDM50PS | DDM50PA | DDM50PG | DDM50PW |



Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(, 010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(, 016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(, 010) \end{gathered}$ | $\begin{gathered} M \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{N} \\ \pm 0,13(.005) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) | 12,30 (.484) | 8,64 (.340) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) | 12,30 (.484) | 8,64 (.340) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) | 12,30 (.484) | 8,64 (.340) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) | 12,30 (.484) | 8,64 (.340) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) | 15,09 (.594) | 10,04 (.395) |

## $90^{\circ}$ PC Tail with Plastic Bracket



## Reader's Resource

For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 272.
For panel cutouts, see page 221.

## Part Numbers

|  |  | Military Part Numbers |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \not \subset Y \\ 0,76(.030) \end{gathered}$ |  |  | $\begin{gathered} \not \varnothing Y \\ 1,02(.040) \end{gathered}$ |  |  |
| $\begin{aligned} & \text { Shell } \\ & \text { Size } \end{aligned}$ | Layout | $\underset{\substack{\mathrm{X} \\ \mathrm{X}(.127)}}{ }$ | $\begin{gathered} \mathrm{X} \\ 4,01(.158) \end{gathered}$ | $\begin{gathered} \mathrm{X} \\ 4,65(.183) \end{gathered}$ | $\begin{gathered} \mathrm{X} \\ 3,23(.127) \end{gathered}$ | $\begin{gathered} X \\ 4,01(.158) \end{gathered}$ | $\frac{X}{4,65(.183)}$ |
| DE | 9 | DEMM9SD | DEMM9SL | DEMM9SS | DEMM9SA | DEMM9SG | DEMM9SW |
| DA | 15 | DAMM15SD | DAMM15SL | DAMM15SS | DAMM15SA | DAMM15SG | DAMM15SW |
| DB | 25 | DBMM25SD | DBMM25SL | DBMM255S | DBMM25SA | DBMM25SG | DBMM25SW |
| DC | 37 | DCMM37SD | DCMM37SL | DCMM375S | DCMM37SA | DCMM375G | DCMM375W |
| DD | 50 | DDMM50SD | DDMM50SL | DDMM50SS | DDMM50SA | DDMM50SG | DDMM50SW |
|  |  | Commercial Part Numbers |  |  |  |  |  |
|  |  |  | $\begin{gathered} \not \varnothing \mathbf{Y} \\ 0,76(.030) \end{gathered}$ |  |  | $\begin{gathered} \varnothing Y \\ 1,02(.040) \\ \hline \end{gathered}$ |  |
| $\begin{aligned} & \text { Shell } \\ & \text { Size } \end{aligned}$ | Layout | $\underset{\substack{\mathrm{X} \\ \hline(.127)}}{ }$ | $\begin{gathered} \mathrm{X} \\ 4,01(.158) \end{gathered}$ | $\begin{gathered} \mathrm{X} \\ 4,65(.183) \\ \hline \end{gathered}$ | $\underset{\substack{\mathrm{X} \\ 3,23(.127)}}{ }$ | $\begin{gathered} \text { X } \\ 4,01(.158) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{X} \\ 4,65(.183) \\ \hline \end{gathered}$ |
| DE | 9 | DEM9SD | DEM9SL | DEM9SS | DEM9SA | DEM9SG | DEM9SW |
| DA | 15 | DAM15SD | DAM15SL | DAM15SS | DAM155A | DAM15SG | DAM15SW |
| DB | 25 | DBM25SD | DBM25SL | DBM255S | DBM25SA | DBM25SG | DBM255W |
| DC | 37 | DCM37SD | DCM375L | DCM375S | DCM375A | DCM375G | DCM37SW |
| DD | 50 | DDM50SD | DDM50SL | DDM50SS | DDM50SA | DDM50SG | DDM50SW |



Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathbf{F} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{W} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { M } \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{N} \\ \pm 0,13(.005) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) | 12,30 (.484) | 8,64 (.340) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) | 12,30 (.484) | 8,64 (.340) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (273) | 0,76 (.030) | 12,30 (.484) | 8,64 (.340) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) | 12,30 (.484) | 8,64 (.340) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) | 15,09 (.594) | 10,04 (.395) |

## $90^{\circ}$ PC Tail



Part Numbers

|  |  | Military Part Numbers |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \not \varnothing Y \\ 0,76(.030) \\ \hline \end{gathered}$ |  |  | $\begin{gathered} \not \varnothing Y \\ 1,02(.040) \\ \hline \end{gathered}$ |  |
| Shell Size | Layout | $\begin{gathered} \mathrm{X} \\ 3,23(.127) \\ \hline \end{gathered}$ | $\begin{gathered} \text { X } \\ 4,01(.158) \\ \hline \end{gathered}$ | $\begin{array}{r} \mathrm{X} \\ 4,65(.183) \\ \hline \end{array}$ | $\begin{gathered} \mathrm{X} \\ 3,23(.127) \\ \hline \end{gathered}$ | $\begin{gathered} \text { X } \\ 4,01(.158) \\ \hline \end{gathered}$ |
| DE | 9 | DEMM9PF | DEMM9PP | DEMM9PR | DEMM9PC | DEMM9PK |
| DA | 15 | DAMM15PF | DAMM15PP | DAMM15PR | DAMM15PC | DAMM15PK |
| DB | 25 | DBMM25PF | DBMM25PP | DBMM25PR | DBMM25PC | DBMM25PK |
| DC | 37 | DCMM 37 PF | DCMM37PP | DCMM37PR | DCMM37PC | DCMM37PK |
| DD | 50 | DDMM50PF | DDMM50PP | DDMM50PR | DDMM50PC | DDMM50PK |


|  |  | Commercial Part Numbers |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \varnothing Y \\ 0,76(.030) \end{gathered}$ |  |  | $\begin{gathered} \varnothing Y \\ 1,02(.040) \end{gathered}$ |  |
| Shell Size | Layout | $\underset{\substack{\mathrm{X} \\ \text { (.127) }}}{ }$ | $\begin{gathered} \mathrm{X} \\ 4,01(.158) \end{gathered}$ | $\begin{gathered} \mathrm{X} \\ 4,65(.183) \end{gathered}$ | $\begin{gathered} \mathrm{X} \\ 3,23(.127) \end{gathered}$ | $\frac{\mathrm{X}}{4,01(.158)}$ |
| DE | 9 | DEM9PF | DEM9PP | DEM9PR | DEM9PC | DEM9PK |
| DA | 15 | DAM15PF | DAM15PP | DAM15PR | DAM15PC | DAM15PK |
| DB | 25 | DBM25PF | DBM25PP | DBM25PR | DBM25PC | DBM25PK |
| DC | 37 | DCM37PF | DCM37PP | DCM37PR | DCM37PC | DCM37PK |
| DD | 50 | DDM50PF | DDM50PP | DDM50PR | DCM50PC | DDM50PK |

For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 272.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.


Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,317(.0125) \end{gathered}$ | $\begin{gathered} \text { K } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |

## $90^{\circ}$ PC Tail



## Reader's Resource

For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 272.
For panel cutouts, see page 221.
For hardware view (Standard), see page 226.

Part Numbers

|  |  | Military Part Numbers |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \varnothing Y \\ 0,76(.030) \end{gathered}$ |  |  | $\begin{gathered} \not \subset \mathbf{Y} \\ 1,02(.040) \end{gathered}$ |  |
| Shell Size | Layout | $\begin{gathered} \mathrm{X} \\ 3,23(.127) \end{gathered}$ | $\begin{gathered} \text { X } \\ 4,01(.158) \end{gathered}$ | $\begin{gathered} \text { X } \\ 4,65(.183) \end{gathered}$ | $\begin{gathered} \mathrm{X} \\ 3,23(.127) \end{gathered}$ | $\begin{gathered} \mathrm{X} \\ 4,01(.158) \\ \hline \end{gathered}$ |
| DE | 9 | DEMM9SF | DEMM9SP | DEMM9SR | DEMM9SC | DEMM9SK |
| DA | 15 | DAMM15SF | DAMM15SP | DAMM15SR | DAMM15SC | DAMM15SK |
| DB | 25 | DBMM25SF | DBMM25SP | DBMM25SR | DBMM25SC | DBMM25SK |
| DC | 37 | DCMM375F | DCMM375P | DCMM37SR | DCMM37SC | DCMM37SK |
| DD | 50 | DDMM50SF | DDMM50SP | DDMM50SR | DDMM50SC | DDMM50SK |


|  |  | Commercial Part Numbers |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \varnothing \mathbf{Y} \\ 0,76(.030) \end{gathered}$ |  |  | $\begin{gathered} \not \varnothing \mathbf{Y} \\ 1,02(.040) \end{gathered}$ |  |
| Shell Size | Layout | $\begin{gathered} \mathrm{X} \\ 3,23(, 127) \end{gathered}$ | $\begin{gathered} \mathrm{X} \\ 4,01(.158) \end{gathered}$ | $\begin{gathered} \mathrm{X} \\ 4,65(, 183) \end{gathered}$ | $\begin{gathered} \mathrm{X} \\ 3,23(, 127) \end{gathered}$ | $\frac{\mathrm{X}}{4,01(, 158)}$ |
| DE | 9 | DEM9SF | DEM9SP | DEM9SR | DEM9SC | DEM9SK |
| DA | 15 | DAM15SF | DAM15SP | DAM15SR | DAM15SC | DAM15SK |
| DB | 25 | DBM25SF | DBM25SP | DBM25SR | DBM25SC | DBM25SK |
| DC | 37 | DCM375F | DCM375P | DCM37SR | DCM375C | DCM375K |
| DD | 50 | DDM50SF | DDM50SP | DDM50SR | DDM50SC | DDM50SK |



Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0.13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(, 015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(, 010) \\ \hline \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(, 015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { K } \\ \pm 0,318(, 0125) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(, 010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |


| Plug | Part Numbers |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Military Part Numbers |  |  |  |  |  |
|  |  |  | $\begin{gathered} \varnothing \mathbf{Y} \\ 0,76(.030) \end{gathered}$ |  |  | $\begin{gathered} \varnothing Y \\ 1,02(.040) \end{gathered}$ |  |  |
|  | $\begin{aligned} & \text { Shell } \\ & \text { Size } \end{aligned}$ | Layout | $\begin{gathered} \mathrm{X} \\ 3,23(.127) \end{gathered}$ | $\begin{gathered} \mathrm{X} \\ 4,01(, 158) \end{gathered}$ | $\begin{gathered} \mathrm{X} \\ 4,65(.183) \end{gathered}$ | $\begin{gathered} \mathrm{X} \\ 3,23(.127) \end{gathered}$ | $\begin{gathered} \text { X } \\ 4,01(.158) \\ \hline \end{gathered}$ | $\begin{gathered} x \\ 4,65(.183) \\ \hline \end{gathered}$ |
|  | DE | 9 | DEMM9PE* | DEMM9PM* | DEMM9PZ* | DEMM9PB | DEMM9PH | DEMM9PX* |
|  | DA | 15 | DAMM15PE* | DAMM15PM* | DAMM15PZ* | DAMM15PB | DAMM15PH | DAMM15PX* |
|  | DB | 25 | DBMM25PE* | DBMM25PM* | DBMM25PZ* | DBMM25PB | DBMM25PH | DBMM25PX* |
|  | DC | 37 | DCMM37PE* | DCMM ${ }^{\text {P7PM* }}$ | DCMM37P* | DCMM37PB | DCMM37PH | DCMM37PX* |
|  | DD | 50 | DDMM50PE* | DDMM50PM* | DDMM50PZ* | DDMM50PB | DDMM50PH | DDMM50PX* |
|  | Note: Spacers (shipped loose) provided only on parts marked * |  |  |  |  |  |  |  |
| Reader's Resource <br> For contact cavity arrangements, see page 224. <br> For P.C. hole patterns, see page 274. <br> For panel cutouts, see page 221. <br> For hardware views (Standard), see page 226. |  |  | Commercial Part Numbers |  |  |  |  |  |
|  |  |  | $\begin{gathered} \phi Y \\ 0,76(.030) \\ \hline \end{gathered}$ |  |  | $\begin{gathered} \varnothing Y \\ 1,02(.040) \end{gathered}$ |  |  |
|  | $\begin{aligned} & \text { Syell } \\ & \text { Size } \end{aligned}$ | Layout | $\underset{\substack{\text { 3,23 } \\(.127)}}{ }$ |  | $\underset{\substack{\mathrm{X} \\ \hline(183)}}{ }$ | $\underset{\substack{\mathrm{X} \\ \mathrm{X}(.127)}}{ }$ | $\begin{gathered} \text { X } \\ 4,01(.158) \end{gathered}$ | $\underset{4,65(.183)}{\text { X }}$ |
|  | DE | 9 | DEM9PE | DEM9PM | DEM9PZ | DEM9PB | DEM9PH | DEM9PX |
|  | DA | 15 | DAM15PE | DAM15PM | DAM15PZ | DAM15PB | DAM15PH | DAM15PX |
|  | DB | 25 | DBM25PE | DBM25PM | DBM25PZ | DBM25PB | DBM25PH | DBM25PX |
|  | DC | 37 | DCM37PE | DCM37PM | DCM37PZ | DCM37PB | DCM37PH | DCM37PX |
|  | DD | 50 | DDM50PE | DDM50PM | DDM50PZ | DDM50PB | DDM50PH | DDM50PX |



## Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\underset{ \pm 0,13(.005)}{\text { C }}$ | $\pm \begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E}^{\mathrm{E}}(.015) \end{gathered}$ | $\underset{ \pm 0,25(.010)}{\text { F }}$ | $\begin{gathered} \mathrm{W} \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} \mathrm{W} \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,317(.0125) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (0.39) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |


| Straight PC Tail |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Receptacle | Part Numbers |  |  |  |  |  |  |  |
|  |  |  | Military Part Numbers |  |  |  |  |  |
|  |  |  | $\begin{gathered} \varnothing \mathrm{Y} \\ 0,76(.030) \end{gathered}$ |  |  | $\begin{gathered} \not \varnothing Y \\ 1,02(.040) \\ \hline \end{gathered}$ |  |  |
|  | $\begin{aligned} & \hline \text { Shell } \\ & \text { Size } \end{aligned}$ | Layout | $\frac{\mathrm{X}}{3,23(.127)}$ | $\begin{gathered} \mathrm{X} \\ 4,01(.158) \end{gathered}$ | $\frac{X}{4,65(.183)}$ | $\frac{\mathrm{X}}{3,23(.127)}$ | $\begin{gathered} X \\ 4,01(.158) \end{gathered}$ | $\begin{gathered} \text { X } \\ 4,65(.183) \end{gathered}$ |
|  | DE | - | DEMM9SE* | DEMM9SM* | DEMM9SZ* | DEMM9SB | DEMM9SH | DEMM9SX* |
|  | DA | 15 | DAMM15SE* | DAMM15SM* | DAMM15SZ* | DAMM15SB | DAMM15SH | DAMM15SX* |
|  | DB | 25 | DBMM25SE* | DBMM25SM* | DBMM25Sて* | DBMM25SB | DBMM25SH | DBMM25SX* |
|  | DC | 37 | DCMM37SE* | DCMM37SM* | DCMM375Z* | DCMM37SB | DCMM37SH | DCMM375X* |
|  | DD | 50 | DDMM50SE* | DDMM50SM* | DDMM50SZ ${ }^{\text {a }}$ | DDMM50SB | DDMM50SH | DDMM50SX* |
| Reader's Resource <br> For contact cavity arrangements, see page 224. <br> For P.C. hole patterns, see page 274. <br> For panel cutouts, see page 221. <br> For hardware views (Standard), see page 226. | Note: Spacers (shipped loose) provided only on parts marked * |  |  |  |  |  |  |  |
|  |  |  | Commercial Part Numbers |  |  |  |  |  |
|  |  |  | $\begin{gathered} \not \subset \mathbf{Y} \\ 0,76(.030) \end{gathered}$ |  |  | $\begin{gathered} \varnothing Y \\ 1,02(.040) \end{gathered}$ |  |  |
|  | $\begin{aligned} & \text { Shell } \\ & \text { Size } \end{aligned}$ | Layout | $\underset{\substack{\mathrm{x} 23 \\(.127)}}{ }$ | $\begin{gathered} \mathrm{X} \\ 4,01(, 158) \end{gathered}$ | $\underset{\substack{\text { X } \\(183)}}{\text { (183 }}$ | $\begin{gathered} \mathrm{X} \\ 3,23(.127) \\ \hline \end{gathered}$ | $\begin{gathered} \text { X } \\ 4,01(.158) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{X} \\ 4,65(.183) \\ \hline \end{gathered}$ |
|  | DE | 9 | DEM9SE | DEM9SM | DEM9SZ | DEM9SB | DEM9SH | DEM9SX |
|  | DA | 15 | DAM15SE | DAM15SM | DAM155Z | DAM15SB | DAM15SH | DAM155X |
|  | DB | 25 | DBM25SE | DBM25SM | DBM25SZ | DBM25SB | DBM25SH | DBM25SX |
|  | DC | 37 | DCM375E | DCM37SM | DCM375Z | DCM375B | DCM375H | DCM37SX |
|  | DD | 50 | DDM50SE | DDM50SM | DDM50SZ | DDM50SB | DDM50SH | DDM50SX |



## Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathbf{F} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { K } \\ \pm 0,318(.0125) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |

## Wrap Post Connector



## Reader's Resource

For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 274. For panel cutouts, see page 221.
For hardware views (Standard), see page 226.

Part Numbers

| Shell Size | Layout | Military Part Numbers |  |
| :---: | :---: | :---: | :---: |
| DE | 9 | DEMM9PF179 | DEMM9PF179A |
| DA | 15 | DAMM15PF179 | DAMM15PF179A |
| DB | 25 | DBMM25PF179 | DBMM25PF179A |
| DC | 37 | DCMM37PF179 | DCMM37PF179A |
| DD | 50 | DDMM50PF179 | DDMM50PF179A |
| Shell Size | Layout | Commercial Part Numbers |  |
| DE | 9 | DEM9PF179 | DEM9PF179A |
| DA | 15 | DAM15PF179 | DAM15PF179A |
| DB | 25 | DBM25PF179 | DBM25PF179A |
| DC | 37 | DCM37PF179 | DCM37PF179A |
| DD | 50 | DDM50PF179 | DDM50PF179A |


| Modification Code | Number of <br> Wraps | $\mathbf{X}$ <br> $\pm 0,51(.020)$ |
| :---: | :---: | ---: |
| F179 | 2 | $9,60(.378)$ |
| F179A | 3 | $12,90(.508)$ |

DD Configuration



Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(, 010) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,368(, 0145) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,317(.0125) \end{gathered}$ | $\begin{gathered} \text { K } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \text { L } \\ \pm 0,25(, 010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |

## Wrap Post Connector

## Receptacle



For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 274. For panel cutouts, see page 221. For hardware views (Standard), see page 226.

Part Numbers

| Shell Size | Layout | Military Part Numbers |  |
| :---: | :---: | :---: | :---: |
| DE | 9 | DEMM95F179 | DEMM9SF179A |
| DA | 15 | DAMM15FF179 | DAMM15SF179A |
| DB | 25 | DBMM25F179 | DBMM25SF179A |
| DC | 37 | DCMM37SF179 | DCMM375F179A |
| DD | 50 | DDMM50SF179 | DDMM50SF179A |
|  |  |  |  |
| Shell Size | Layout | Commercial Part Numbers |  |
| DE | 9 | DEM9SF179 | DEM9SF179A |
| DA | 15 | DAM15SF179 | DAM155F179A |
| DB | 25 | DBM25FF179 | DBM25FF179A |
| DC | 37 | DCM37SF179 | DCM375F179A |
| DD | 50 | DDM50SF179 | DDM50SF179A |


| Modification <br> Code | Number of <br> Wraps | $\mathrm{X}(0,51(.020)$ |
| :---: | :---: | ---: |
| F179 | 2 | $9,60(.378)$ |
| F179A | 3 | $12,90(.508)$ |

DD Configuration


Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\underset{ \pm 0,13(.005)}{\text { C }}$ | $\begin{array}{r} \mathrm{D} \\ \pm 0,13(.005) \\ \hline \end{array}$ | $\begin{array}{r} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{array}$ | $\begin{gathered} \mathbf{F} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{W} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,318(.0125) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66(.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |

## Solder Cup Connector



## Reader's Resource

For contact cavity arrangements,
see page 224.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.

Part Numbers

|  |  | Military Part Numbers |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Shell <br> Size | Layout | Through Hole | Dual | CloatMount |


|  |  |  | Commercial Part Numbers |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shell <br> Size | Layout | Through Hole | Dual <br> DloatMount | Clinch Nut <br> \#4-40 UNC |  |  |
| DE | 9 | DEM9P | DEMY9P | DEME9P |  |  |
| DA | 15 | DAM15P | DAMY15P | DAME15P |  |  |
| DB | 25 | DBM25P | DBMY25P | DBME25P |  |  |
| DC | 37 | DCM37P | DCMY37P | DCME37P |  |  |
| DD | 50 | DDM50P | DDMY50P | DDME50P |  |  |

Engaging Face


## DD Configuration




Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} D \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathbf{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} K \\ \pm 0,317(.0125) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0.76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |

## Solder Cup Connector



## Reader's Resource

For contact cavity arrangements,
see page 224.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.

Part Numbers

|  |  | Military Part Numbers |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Shell <br> Size | Layout | Through Hole | Dual | FloatMount |


| $\begin{aligned} & \text { Shell } \\ & \text { Size } \end{aligned}$ | Layout | Commercial Part Numbers |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Through Hole | $\begin{gathered} \text { Dual } \\ \text { Float Mount } \end{gathered}$ | Clinch Nut \# 4-40 UNC |
| DE | 9 | DEM9S | DEMY9S | DEME9S |
| DA | 15 | DAM15S | DAMY15S | DAME15S |
| DB | 25 | DBM25S | DBMY25S | DBME25S |
| DC | 37 | DCM375 | DCMY37S | DCME37S |
| DD | 50 | DDM50S | DDMY50S | DDME50S |

## Engaging Face



DD Configuration



Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathbf{E} \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \mathbf{F} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { K } \\ \pm 0,318(.0125) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |

## 24308-Style Cross Reference

| Military Part Number | ITT Cannon Part Number | Military Part Number | ITT Cannon Part Number | Military Part Number | ITT Cannon Part Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| M24308/1-1 | DEMM9S | M24308/3-3 | DBMM25P | M24308/6-261 | DBMAMF25SNM |
| M24308/1-2 | DAMM15S | M24308/3-4 | DCMM37P | M24308/6-262 | DCMAMF37SNM |
| M24308/1-3 | DBMM25S | M24308/3-5 | DDMM50P | M24308/6-263 | DDMAMF50SNM |
| M24308/1-4 | DCMM37S | M24308/3-12 | DEMMF9P | M24308/6-270 | DEMAMFTOSNM |
| M24308/1-5 | DDMM50S | M24308/3-13 | DAMMF15P | M24308/6-271 | DAMAMFT15SNM |
| M24308/1-12 | DEMMF9S | M24308/3-14 | DBMMF25P | M24308/6-272 | DBMAMFT25SNM |
| M24308/1-13 | DAMMF15S | M24308/3-15 | DCMMF37P | M24308/6-273 | DCMAMFT37SNM |
| M24308/1-14 | DBMMF25S | M24308/3-16 | DDMMF50P | M24308/6-274 | DDMAMFT50SNM |
| M24308/1-15 | DCMMF37S | M24308/4-1 | DEMAM9P | M24308/6-281 | DEMAM 9 SNM-FO |
| M24308/1-16 | DDMMF50S | M24308/4-2 | DAMAM15P | M24308/6-282 | DAMAM15SNM-FO |
| M24308/1-23 | DEMMYgS | M24308/4-3 | DBMAM25P | M24308/6-283 | DBMAM25SNM-FO |
| M24308/1-24 | DAMMY15S | M24308/4-4 | DCMAM37P | M24308/6-284 | DCMAM37SNM-FO |
| M24308/1-25 | DBMMY25S | M24308/4-5 | DDMAM50P | M24308/6-285 | DDMAM50SNM-FO |
| M24308/1-26 | DCMMY37S | M24308/4-6 | DEMAMT9P | M24308/6-324 | DEMAMF9SNM-FO |
| M24308/1-27 | DDMMY50S | M24308/4-7 | DAMAMT15P | M24308/6-325 | DAMAMF15SNM-FO |
| M24308/2-1 | DEMAM9S | M24308/4-8 | DBMAMT25P | M24308/6-326 | DBMAMF25SNM-FO |
| M24308/2-2 | DAMAM15S | M24308/4-9 | DCMAMT37P | M24308/6-327 | DCMAMF37SNM-FO |
| M24308/2-3 | DBMAM25S | M24308/4-10 | DDMAMT50P | M24308/6-328 | DDMAMF50SNM-FO |
| M24308/2-4 | DCMAM37S | M24308/4-259 | DEMAM9P-FO | M24308/6-453 | DEMAMY9SNM |
| M24308/2-5 | DDMAM50S | M24308/4-260 | DAMAM15P-FO | M24308/6-454 | DAMAMY15SNM |
| M24308/2-6 | DEMAMT9S | M24308/4-261 | DBMAMF25P-FO | M24308/6-455 | DBMAMY25SNM |
| M24308/2-7 | DAMAMT15S | M24308/4-262 | DCMAM37P-FO | M24308/6-456 | DCMAMY37SNM |
| M24308/2-8 | DBMAMT25S | M24308/4-263 | DDMAM50P-FO | M24308/6-457 | DDMAMY50SNM |
| M24308/2-9 | DCMAMT37S | M24308/4-302 | DEMAMF9P | M24308/6-464 | DDMEMYT9SNM |
| M24308/2-10 | DDMAMT50S | M24308/4-303 | DAMAMF15P | M24308/6-465 | DAMAMYT15SNM |
| M24308/2-23 | DEMAMF9S | M24308/4-304 | DBMAMF25P | M24308/6-466 | DBMAMYT25SNM |
| M24308/2-24 | DAMAMF15S | M24308/4-305 | DCMAMF37P | M24308/6-467 | DCMAMYT37SNM |
| M24308/2-25 | DBMAMF25S | M24308/4-306 | DDMAMF50P | M24308/6-468 | DDMAMYT50SNM |
| M24308/2-26 | DCMAMF37S | M24308/4-313 | DEMAMFT9P | M24308/6-491 | DEMAMYSSNM-FO |
| M24308/2-27 | DDMAMF50S | M24308/4-314 | DAMAMFT15P | M24308/6-492 | DAMAMY15SNM-FO |
| M24308/2-34 | DEMAMFT9S | M24308/4-315 | DBMAMFT25P | M24308/6-493 | DBMAMY25SNM-FO |
| M24308/2-35 | DAMAMFT15S | M24308/4-316 | DCMAMFT37P | M24308/6-494 | DCMAMY37SNM-FO |
| M24308/2-36 | DBMAMFT25S | M24308/4-317 | DDMAMFT50P | M24308/6-495 | DDMAMY50SNM-FO |
| M24308/2-37 | DCMAMFT37S | M24308/4-324 | DEMAMF9P-FO | M24308/7-1 | DEMM9PNM |
| M24308/2-38 | DDMAMFT50S | M24308/4-325 | DAMAMF15P-FO | M24308/7-2 | DAMM15PNM |
|  | DEMAM9S-FO |  | DBMAMF25P-FO |  |  |
| M24308/2-282 | DAMAM15S-FO | M24308/4-327 | DCMAMF37P-F0 | M24308/7-4 | DCMM37PNM |
| M24308/2-283 | DBMAM25S-FO | M24308/4-328 | DDMAMF50P-FO | M24308/7-5 | DDMM50PNM |
| M24308/2-284 | DCMAM37S-FO | M24308/5-1 | DEMM9SNM | M24308/7-12 | DEMMF9PNM |
| M24308/2-285 | DDMAM50S-FO | M24308/5-2 | DAMM15SNM | M24308/7-13 | DAMMF15PNM |
| M24308/2-292 | DEMAMF9S-FO | M24308/5-3 | DBMM25SNM | M24308/7-14 | DBMMF25PNM |
| M24308/2-293 | DAMAMF15S-F0 | M24308/5-4 | DCMM37SNM | M24308/7-15 | DCMMF37PNM |
| M24308/2-294 | DBMAMF25S-FO | M24308/5-5 | DDMM50SNM | M24308/7-16 | DDMMF50PNM |
| M24308/2-295 | DCMAMF37S-FO | M24308/5-12 | DEMMF9SNM | M24308/8-1 | DEMAM9PNM |
| M24308/2-296 | DDMAMF50S-F0 | M24308/5-13 | DAMMF15SNM | M24308/8-2 | DAMAM15PNM |
| M24308/2-335 | DBMAMR25S | M24308/5-14 | DBMMF25SNM | M24308/8-3 | DBMAM25PNM |
| M24308/2-336 | DCMAMR37S | M24308/5-15 | DCMMF37SNM | M24308/8-4 | DCMAM37PNM |
| M24308/2-341 | DAMAMR15S | M24308/5-16 | DDMMF50SNM | M24308/8-5 | DDMAM50PNM |
| M24308/2-342 | DEMAMY9S | M24308/5-23 | DDMMYgSNM | M24308/8-6 | DEMAMT9PNM |
| M24308/2-343 | DAMAMY15S | M24308/5-24 | DAMMY15SNM | M24308/8-7 | DAMAMT15PNM |
| M24308/2-344 | DBMAMY25S | M24308/5-25 | DBMMY25SNM | M24308/8-8 | DBMAMT25PNM |
| M24308/2-345 | DCMAMY37S | M24308/5-26 | DCMMY37SNM | M24308/8-9 | DCMAMT37PNM |
| M24308/2-346 | DDMAMY50S | M24308/5-27 | DDMMY50SNM | M24308/8-10 | DDMAMT50PNM |
| M24308/2-353 | DEMAMYT9S | M24308/6-1 | DEMAM9SNM | M24308/8-259 | DEMAM9PNM-FO |
| M24308/2-354 | DAMAMYT15S | M24308/6-2 | DAMAM15SNM | M24308/8-260 | DAMAM15PNM-FO |
| M24308/2-355 | DBMAMYT25S | M24308/6-3 | DBMAM25SNM | M24308/8-261 | DBMAM25PNM-FO |
| M24308/2-356 | DCMAMYT37S | M24308/6-4 | DCMAM37SNM | M24308/8-262 | DCMAM37PNM-FO |
| M24308/2-357 | DDMAMYT50S | M24308/6-5 | DDMAM50SNM | M24308/8-263 | DDMAM50PNM-FO |
| M24308/2-482 | DEMAMYSS-FO | M24308/6-6 | DEMAMT9SNM | M24308/8-302 | DEMAMF9PNM |
| M24308/2-483 | DEMAMY15S-FO | M24308/6-7 | DAMAMT15SNM | M24308/8-303 | DAMAMF15PNM |
| M24308/2-484 | DEMAMY25S-F0 | M24308/6-8 | DBMAMT25SNM | M24308/8-304 | DBMAMF25PNM |
| M24308/2-485 | DCMAMY37S-FO | M24308/6-9 | DCMAMT37SNM | M24308/8-305 | DCMAMF37PNM |
| M24308/2-486 | DDMAMY50S-FO | M24308/6-10 | DDMAMT50SNM | M24308/8-306 | DDMAMF50PNM |
| M24308/3-1 | DEMM9P | M24308/6-259 | DEMAMF9SNM | M24308/8-313 | DEMAMFT9PNM |
| M24308/3-2 | DAMM15P | M24308/6-260 | DAMAMF15SNM | M24308/8-314 | DAMAMFT15PNM |

## 24308-Style Cross Reference

| Military Part Number | ITT Cannon Part Number | Military Part Number | ITT Cannon Part Number | Military Part Number | ITT Cannon Part Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| M24308/8-315 | DBMAMFT25PNM | M24308/23-21 | DBMM25SX | M24308/24-15 | DBMM25PH |
| M24308/8-316 | DCMAMFT37PNM | M24308/23-22 | DCMM37SX | M24308/24-16 | DCMM37PH |
| M24308/8-317 | DDMAMFT50PNM | M24308/23-23 | DDMM50SX | M24308/24-17 | DDMM50PH |
| M24308/8-324 | DEMAMF9PNM-FO | M24308/23-25 | DEMM9SD | M24308/24-19 | DEMM9PX |
| M24308/8-325 | DAMAMF15PNM-FO | M24308/23-26 | DAMM15SD | M24308/24-20 | DAMM15PX |
| M24308/8-326 | DBMAMF25PNM-FO | M24308/23-27 | DBMM25SD | M24308/24-21 | DBMM25PX |
| M24308/8-327 | DCMAMF37PNM-FO | M24308/23-28 | DCMM37SD | M24308/24-22 | DCMM37PX |
| M24308/8-328 | DDMAMF50PNM-FO | M24308/23-29 | DDMM50SD | M24308/24-23 | DDMM50PX |
| M24308/9-1 | DEH9P002 | M24308/23-31 | DEMM9SL | M24308/24-25 | DEMM9PD |
| M24308/9-2 | DAH15P002 | M24308/23-32 | DAMM15SL | M24308/24-26 | DAMM15PD |
| M24308/9-3 | DBH25P002 | M24308/23-33 | DBMM25SL | M24308/24-27 | DBMM25PD |
| M24308/9-4 | DCH37P002 | M24308/23-34 | DCMM37SL | M24308/24-28 | DCMM37PD |
| M24308/9-5 | DDH50P002 | M24308/23-35 | DDMM50SL | M24308/24-29 | DDMM50PD |
| M24308/9-6 | DEH9P001 | M24308/23-37 | DEMM9SA | M24308/24-31 | DEMM9PL |
| M24308/9-7 | DAH15P001 | M24308/23-38 | DAMM15SA | M24308/24-32 | DAMM15PL |
| M24308/9-8 | DBH25P001 | M24308/23-39 | DBMM25SA | M24308/24-33 | DBMM25PL |
| M24308/9-9 | DCH37P001 | M24308/23-40 | DCMM37SA | M24308/24-34 | DCMM37PL |
| M24308/9-10 | DDH50P001 | M24308/23-41 | DDMM50SA | M24308/24-35 | DDMM50PL |
| M24308/9-11 | DEH9P202 | M24308/23-43 | DEMM9SG | M24308/24-37 | DEMM9PA |
| M24308/9-12 | DAH15P202 | M24308/23-44 | DAMM15SG | M24308/24-38 | DAMM15PA |
| M24308/9-13 | DBH25P202 | M24308/23-45 | DBMM25SG | M24308/24-39 | DBMM25PA |
| M24308/9-14 | DCH37P202 | M24308/23-46 | DCMM37SG | M24308/24-40 | DCMM37PA |
| M24308/9-15 | DDH50P202 | M24308/23-47 | DDMM50SG | M24308/24-41 | DDMM50PA |
| M24308/9-16 | DEH9P201 | M24308/23-49 | DEMM9SS | M24308/24-43 | DEMM9PG |
| M24308/9-17 | DAH15P201 | M24308/23-50 | DAMM15SS | M24308/24-44 | DAMM15PG |
| M24308/9-18 | DBH25P201 | M24308/23-51 | DBMM25SS | M24308/24-45 |  |
| M24308/9-19 | DCH37P201 | M24308/23-52 | DCMM37SS | M24308/24-46 | DCMM37PG |
| M24308/9-20 | DDH50P201 | M24308/23-53 | DDMM50SS | M24308/24-47 | DDMM50PG |
| M24308/23-1 | DEMM9SM | M24308/23-55 | DEMM9SW | M24308/24-49 | DEMM9PS |
| M24308/23-2 | DAMM15SM | M24308/23-56 | DAMM15SW | M24308/24-50 | DAMM15PS |
| M24308/23-3 | DBMM25SM | M24308/23-57 | DBMM25SW | M24308/24-51 | DBMM25PS |
| M24308/23-4 | DCMM37SM | M24308/23-58 | DCMM37SW | M24308/24-52 | DCMM37PS |
| M24308/23-5 | DDMM50SM | M24308/23-59 | DDMM50SW | M24308/24-53 | DDMM50PS |
| M24308/23-7 | DEMM9SZ | M24308/24-1 | DEMM9PM | M24308/24-55 | DEMM9PW |
| M24308/23-8 | DAMM15SZ | M24308/24-2 | DAMM15PM | M24308/24-56 | DAMM15PW |
| M24308/23-9 | DBMM25SZ | M24308/24-3 | DBMM25PM | M24308/24-57 | DBMM25PW |
| M24308/23-10 | DCMM37SZ | M24308/24-4 | DCMM37PM | M24308/24-58 | DCMM37PW |
| M24308/23-11 | DDMM50SZ | M24308/24-5 | DDMM50PM | M24308/24-59 | DDMM50PW |
| M24308/23-13 | DEMM9SH | M24308/24-7 | DEMM9PZ | M24308/26-1 | D20418-2 |
| M24308/23-14 | DAMM15SH | M24308/24-8 | DAMM15PZ | M24308/26-2 | D20418-39 |
| M24308/23-15 | DBMM25SH | M24308/24-9 | DBMM25PZ |  |  |
| M24308/23-16 | DCMM37SH | M24308/24-10 | DCMM37PZ |  |  |
| M24308/23-17 | DDMM50SH | M24308/24-11 | DDMM50PZ |  |  |
| M24308/23-19 | DEMM 9 SX | M24308/24-13 | DEMM9PH |  |  |
| M24308/23-20 | DAMM15SX | M24308/24-14 | DAMM15PH |  |  |

## MIL-C-39029 Crimp Contacts

| Military <br> Part Number | ITT Cannon <br> Part Number | Contact Size | Contact Style | Product Line |
| :---: | :---: | :---: | :---: | :---: |
| M39029/63-368 | $031-1007-078$ | 20 | Socket | D*MA |
| M39029/64-369 | $330-5291-097$ | 20 | Pin | D*MA |

HE501/D*M Cross Reference

| $\begin{gathered} \text { HE501 } \\ \text { Part Number } \end{gathered}$ | ITT Cannon Part Number | $\begin{gathered} \text { HE501 } \\ \text { Part Number } \end{gathered}$ | ITT Cannon Part Number | $\begin{gathered} \text { HE501 } \\ \text { Part Number } \end{gathered}$ | ITT Cannon Part Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HE501N09AS3 HE501N15AS3 HE501N25AS3 HE501N37AS3 HE501N50AS3 | DEM9S <br> DAM15S <br> DBM25S <br> DCM37S <br> DDM50S | $\begin{aligned} & \hline \text { HE501N9KS33 } \\ & \text { HE501N15KS33 } \\ & \text { HE501N25KS33 } \\ & \text { HE501N37KS33 } \\ & \text { HE501N5OKS33 } \end{aligned}$ | DEM9SF179A <br> DAM15SF179A <br> DBM25SF179A <br> DCM37SF179A <br> DDM50SF179A | HE501N09YP4 HE501N15YP4 HE501N25YP4 HE501N37YP4 HE501N50YP4 | $\begin{aligned} & \text { DEM9POL3 } \\ & \text { DAM15POL3 } \\ & \text { DBM25POL } \\ & \text { DCM37PPOL } \\ & \text { DDM50POL3 } \end{aligned}$ |
| HE501F09AS3 <br> HE501F15AS3 <br> HE501F25AS3 <br> HE501F37AS3 <br> HE501F50AS3 | $\begin{aligned} & \text { DEMY9S } \\ & \text { DAMY15S } \\ & \text { DBMY25S } \\ & \text { DCMY37S } \\ & \text { DDMY50S } \end{aligned}$ | $\begin{aligned} & \text { HE501N09AP } \\ & \text { HE501N15AP } \\ & \text { HE501N25AP } \\ & \text { HE501N37AP } \\ & \text { HE501N50AP } \end{aligned}$ | DEM9P <br> DAM15P <br> DBM25P <br> DCM37P <br> DDM50P | HE501P09VP6E HE501P15VP6E HE501P25VP6E HE501P37VP6E HE501P50VP6E | DEM9P1A5N DAM15P1A5N DBM25P1A5N DCM39P1A5N DDM50P1A5N |
| HE501N09YS43 <br> HE501N15YS43 <br> HE501N25YS43 <br> HE501N37YS43 <br> HE501N50YS43 | $\begin{aligned} & \hline \text { DEM9SOL3 } \\ & \text { DAM15SOL3 } \\ & \text { DBM25SOL3 } \\ & \text { DCM350L3 } \\ & \text { DDM50S0L3 } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { HE501F09AP } \\ & \text { HE501F15AP } \\ & \text { HE501F25AP } \\ & \text { HE501F37AP } \\ & \text { HE501F50AP } \\ & \hline \end{aligned}$ | DEMY9P <br> DAMY15P <br> DBMY25P <br> DCMY37P <br> DDMY50P | $\begin{aligned} & \hline \text { HE501N9KP3 } \\ & \text { HE501N15KP3 } \\ & \text { HE501N25KP3 } \\ & \text { HE501N37KP3 } \\ & \text { HE501N50KP3 } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { DEM9PF179A } \\ & \text { DAM15PF179A } \\ & \text { DBM25PF179A } \\ & \text { DCM37PF179A } \\ & \text { DDM50PF179A } \\ & \hline \end{aligned}$ |
| HE501P09VS63E HE501P15VS63E HE501P25VS63E HE501P37VS63E HE501P50VS63E | DEM9S1A5N <br> DAM15SA15N <br> DBM25S1A5N <br> DCM37S1A5N <br> DDM50S1A5N |  |  |  |  |

## Test Data

## 24308-Style Test Extracts Applicable To Class G Connectors

| Test Description | Test Requirements | MIL-STD-1344 Test Method |
| :---: | :---: | :---: |
| Mating/Unmating Force | Shell Size Layout Max Unmating (lbs.) Max Mating (lbs.) <br> DE 9 6 10 <br> DA 15 10 17 <br> DB 25 17 28 <br> DC 37 24 39 <br> DD 50 30 49 | 2013 |
| Contact Retention | Contacts shall be retained in their inserts by a 9 pound (minimum) force. The axial displacement of contacts shall not exceed .012 inch while under load. | 2007 |
| Insulation Resistance | After humidity 1 Megohm (min.) All other conditions 5000 Megohm (min.) | 3003 |
| Contact Resistance | After salt spray not to exceed 65 millivolts max. | $\begin{aligned} & 3004 \\ & \text { Size } 20 \text { AWG; 7.5 A } \end{aligned}$ |
| Vibration | No damage and no loosening of parts due to vibration. No interruption of electrical continuity longer than 1 microsecond. | $\begin{aligned} & \hline 2005 \\ & \text { Test Cond. } 4 \end{aligned}$ |
| Shock | No damage and no loosening of parts. No interruption of electrical continuity longer than 1 microsecond. | $\begin{aligned} & 2004 \\ & \text { Test Cond. E } \end{aligned}$ |
| Durability | No electrical or mechanical defects after 500 cycles of mating and unmating. | $\begin{aligned} & 2016 \\ & 200 \pm 100 \text { cycles/hour } \end{aligned}$ |
| Salt Spray (Corrosion) | No exposure of base metal due to corrosion which will affect performance. Product will meet further tests as specified. | $1001$ <br> Cond. B |
| Fluid Immersion | 20 hours immersion MIL-H-5606 Hydraulic Fluid. <br> 20 hours immersion MIL-L-23699 Lubricating Fluid. <br> Connectors shall meet mating/unmating force following immersion. | 1016 |

## Coaxial $90^{\circ}$ PCB (Sizes DE-DC)

Plug


## Reader's Resource

For contact cavity arrangements, see page 222.
For P.C. hole patterns, see pages 228-229. For panel cutouts, see page 221.
For hardware views (Standard), see page 226. For alternate bracket configuration (when connectors are supplied without boardlocks), see page 226.
For alternate 50 Ohm coaxial configuration, see page 225.

## 75 Ohm Part Numbers* with Bracket and Rivnut \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks Without Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEMMP5C1PJ | DEMMC5C1PJ | DEMMD5C1P | DEMMG5C1PJ |
| DA | 7W2 | DAMMP7C2PJ | DAMMC7C2PJ | DAMMD7C2PJ | DAMMG7C2PJ |
| DA | 11W1 | DAMMP11C1PJ | DAMMC11C1PJ | DAMMD11C1PJ | DAMMG11C1P) |
| DA | 3W3 | DAMMP3C3PJ | DAMMC3C3P] | DAMMD3C3PJ | DAMMG3C3PJ |
| DA | 3WK3¢ | DAMMP3CK3PJTM | DAMMC3CK3PJ TM | DAMMD3CK3PJTM | DAMMG3CK3PJTM |
| DB | 5W5 | DBMMP5C5PJ | DBMMC5C5PJ | DBMMD5C5P] | DBMMG5C5PJ |
| DB | 9W4 | DBMMP9C4P | DBMMC9C4P | DBMMD9C4P] | DBMMG9C4PJ |
| DB | 13W3 | DBMMP13C3P] | DBMMC13C3P] | DBMMD13C3PJ | DBMMG13C3P] |
| DB | 17W2 | DBMMP17C2PJ | DBMMC17C2PJ | DBMMD17C2PJ | DBMMG17C2PJ |
| DB | 21W1 | DBMMP21C1PJ | DBMMC21C1PJ | DBMMD21C1PJ | DBMMG21C1P) |
| DC | 8W8 | DCMMP8C8P] | DCMMC8C8P] | DCMMD8C8P] | DCMMG8C8P] |
| DC | 13W6 | DCMMP13C6P) | DCMMC13C6PJ | DCMMD13C6PJ | DCMMG13C6PJ |
| DC | 17W5 | DCMMP17C5P] | DCMMC17C5PJ | DCMMD17C5PJ | DCMMG17C5PJ |
| DC | 21WA4 | DCMMP21CA4PJ | DCMMC21CA4PJ | DCMMD21CA4PJ | DCMMG21CA4PJ |
| DC | 25W3 | DCMMP25C3P] | DCMMC25C3P] | DCMMD25C3PJ | DCMMG25C3P] |
| DC | 27W2 | DCMMP27C2P) | DCMMC27C2PJ | DCMMD27C2PJ | DCMMG27C2PJ |

Notes: *For 50 Ohm Coaxial substitute $X$ for C . Example: DEMMP5X1PJ
For DD shell size, see page 148.
\& Keyed



Screw lock, boardlock, and signal contacts removed for clarity


Screw lock, boardlock, and coaxial contact removed for clarity

Note: Dimension varies with alternate bracket configuration, see Reader's Resource page 226.
Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{B} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

## Coaxial $90^{\circ}$ PCB (Sizes DE-DC)

## Receptacle



## Reader's Resource

For contact cavity arrangements, see page 223.
For P.C. hole patterns, see pages 231-232. For panel cutouts, see page 221.
For hardware views (Standard), see page 226. For alternate bracket configuration (when connectors are supplied without boardlocks), see page 226.
For alternate 50 Ohm coaxial configuration, see page 225.

75 Ohm Part Numbers* with Bracket and Rivnut \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks Without Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEMMP5C1S | DEMMC5C1S | DEMMD5C1S | DEMMG5C1S |
| DA | 7W2 | DAMMP7C2SJ | DAMMC7C2S | DAMMD7C2S | DAMMG7C2S |
| DA | 11W1 | DAMMP11C15 | DAMMC11C15 | DAMMD11C15 | DAMMG11C1S |
| DA | 3W3 | DAMMP3C3S | DAMMC3C3S | DAMMD3C3S | DAMMG3C3S |
| DA | 3WK3\% | DAMMP3CK3SJTM | DAMMC3CK35J TM | DAMMD3CK3SJTM | DAMMG3CK35 JM |
| DB | 5W5 | DBMMP5C5SJ | DBMMC5C5S | DBMMD5C5S | DBMMG5C55 |
| DB | 9W4 | DBMMP9C4S | DBMMC9C4S | DBMMD9C4S | DBMMG9C4S |
| DB | 13W3 | DBMMP13C35 | DBMMC13C35 | DBMMD13C35 | DBMMG13C3S |
| DB | 17W2 | DBMMP17C2S | DBMMC17C2S | DBMMD17C2S | DBMMG17C2SJ |
| DB | 21W1 | DBMMP21C15 | DBMMC21C15 | DBMMD21C15 | DBMMG21C1S |
| DC | 8W8 | DCMMP8C85 | DCMMC8C85 | DCMMD8C85 | DCMMG8C8SJ |
| DC | 13W6 | DCMMP13C6SJ | DCMMC13C6S | DCMMD13C6SJ | DCMMG13C6S |
| DC | 17W5 | DCMMP17C55 | DCMMC17C55 | DCMMD17C55 | DCMMG17C5S |
| DC | 21WA4 | DCMMP21CA4S | DCMMC21CA4SJ | DCMMD21CA4SJ | DCMMG21CA4SJ |
| DC | 25W3 | DCMMP25C3S | DCMMC25C3S | DCMMD25C3S | DCMMG25C3S |
| DC | 27W2 | DCMMP27C2S | DCMMC27C2S | DCMMD27C2S | DCMMG27C2S |

Notes: *For 50 Ohm Coaxial substitute X for C. Example: DEMMP5X1SJ
For DD shell size, see page 149.
of Keyed



Screw lock, boardlock and signal contacts removed for clarity


Screw lock, boardlock and coaxial contact removed for clarity

Note: Dimension varies with altenate bracket configuration, see Reader's Resource page 225.
Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47.04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

## Coaxial $90^{\circ}$ PCB (Size DD)

Plug


## Reader's Resource

For contact cavity arrangements,
see page 222.
For P.C. hole patterns, see page 230.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.
For alternate bracket configuration (when
connectors are supplied without boardlocks),
see page 226.
For alternate 50 Ohm coaxial configuration,
see page 225.

75 Ohm Part Numbers* with Metal Bracket and Rivnut \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks Without Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 24W7 | DDMMP24C7P] | DDMMC24C7P) | DDMMD24C7P] | DDMMG24C7PJ |
| DD | 36W4 | DDMMP36C4P] | DDMMC36C4P] | DDMMD36C4P] | DDMMG36C4PJ |
| DD | 43W2 | DDMMP43C2P) | DDMMC43C2PJ | DDMMD43C2PJ | DDMMG43C2PJ |
| DD | 47W1 | DDMMP47C1P) | DDMMC47C1P) | DDMMD47C1P] | DDMMG47C1PJ |

Note: *For 50 Ohm Coaxial substitute X for C. Example: DDMMP24X7PJ


Screw lock, boardock, and signal contacts removed for clarity

Note: Dimension varies with alternate bracket configuration, see Reader's Resource page 226.
Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\underset{ \pm 0,13(.005)}{\text { C }}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\underset{ \pm 0,38(.015)}{\mathrm{E}}$ | $\underset{ \pm 0,25(.010)}{\mathrm{F}}$ | $\begin{gathered} W \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | 6,84 (.269) | 0,99 (.039) |

## Coaxial $90^{\circ}$ PCB (Size DD)

Receptacle


For contact cavity arrangements,

75 Ohm Part Numbers* with Metal Bracket and Rivnut \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks Without Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 24W7 | DDMMP24C75) | DDMMC24C75 | DDMMD24C75] | DDMMG24C75) |
| DD | 36W4 | DDMMP36C4S | DDMMC36C4S | DDMMD36C4S | DDMMG36C4SJ |
| DD | 43W2 | DDMMP43C2S | DDMMC43C25 | DDMMD43C2SJ | DDMMG43C2SJ |
| DD | 47W1 | DDMMP47C1S | DDMMC47C15 | DDMMD47C1S | DDMMG47C1SJ |

Note: *For 50 Ohm Coaxial substitute X for C. Example: DDMMG36X4SJ
see page 223.
For P.C. hole patterns, see page 233.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.
For alternate bracket configuration (when connectors are supplied without boardlocks),
see page 226 .
For alternate 50 Ohm coaxial configuration, see page 225.


Screw lock, boardlock, and coaxial contacts removed for clarity

Screw lock, boardlock, and signal contacts removed for clarity



BRACKET,
METAL


Note: Dimension varies with alternate bracket configuration, see Reader's Resource page 226.

## Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 66,93 (2.635) | 52,42 2 . | 61,11 | 10 | 15,37 (.605) | 10,90 (.429) | 3) | 0,76 (.030) |

## Coaxial Straight PCB (Sizes DE-DC)

Plug


## Reader's Resource

For contact cavity arrangements,
see page 222.
For P.C. hole patterns, see pages 238-239.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.
For alternate 500 hm coaxial configuration,
see page 225.

75 Ohm Part Numbers* with Standoff \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEMMV5C1PN | DEMMZ5C1PN | DEMMN5C1PN |
| DA | 7W2 | DAMMV7C2PN | DAMMZIC2PN | DAMMN7C2PN |
| DA | 11W1 | DAMMV11C1PN | DAMMZ11C1PN | DAMMN11C1PN |
| DA | 3W3 | DAMMV3C3PN | DAMMZ3C3PN | DAMMN3C3PN |
| DA | 3WK3¢ | DAMMV3CK3PNTM | DAMMZZCK3PNTM | DAMMN3CK3PNTM |
| DB | 5W5 | DBMMV5C5PN | DBMMZ5C5PN | DBMMN5C5PN |
| DB | 9W4 | DBMMV9C4PN | DBMMZ9C4PN | DBMMN9C4PN |
| DB | 13W3 | DBMMV13C3PN | DBMMZ13C3PN | DBMMN13C3PN |
| DB | 17W2 | DBMMV17C2PN | DBMMZ17C2PN | DBMMN17C2PN |
| DB | 21W1 | DBMMV21C1PN | DBMMZ21C1PN | DBMMN21C1PN |
| DC | 8W8 | DCMMV8C8PN | DCMMZ8C8PN | DCMMN8C8PN |
| DC | 13W6 | DCMMV13C6PN | DCMMZ13C6PN | DCMMN13C6PN |
| DC | 17W5 | DCMMV17C5PN | DCMMZ17C5PN | DCMMN17C5PN |
| DC | 21WA4 | DCMMV21CA4PN | DCMMZ21CAAPN | DCMMN21CAAPN |
| DC | 25W3 | DCMMV25C3PN | DCMMZ25C3PN | DCMMN25C3PN |
| DC | 27W2 | DCMMV27C2PN | DCMMZ27C2PN | DCMMN27C2PN |

Notes: *For 50 Ohm Coaxial substitute X for C. Example: DEMMV5X1PN
For DD shell size, see page 152.
\& Keyed


Screw lock, boardlock, and signal contacts removed for clarity


Screw lock, boardlock, and coaxial contact removed for clarity

Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

## Coaxial Straight PCB (Sizes DE-DC)

Receptacle


## Reader's Resource

For contact cavity arrangements,
see page 223.
For P.C. hole patterns, see pages 241-242.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.
For alternate 50 Ohm coaxial configuration,
see page 225.

75 Ohm Part Numbers* with Standoff \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEMMV5C1SN | DEMMZ5C1SN | DEMMN5C1SN |
| DA | 7W2 | DAMMV7C2SN | DAMMZIC2SN | DAMMN7C2SN |
| DA | 11W1 | DAMMV11C1SN | DAMMZ11C1SN | DAMMN11C1SN |
| DA | 3W3 | DAMMV3C3SN | DAMMZ3C3SN | DAMMN3C3SN |
| DA | 3WK3¢ | DAMMV3CK3SNTM | DAMMZ3CK3SNTM | DAMMN3CK3SNTM |
| DB | 5W5 | DBMMV5C5SN | DBMMZ5C5SN | DBMMN5C5SN |
| DB | 9W4 | DBMMV9C4SN | DBMMZ9C4SN | DBMMN9C4SN |
| DB | 13W3 | DBMMV13C3SN | DBMMZ13C3SN | DBMMN13C3SN |
| DB | 17W2 | DBMMV17C2SN | DBMMZ17C2SN | DBMMN17C2SN |
| DB | 21W1 | DBMMV21C1SN | DBMMZ21C1SN | DBMMN21C1SN |
| DC | 8W8 | DCMMV8C8SN | DCMMZ8C8SN | DCMMN8C8SN |
| DC | 13W6 | DCMMV13C65N | DCMMZ13C65N | DCMMN13C6SN |
| DC | 17W5 | DCMMV17C5SN | DCMMZ17C5SN | DCMMN17C5SN |
| DC | 21WA4 | DCMMV21CA4SN | DCMMZ21CA4SN | DCMMN21CA4SN |
| DC | 25W3 | DCMMV25C3SN | DCMMZ25C3SN | DCMMN25C3SN |
| DC | 27W2 | DCMMV27C2SN | DCMMZ27C2SN | DCMMN27C2SN |

Notes: *For 50 Ohm Coaxial substitute X for C. Example: DEMMV5XISN
For DD shell size, see page 153.
of Keyed

## Engaging Face



Screw lock, boardlock, and signal contacts removed for clarity

Hardware and coaxial contact
removed for clarity


|  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\stackrel{\mathrm{F}}{0,25(.010)}$ | $\begin{gathered} \mathrm{W} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

## Coaxial Straight PCB (Size DD)

## Plug



## Reader's Resource

For contact cavity arrangements,
see page 222.
For P.C. hole patterns, see page 256.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.
For alternate 500 hm coaxial configuration,
see page 225.
Engaging Face



Screw lock, boardlock, and signal contacts removed for clarity

Screw lock, boardlock, and coaxial contact removed for clarity
Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \mathbf{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | 6,84 (.269) | 0,99 (.039) |

## Coaxial Straight PCB (Size DD)

## Receptacle



## 75 Ohm Part Numbers* with Standoff \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: |
| DD | 24W7 | DDMMV24C75N | DDMMZ24C75N | DDMMN24C7SN |
| DD | 36W4 | DDMMV36C4SN | DDMMZ36C4SN | DDMMN36C4SN |
| DD | 43W2 | DDMMV43C2SN | DDMMZ43C2SN | DDMMN43C2SN |
| DD | 47W1 | DDMMV47C1SN | DDMMZ47C1SN | DDMMN47C1SN |

Note: *For 50 Ohm Coaxial substitute X for C. Example: DDMMV24X7SN

## Reader's Resource

For contact cavity arrangements,
see page 223.
For P.C. hole patterns, see page 259.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.
For alternate 50 Ohm coaxial configuration,
see page 225 .


Screw lock, boardlock, and signal contacts removed for clarity


Screw lock, boardlock, and coaxial contact
removed for clarity

Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 66,93 (2,635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

Plug


## Reader's Resource

For contact cavity arrangements, see page 222.
For P.C. hole patterns, see pages 244-245. For panel cutouts, see page 221.
For hardware views (Standard), see page 226. For alternate bracket configuration (when connectors are supplied without boardlocks), see page 226.

Part Numbers with Metal Bracket and Rivnut \# 4-40 UNC

| Shell Size | Layout | Wart Number <br> Without Screw Locks <br> ithout Boardlocks | Part Number <br> Without Screw Locks <br> With Boardlocks | Part Number <br> With Screw Locks <br> Without Boardlocks | Part Number <br> With Screw Locks <br> With Boardlocks |
| :---: | :---: | :--- | :--- | :--- | :--- |
| DE | $5 W 1$ | DEMMP5H1PJ | DEMMC5H1PJ | DEMMD5H1PJ | DEMMG5H1PJ |
| DA | $7 W 2$ | DAMMP7H2PJ | DAMMC7H2PJ | DAMMD7H2PJ | DAMMG7H2PJ |
| DA | 11 W1 | DAMMP11H1PJ | DAMMC11H1PJ | DAMMD11H1PJ | DAMMG11H1PJ |
| DA | $3 W 3$ | DAMMP3H3PJ | DAMMC3H3PJ | DAMMD3H3PJ | DAMMG3H3PJ |
| DA | $3 W K 3 \& ~$ | DAMMP3HK3PJTM | DAMMC3HK3PJTM | DAMMD3HK3PJTM | DAMMG3HK3PJTM |
| DB | $5 W 5$ | DBMMP5H5PJ | DBMMC5H5PJ | DBMMD5H5PJ | DBMMG5H5PJ |
| DB | $9 W 4 ~$ | DBMMP9H4PJ | DBMMC9H4PJ | DBMMD9H4PJ | DBMMG9H4PJ |
| DB | $13 W 3 ~$ | DBMMP13H3PJ | DBMMC13H3PJ | DBMMD13H3PJ | DBMMG13H3PJ |
| DB | $17 W 2 ~$ | DBMMP17H2PJ | DBMMC17H2PJ | DBMMD17H2PJ | DBMMG17H2PJ |
| DB | $21 W 1 ~$ | DBMMP21H1PJ | DBMMC21H1PJ | DBMMD21H1PJ | DBMMG21H1PJ |
| DC | $8 W 8$ | DCMMP8H8PJ | DCMMC8H8PJ | DCMMD8H8PJ | DCMMG8H8PJ |
| DC | $13 W 6 ~$ | DCMMP13H6PJ | DCMMC13H6PJ | DCMMD13H6PJ | DCMMG13H6PJ |
| DC | $17 W 5 ~$ | DCMMP17H5PJ | DCMMC17H5PJ | DCMMD17H5PJ | DCMMG17H5PJ |
| DC | $21 W A 4 ~$ | DCMMP21HA4PJ | DCMMC21HA4PJ | DCMMD21HA4PJ | DCMMG21HA4PJ |
| DC | $25 W 3 ~$ | DCMMP25H3PJ | DCMMC25H3PJ | DCMMD25H3PJ | DCMMG25H3PJ |
| DC | $27 W 2 ~$ | DCMMP27H2PJ | DCMMC27H2PJ | DCMMD27H2PJ | DCMMG27H2PJ |

Notes: For DD shell size, see page 156. \& Keyed



Screw lock, boardlock, and signal contacts removed for clarity


Screw lock, boardlock, and high power contact removed for clarity

Note: Dimension varies with alternate bracket configuration, see Reader's Resource page 226.

## Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathbf{F} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

## 40 A High Power $90^{\circ}$ PCB (Sizes DE-DC)

Receptacle


## Reader's Resource

For contact cavity arrangements,
see page 223.
For P.C. hole patterns, see pages 247-248.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.
For alternate bracket configuration (when connectors are supplied without boardlocks),
see page 226.

Part Numbers with Metal Bracket and Rivnut \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks Without Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEMMP5H1SJ | DEMMC5H1SJ | DEMMD5H1SJ | DEMMG5H1SJ |
| DA | 7W2 | DAMMP7H2SJ | DAMMC7H2SJ | DAMMD7H2SJ | DAMMG7H2SJ |
| DA | 11W1 | DAMMP11H1SJ | DAMMC11H1SJ | DAMMD11H1SJ | DAMMG11H1SJ |
| DA | 3W3 | DAMMP3H3SJ | DAMMC3H3SJ | DAMMD3H3SJ | DAMMG3H3SJ |
| DA | 3WK3\% | DAMMP3HK3SJTM | DAMMC3HK3SJTM | DAMMD3HK3SJTM | DAMMG3HK3SJTM |
| DB | 5W5 | DBMMP5H5SJ | DBMMC5H5SJ | DBMMD5H5SJ | DBMMG5H5SJ |
| DB | 9W4 | DBMMP9H4SJ | DBMMC9H4SJ | DBMMD9H4SJ | DBMMG9H4SJ |
| DB | 13W3 | DBMMP13H3SJ | DBMMC13H3SJ | DBMMD13H3SJ | DBMMG13H3SJ |
| DB | 17W2 | DBMMP17H2SJ | DBMMC17H2SJ | DBMMD17H2SJ | DBMMG17H2SJ |
| DB | 21W1 | DBMMP21H1SJ | DBMMC21H1SJ | DBMMD21H1SJ | DBMMG21H1SJ |
| DC | 8W8 | DCMMP8H8SJ | DCMMC8H8SJ | DCMMD8H8SJ | DCMMG8H8SJ |
| DC | 13W6 | DCMMP13H6SJ | DCMMC13H6SJ | DCMMD13H6SJ | DCMMG13H6SJ |
| DC | 17W5 | DCMMP17H5SJ | DCMMC17H5SJ | DCMMD17H5SJ | DCMMG17H5SJ |
| DC | 21WA4 | DCMMP21HA4SJ | DCMMC21HA4SJ | DCMMD21HA4SJ | DCMMG21HA4SJ |
| DC | 25W3 | DCMMP25H3SJ | DCMMC25H3SJ | DCMMD25H3SJ | DCMMG25H3SJ |
| DC | 27W2 | DCMMP27H2SJ | DCMMC27H2SJ | DCMMD27H2SJ | DCMMG27H2SJ |

Notes: For DD shell size, see page 157.
of Keyed.


Screw lock, boardlock, and signal contacts removed for clarity


Screw lock, boardlock, and high power contact removed for clarity

Note: Dimension varies with alternate bracket configuration, see Reader's Resource page 226.

## Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

## 40 A High Power $90^{\circ}$ PCB (Size DD)

Part Numbers with Metal Bracket and Rivnut \# 4-40 UNC


For contact cavity arrangements,
see page 222.
For P.C. hole patterns, see page 246.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.
For alternate bracket configuration (when connectors are supplied without boardlocks), see page 226.

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks Without Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 24W7 | DDMMP24H7P] | DDMMC24H7P] | DDMMD24H7PJ | DDMMG24H7PJ |
| DD | 36W4 | DDMMP36H4P] | DDMMC36H4PJ | DDMMD36H4PJ | DDMMG36H4PJ |
| DD | 43W2 | DDMMP43H2PJ | DDMMC43H2P) | DDMMD43H2PJ | DDMMG43H2PJ |
| DD | 47W1 | DDMMP47H1PJ | DDMMC47H1P] | DDMMD47H1PJ | DDMMG47H1PJ |

## Engaging Face



Screw lock, boardlock, and signal contacts removed for clarity


Screw lock, boardlock, and high power contact removed for clarity

Note: Dimension varies with alternate bracket configuration, see Reader's Resource page 226.

## Dimensions

| Shell Size | $\begin{gathered} A \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathbf{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathbf{F} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 66,93 (2,635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | 6,84 (.269) | 0,99 (.039) |

## 40 A High Power $90^{\circ}$ PCB (Size DD)

## Receptacle



## Reader's Resource

For contact cavity arrangements,
see page 223.
For P.C. hole patterns, see page 249.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226. For alternate bracket configuration (when connectors are supplied without boardlocks), see page 226.


Screw lock, boardlock, and signal contacts removed for clarity


Screw lock, boardlock, and high power contact removed for clarity

Note: Dimension varies with alternate bracket configuration, see Reader's Resource page 226.

Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{F} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathrm{W} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \hline \mathrm{L} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

## 40 A High Power Straight PCB (Sizes DE-DC)



## Reader's Resource

For contact cavity arrangements, see page 222.
For P.C. hole patterns, see pages 254-255.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.
Part Numbers with Standoff \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEMMV5H1PN | DEMMZ5H1PN | DEMMN5H1PN |
| DA | 7W2 | DAMMV7H2PN | DAMMZ7H2PN | DAMMN7H2PN |
| DA | 11W1 | DAMMV11H1PN | DAMMZ11H1PN | DAMMN11H1PN |
| DA | 3W3 | DAMMV3H3PN | DAMMZ3H3PN | DAMMN3H3PN |
| DA | 3WK3¢ | DAMMV3HK3PNTM | DAMMZ3HK3PNTM | DAMMN3HK3PNTM |
| DB | 5W5 | DBMMV5H5PN | DBMMZ5H5PN | DBMMN5H5PN |
| DB | 9W4 | DBMMV9H4PN | DBMMZ9H4PN | DBMMN9H4PN |
| DB | 13W3 | DBMMV13H3PN | DBMMZ13H3PN | DBMMN13H3PN |
| DB | 17W2 | DBMMV17H2PN | DBMMZ17H2PN | DBMMN17H2PN |
| DB | 21W1 | DBMMV21H1PN | DBMMZ21H1PN | DBMMN21H1PN |
| DC | 8W8 | DCMMV8H8PN | DCMMZ8H8PN | DCMMN8H8PN |
| DC | 13W6 | DCMMV13H6PN | DCMMZ13H6PN | DCMMN13H6PN |
| DC | 17W5 | DCMMV17H5PN | DCMMZ17H5PN | DCMMN17H5PN |
| DC | 21WA4 | DCMMV21HA4PN | DCMMZ21HA4PN | DCMMN21HA4PN |
| DC | 25W3 | DCMMV25H3PN | DCMMZ25H3PN | DCMMN25H3PN |
| DC | 27W2 | DCMMV27H2PN | DCMMZ27H2PN | DCMMN27H2PN |

Notes: For DD shell sizes, see page 160.
\& Keyed.

## Engaging Face




Screw lock, boardlock and high power contact removed for clarity

Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | ${ }_{ \pm 0,13(.005)}^{\text {C }}$ | $\begin{gathered} \quad D \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{W} \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} \mathrm{W} \\ \pm 0,41(.016) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

## 40 A High Power Straight PCB (Sizes DE-DC)

| Receptacle | Part Numbers with Standoff \# 4-40 UNC |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks With Boardlocks |
|  | DE | 5W1 | DEMMV5H1SN | DEMMZ5H1SN | DEMMN5H1SN |
|  | DA | 7W2 | DAMMV7H2SN | DAMMZ7H2SN | DAMMN7H2SN |
|  | DA | 11W1 | DAMMV11H1SN | DAMMZ11H1SN | DAMMN11H1SN |
|  | DA | 3W3 | DAMMV3H3SN | DAMMZ3H3SN | DAMMN3H3SN |
|  | DA | 3WK3* | DAMMV3HK3SNTM | DAMMZ3HK3SNTM | DAMMN3HK3SNTM |
|  | DB | 5W5 | DBMMV5H5SN | DBMMZ5H5SN | DBMMN5H5SN |
|  | DB | 9W4 | DBMMV9H4SN | DBMMZ9H4SN | DBMMN9H4SN |
| Reader's Resource <br> For contact cavity arrangements, see page 223. <br> For P.C. hole patterns, see pages 257-258. For panel cutouts, see page 221. For hardware views (Standard), see page 226. | DB | 13W3 | DBMMV13H3SN | DBMMZ13H3SN | DBMMN13H3SN |
|  | DB | 17W2 | DBMMV17H2SN | DBMMZ17H2SN | DBMMN17H2SN |
|  | DB | 21W1 | DBMMV21H1SN | DBMMZ21H1SN | DBMMN21H1SN |
|  | DC | 8W8 | DCMM V8H8SN | DCMMZ8H8SN | DCMMN8H8SN |
|  | DC | 13W6 | DCMMV13H6SN | DCMMZ13H6SN | DCMMN13H6SN |
|  | DC | 17W5 | DCMMV17H5SN | DCMMZ17H5SN | DCMMN17H5SN |
|  | DC | 21WA4 | DCMMV21HA4SN | DCMMZ21HA4SN | DCMMN21HA4SN |
|  | DC | 25W3 | DCMMV25H3SN | DCMMZ25H3SN | DCMMN25H3SN |
|  | DC | 27W2 | DCMMV27H2SN | DCMMZ27H2SN | DCMMN27H2SN |

Notes: For DD shell sizes, see page 161.
of Keyed.

Engaging Face



Screw lock, boardlock and high power contact removed for clarity

Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

## 40 A High Power Straight PCB (Size DD)

Plug


## Reader's Resource

For contact cavity arrangements, see page 222.
For P.C. hole patterns, see page 256. For panel cutouts, see page 221.
For hardware views (Standard), see page 226.

Part Numbers with Standoff \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: |
| DD | 24W7 | DDMMV24H7PN | DDMMZ24H7PN | DDMMN24H7PN |
| DD | 36W4 | DDMMV36H4PN | DDMMZ36H4PN | DDMMN36H4PN |
| DD | 43W2 | DDMMV43H2PN | DDMMZ43H2PN | DDMMN43H2PN |
| DD | 47W1 | DDMMV47H1PN | DDMMZ4TH1PN | DDMMN47H1PN |

Engaging Face



Screw lock, boardlock, and high power contact removed for clarity

## Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \text { L } \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | 6,84 (.269) | 0,99 (.039) |

## 40 A High Power Straight PCB (Size DD)

## Receptacle



## Reader's Resource

For contact cavity arrangements,
see page 223.
For P.C. hole patterns, see page 259.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.
Part Numbers with Standoff \# 4-40 UNC

| Shell Size | Layout | Part Number <br> Without Screw Locks <br> Without Boardlocks | Part Number <br> Without Screw Locks <br> With Boardlocks | Part Number <br> With Screw Locks <br> With Boardlocks |
| :---: | :---: | :--- | :--- | :--- |
| DD | $24 W 7$ | DDMMV24H7SN | DDMMZ24H7SN | DDMMN24H7SN |
| DD | 36 W4 | DDMMV36H4SN | DDMMZ36H4SN | DDMMN36H4SN |
| DD | $43 W 2$ | DDMMV43H2SN | DDMMZ43H2SN | DDMMN43H2SN |
| DD | $47 W 1$ | DDMMV47H1SN | DDMMZ47H1SN | DDMMN47H1SN |

Engaging Face



Screw lock, boardlock and high power contact removed for clarity

## Dimensions

|  | A | B | C | D | E | W | W | W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shell Size | $\pm 0,38(.015)$ | $\pm 0,13(.005)$ | $\pm 0,13(.005)$ | $\pm 0,13(.005)$ | $\pm 0,38(.015)$ | $\pm 0,25(.010)$ | $\pm 0,38(.015)$ | $\pm 0,25(.010)$ |
| $D D$ | $66,93(2.635)$ | $52,42(2.064)$ | $61,11(2.406)$ | $10,74(.423)$ | $15,37(.605)$ | $10,90(.429)$ | $6,94(.273)$ | $0,76(.030)$ |

## High Voltage Straight PCB (Sizes DE-DC)



## Reader's Resource

For contact cavity arrangements, see page 222.
For P.C. hole patterns, see pages 254-255.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.
Part Numbers with Standoff \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEMMV5V1PN | DEMMZ5V1PN | DEMMN5V1PN |
| DA | 7W2 | DAMMV7V2PN | DAMMZ7V2PN | DAMMNTV2PN |
| DA | 11W1 | DAMMV11V1PN | DAMMZ11V1PN | DAMMN11V1PN |
| DA | 3W3 | DAMMV3V3PN | DAMMZ3V3PN | DAMMN3V3PN |
| DA | 3WK3\% | DAMMV3VK3PNTM | DAMMZ3VK3PNTM | DAMMN3VK3PNTM |
| DB | 5W5 | DBMMV5V5PN | DBMMZ5V5PN | DBMMN5V5PN |
| DB | 9W4 | DBMMV9V4PN | DBMMZ9V4PN | DBMMN9V4PN |
| DB | 13W3 | DBMMV13V3PN | DBMMZ13V3PN | DBMMN13V3PN |
| DB | 17W2 | DBMMV17V2PN | DBMMZ17V2PN | DBMMN17V2PN |
| DB | 21W1 | DBMMV21V1PN | DBMMZ21V1PN | DBMMN21V1PN |
| DC | 8W8 | DCMMV8V8PN | DCMMZ8V8PN | DCMMN8V8PN |
| DC | 13W6 | DCMMV13V6PN | DCMMZ13V6PN | DCMMN13V6PN |
| DC | 17W5 | DCMMV17V5PN | DCMMZ17V5PN | DCMMN17V5PN |
| DC | 21WA4 | DCMMV21VA4PN | DCMMZ21va4PN | DCMMN21VA4PN |
| DC | 25W3 | DCMMV25V3PN | DCMMZ25V3PN | DCMMN25V3PN |
| DC | 27W2 | DCMMV27V2PN | DCMMZ27V2PN | DCMMN27V2PN |

Notes: For DD shell size, see page 164.
\& Keyed.

Engaging Face


Hardware and high voltage contact removed for clarity

## Dimensions

| $\begin{gathered} \text { Plug } \\ \text { Shell Size } \end{gathered}$ | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,37(.015) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,69 (.264) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,69 (.264) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) |

High Voltage Straight PCB (Sizes DE-DC)

## Receptacle



Reader's Resource
For contact cavity arrangements, see page 223.
For P.C. hole patterns, see pages 257-258.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.

## Part Numbers with Standoff \# 4-40 UNC

| Shell Size | Layout | Part Number Without Screw Locks Without Boardlocks | Part Number Without Screw Locks With Boardlocks | Part Number With Screw Locks With Boardlocks |
| :---: | :---: | :---: | :---: | :---: |
| DE | 5W1 | DEMMV5V1SN | DEMMZ5V1SN | DEMMN5V1SN |
| DA | 7W2 | DAMMV7V2SN | DAMMZTV2SN | DAMMNTV2SN |
| DA | 11W1 | DAMMV11V1SN | DAMMZ11V1SN | DAMMN11V1SN |
| DA | 3W3 | DAMMV3V3SN | DAMMZ3V3SN | DAMMN3V3SN |
| DA | 3WK3¢ | DAMMV3VK3SNTM | DAMMZ3VK3SNTM | DAMMN3VK3SNTM |
| DB | 5W5 | DBMMV5V5SN | DBMMZ5V5SN | DBMMN5V5SN |
| DB | 9W4 | DBMMV9V4SN | DBMMZ2V4SN | DBMMN9V4SN |
| DB | 13W3 | DBMMV13V3SN | DBMMZ13V35N | DBMMN13V3SN |
| DB | 17W2 | DBMMV17V2SN | DBMMZ17V2SN | DBMMN17V2SN |
| DB | 21W1 | DBMMV21V1SN | DBMMZ21V1SN | DBMMN21V1SN |
| DC | 8W8 | DCMMV8V8SN | DCMMZ8V8SN | DCMMN8V8SN |
| DC | 13W6 | DCMMV13V6SN | DCMMZ13V6SN | DCMMN13V6SN |
| DC | 17W5 | DCMMV17V5SN | DCMMZ17V5SN | DCMMN17V5SN |
| DC | 21WA4 | DCMMV21VA4SN | DCMMZ21VA4SN | DCMMN21VA4SN |
| DC | 25W3 | DCMMV25V3SN | DCMMZ25V3SN | DCMMN25V3SN |
| DC | 27W2 | DCMMV27V2SN | DCMMZ27V2SN | DCMMN27V2SN |

Notes: For DD shell size, see page 165.
\&o Keyed.

Engaging Face


Dimensions

| Receptacle Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} { }^{C} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} F \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { L } \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

## High Voltage Straight PCB (Size DD)

| Plug |  | Part Numbers with Standoff \# 4-40 UNC |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Reader's Resource

For contact cavity arrangements,
see page 222.
For P.C. hole patterns, see page 256.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.


Dimensions

| $\begin{gathered} \hline \text { Plug } \\ \text { Shell Size } \end{gathered}$ | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | 6,84 (.269) | 0,99 (.039) |

High Voltage Straight PCB (Size DD)

| Receptacle |  | Part Numbers with Standoff \# 4-40 UNC |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Reader's Resource

For contact cavity arrangements,
see page 223.
For P.C. hole patterns, see page 259.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.

Engaging Face


Hardware and high voltage contacts
removed for clarity

Dimensions

| Receptacle Shell Size | $\begin{gathered} A \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} { }^{C} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathbf{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { L } \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DD | 66,93 (2,635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) |

## Cable Solder Cup

Plug


## Reader's Resource

For contact cavity arrangements, see page 222.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.

| Part Numbers |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Shell Size | Layout | Through Hole | Dual Float Mount | Clinch Nut \# 4-40 UNC |
| DE | 5W1 | DEMM5W1P | DEMMY5W1P | DEMME5W1P |
| DA | 7W2 | DAMM7W2P | DAMMY7W2P | DAMME7W2P |
| DA | 11W1 | DAMM11W1P | DAMMY11W1P | DAMME11W1P |
| DA | 3W3 | DAMM3W3P | DAMMY3W3P | DAMME3W3P |
| DA | 3WK3\% | DAMM3WK3P | DAMMY3WK3P | DAMME3WK3P |
| DB | 5W5 | DBMMP5W5P | DBMMY5W5P | DBMME5W5P |
| DB | 9W4 | DBMM9W4P | DBMMY9W4P | DBMME9W4P |
| DB | 13W3 | DBMM13W3P | DBMMY13W3P | DBMME13W3P |
| DB | 17W2 | DBMM17W2P | DBMMY17W2P | DBMME17W2P |
| DB | 21W1 | DBMM21W1P | DBMMY21W1P | DBMME21W1P |
| DC | 8W8 | DCMM8W8P | DCMMY8W8P | DCMME8W8P |
| DC | 13W6 | DCMM13W6P | DCMMY13W6P | DCMME13W6P |
| DC | 17W5 | DCMM17W5P | DCMMY17W5P | DCMME17W5P |
| DC | 21WA4 | DCMM21WA4P | DCMMY21WA4P | DCMME21WA4P |
| DC | 25W3 | DCMM25W3P | DCMMY25W3P | DCMME25W3P |
| DC | 27W2 | DCMM27W2P | DCMMY27W2P | DCMME27W2P |
| DD | 24W7 | DDMM24W7P | DDMMY24W7P | DDMME24W7P |
| DD | 36W4 | DDMM36W4P | DDMMY36W4P | DDMME36W4P |
| DD | 43W2 | DDMM43W2P | DDMMY43W2P | DDMME43W2P |
| DD | 47W1 | DDMM47W1P | DDMMY47W1P | DDMME47W1P |

## Note: ©f Keyed.



## Dimensions

|  | A |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shell Size | $\pm 0,38(.015)$ | $\pm 0,13(.005)$ | $\pm 0,13(.005)$ | $\pm 0,13(1.005)$ | $\pm 0,38(.015)$ | $\pm 0,25(.010)$ | $\pm 0,368(1.0145)$ | $\pm 0,41(.016)$ | $\pm 0,317(.0125)$ | $\pm 0,25(.010)$ | $\pm 0,25(.010)$ |
| DE | $30,81(1.213)$ | $16,92(.666)$ | $24,99(.084)$ | $8,36(.329)$ | $12,55(.494)$ | $10,72(.422)$ | $6,693(.2635)$ | - | $1,206(.0475)$ | - | $0,76(.030)$ |
| DA | $39,14(1.541)$ | $25,25(.994)$ | $33,32(1.312)$ | $8,36(.329)$ | $12,55(.494)$ | $10,72(.422)$ | $6,693(.2635)$ | - | $1,206(.0475)$ | - | $0,76(.030)$ |
| DB | $53,04(2.088)$ | $38,96(1.534)$ | $47,04(1.852)$ | $8,36(.329)$ | $12,55(.494)$ | $10,82(.426)$ | - | $6,84(.269)$ | - | $1,52(.060)$ | $0,99(.039)$ |
| DC | $69,32(2.729)$ | $55,42(2.182)$ | $63,50(2.500)$ | $8,36(.329)$ | $12,55(.494)$ | $10,82(.426)$ | - | $6,84(.269)$ | - | $1,52(.060)$ | $0,99(.039)$ |
| DD | $66,93(2.635)$ | $52,81(2.079)$ | $61,11(2.406)$ | $11,07(.436)$ | $15,37(.605)$ | $10,82(.426)$ | - | $6,84(.269)$ | - | $1,52(.060)$ | $0,99(.039)$ |

## Cable Solder Cup

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |



Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { K } \\ \pm 0,318(, 0125) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.123) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |

Selection Index ..... Page
Space/H igh Reliability
An Introduction ..... 169
Standard Layout Connectors
Straight PC Tail ..... 172
$90^{\circ}$ PC Tail with Plastic Bracket ..... 174
Solder Cup ..... 180
D* MA Crimp Contact Cable Connectors
Standard Density ..... 182
High Density, ..... 184
Contact Cavity Arrangements - High Density ..... 186
Crimp Contacts and Tooling ..... 187
Combo D® Layout Solder Cup Connector ..... 188
Cable (Size 8) Loose Contacts
Coaxial 50 Ohm - Straight Crimp or Solder Braid ..... 190
High Power - Solder or Crimp and Tooling ..... 191
Accessories
Metal Backshells ..... 192
Screw Lock Assemblies ..... 194
NASA/GSFC Cross Reference ..... 195
ESA-SCC Cross Reference ..... 196

## D Subminiature

I
TT Cannon has a long history of providing high performance $D$ Subminiature connectors for space applications (qualified by NASA/ GFSC and the European Space Agency). Space/ High Reliabilty $D * M$ and $D * M A$ connectors meet stringent tests for outgassing and residual magnetism and are suitable for use in space, medical, and high performance military/aerospace applications. D*M and D*MA connectors are designed to be comparable to MIL-C-24308. The newest product group is High Density D*MA crimp connectors.

## Applications

Space - Low/High Orbit Satellites
Medical


Product Features
Non-Magnetic No Outgassing

## Specifications

| Temperature Rating | $-65^{\circ}$ at $125^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Signal Contact Current Rating | 5 A (20 AWG) |
| Signal Contact Resistance | 55 millivolt max. at 7.5 A test current |
| Wire Accommodation (Solder) | 20 AWG max. |
| Wire Accommodation (Crimp) | 18/30 AWG |
| Coaxial Impedance | 50 Ohm |
| Loss VSWR | Less than 1,3-1,0 up to 500 Mhz |
| Coaxial Insertion Loss | 1db loss at 500 Mhz |

Dielectric Withstanding Voltage

|  |  | Altitude (meter/feet) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Sea Level | Sea Level | 6096/20 000 | 6096/20 000 | 15240/50 000 | 15240/50 000 | 21 336/70 000 | $21336 / 70000$ |
| Average Flashover |  | 1500/1700 | 1500/1700 | 1000/1000 | 1000/1000 | 500/650 | 500/650 | 500/500 | 500/500 |
| Test |  | 1000/1250 | 1000/1250 | 650/750 | 650/750 | 325/475 | 325/475 | 325/375 | 325/375 |
| Type of Contact |  | $90^{\circ}$ | Straight | $90^{\circ}$ | Straight | $90^{\circ}$ | Straight | $90^{\circ}$ | Straight |
| Center Conductor to Coaxial Shell | Average Flashover Test | $\begin{array}{r} 1200 \\ 800 \end{array}$ | $\begin{aligned} & 1500 \\ & 1000 \end{aligned}$ | $\begin{aligned} & 900 \\ & 600 \end{aligned}$ | $\begin{array}{r} 1000 \\ 550 \end{array}$ | $\begin{aligned} & 600 \\ & 400 \end{aligned}$ | $\begin{aligned} & 700 \\ & 475 \end{aligned}$ | $\begin{aligned} & 400 \\ & 275 \end{aligned}$ | $\begin{aligned} & 500 \\ & 325 \end{aligned}$ |
| Coaxial Shell to Nearest Solder Cup Contact | Average Flashover Test | - | $\begin{aligned} & 1500 \\ & 1000 \end{aligned}$ | - | $\begin{aligned} & 1500 \\ & 1000 \end{aligned}$ | - | $\begin{aligned} & 900 \\ & 800 \end{aligned}$ | - | $\begin{aligned} & 650 \\ & 425 \end{aligned}$ |
| High Power Contact and/or Coaxial Shell to Plug Shell | Average Flashover Test | $\begin{aligned} & 1500 \\ & 1000 \end{aligned}$ | $\begin{aligned} & 1500 \\ & 1000 \end{aligned}$ | $\begin{array}{r} 1000 \\ 650 \end{array}$ | $\begin{array}{r} 1000 \\ 650 \end{array}$ | $\begin{aligned} & 500 \\ & 325 \end{aligned}$ | $\begin{aligned} & 500 \\ & 325 \end{aligned}$ | $\begin{aligned} & 500 \\ & 325 \end{aligned}$ | $\begin{aligned} & 500 \\ & 325 \end{aligned}$ |
| Size 20 Signal Contact | Average Flashover Test | $\begin{aligned} & 1200 \\ & 1250 \end{aligned}$ | $\begin{aligned} & 1200 \\ & 1250 \end{aligned}$ | $\begin{array}{r} 1000 \\ 750 \end{array}$ | 1000 750 | 650 475 | 650 475 | 500 375 | $\begin{aligned} & 500 \\ & 375 \end{aligned}$ |

All voltage figures are rms AC 60 rms cps . Measured at approximately $+25^{\circ} \mathrm{C}, 50 \%$ rh. For additional performance specifications refer to 24308 -Style.

Residual Magnetism Level

| Residual Magnetism | Suffix Code |
| :--- | :---: |
| 20000 Gamma | NM |
| 200 Gamma | NMB |
| Note: NMC is available by special request. Consult factory for details. |  |


| M aterials and Finishes |  |  |
| :--- | :--- | :--- |
| Connector Assembly (Shells - Yellow Chromate over Cadmium) |  |  |
| Description | Material | Finish |
| Shell | Brass per QQ-B-613 | Yellow chromate over cadmium |
| QQ-P-416, Type II, Class 2 |  |  |

[^17]
## Straight PC Tail

## Plug

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 275.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.

| PC Tail <br> Modifiers | X | $\boldsymbol{\varnothing Y}$ |
| :---: | :---: | :---: |
| M | $4,01 \pm 0,69$ | $0,76 \pm 0,08$ |
|  | $(.158 \pm .027)$ | $(.030 \pm .003)$ |
| Z | $4,65 \pm 0,69$ | $0,76 \pm 0,08$ |
|  | $(.183 \pm .027)$ | $(.030 \pm .003)$ |
| OL3 | $4,20 \pm 1,10$ | $0,60 \pm 0,08$ |
|  | $(.185 \pm .043)$ | $(.023 \pm .003)$ |

## Part Numbers

| Shell Size | Layout | Through Hole | Dual <br> Float |
| :---: | :---: | :--- | :--- |
| $D E$ | 9 | DEM9POL3NM* | DEMYOPOL3NM* |
| $D A$ | 15 | DAM15POL3NM* | DAMYY5POL3NM* |
| $D B$ | 25 | DBM25POL3NM* | DBMY25POLSNM* |
| $D C$ | 37 | DCM37POL3NM* | DCMY37POL3NM* |
| $D D$ | 50 | DDM50POL3NM* | DDMY5OPOL3NM* |

Notes: * For Residual Magnetism Level of 200 gamma, add B. Example: DEM9POL3NMB
For shells with 50 microinches gold, add K52. Example: DEM9POL3NMK52
For alternate PC tail modifiers (see tabulation), replace OL3 with M or Z. Example: DEM9PZNM


DD Configuration



## Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(, 016) \end{gathered}$ | $\begin{gathered} \text { K } \\ \pm 0,317(.0125) \end{gathered}$ | $\begin{gathered} \text { K } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (0.39) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |

## Straight PC Tail

## Receptacle

## Reader's Resource

For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 275.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.

| PC Tail <br> Modifiers | $\mathbf{X}$ | $\boldsymbol{\varnothing Y}$ |
| :---: | :---: | :---: |
| M | $4,01 \pm 0,69$ | $0,76 \pm 0,08$ |
|  | $(.158 \pm .027)$ | $(.030 \pm .003)$ |
| Z | $4,65 \pm 0,69$ | $0,76 \pm 0,08$ |
|  | $(.183 \pm .027)$ | $(.030 \pm .003)$ |
| OL3 | $4,20 \pm 1,10$ | $0,60 \pm 0,00$ |
|  | $(.185 \pm .043)$ | $(.023 \pm .003)$ |

Part Numbers

| Shell Size | Layout | Through Hole | Dual <br> Float |
| :---: | :---: | :--- | :--- |
| $D E$ | 9 | DEM9SOL3NM* | DEMYSOL3NM* |
| $D A$ | 15 | DAM15SOL3NM* | DAMYY5SOL3NM* |
| $D B$ | 25 | DBM25SOL3NM* | DBMY25SOL3NM* |
| $D C$ | 37 | DCM37SOL3NM* | DCMY37SOL3NM* |
| $D D$ | 50 | DDM50SOL3NM* | DDMY50SOL3NM* |

Notes: * For Residual Magnetism Level of 200 gamma, add B. Example: DEM9SOL3NMB
For shells with 50 microinches gold, add K52. Example: DEM9SOL3NMK52
For alternate PC tail modifiers (see tabulation), replace OL3 with M or Z. Example: DEM9SZNM

DD Configuration

## Engaging Face




Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} K \\ \pm 0,318(.0125) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |

## $90^{\circ}$ PC Tail with Plastic Bracket

## Plug

## Reader's Resource

For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 272.
For panel cutouts, see page 221.

Part Numbers

| Shell Size | Layout | Part Number |
| :---: | :---: | :---: |
| $D E$ | 9 | DEM9PLNM* |
| $D A$ | 15 | DAM15PLNM* |
| $D B$ | 25 | DBM25PLNM* |
| $D C$ | 37 | DCM37PLNM* |
| $D D$ | 50 | DDM50PLNM* |

Notes: * For Residual Magnetism Level of 200 gamma, add B. Example: DEM9PLNMB For shells with 50 microinches gold, add K52. Example: DEM9PLNMK52

DD Configuration

## Engaging Face



Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} E \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} F \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(, 010) \end{gathered}$ | $\begin{gathered} M \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{N} \\ \pm 0,13(.005) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) | 12,30 (.484) | 8,64 (.340) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) | 12,30 (.484) | 8,64 (.340) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) | 12,30 (.484) | 8,64 (.340) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) | 12,30 (.484) | 8,64 (.340) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) | 15,09 (.594) | 10,04 (.395) |

$90^{\circ}$ PC Tail with Plastic Bracket

## Receptacle

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 272.
For panel cutouts, see page 221.

Part Numbers

| Shell Size | Layout | Part Number |
| :---: | :---: | :---: |
| DE | 9 | DEM9SLNM |
| DA | 15 | DAM15SLNM |
| DB | 25 | DBM25SLNM |
| DC | 37 | DCM37SLNM* |
| DD | 50 | DDM50SLNM* |

Notes: * For Residual Magnetism Levels of 200 gamma, add B. Example: DEM9SLNMB For shells with 50 microinches gold, add K52. Example: DEM9SLNMK52


## Dimensions

|  | A | B | C |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shell Size | $\pm 0,38(.015)$ | $\pm 0,13(.005)$ | $\pm 0,13(.005)$ | $\pm 0,13(.005)$ | $\pm 0,38(.015)$ | $\pm 0,25(.010)$ | $\pm 0,38(.015)$ | $\pm 0,25(.010)$ | $\pm 0,25(.010)$ | $\pm 0,13((.005)$ |
| DE | $30,81(1.213)$ | $16,33(.643)$ | $24,99(.984)$ | $7,90(.311)$ | $12,55(.494)$ | $10,90(.429)$ | $6,94(.273)$ | $0,76(.030)$ | $12,30(.484)$ | $8,64(.340)$ |
| DA | $39,14(1.541)$ | $24,66(.971)$ | $33,32(1.312)$ | $7,90(.311)$ | $12,55(.494)$ | $10,90(.429)$ | $6,94(.273)$ | $0,76(.030)$ | $12,30(.484)$ | $8,64(.340)$ |
| DB | $53,04(2.088)$ | $38,38(1.511)$ | $47,04(1.852)$ | $7,90(.311)$ | $12,55(.494)$ | $10,90(.429)$ | $6,94(.273)$ | $0,76(.030)$ | $12,30(.484)$ | $8,64(.340)$ |
| DC | $69,32(2.729)$ | $54,84(2.159)$ | $63,50(2.500)$ | $7,90(.311)$ | $12,55(.494)$ | $10,90(.429)$ | $6,94(.273)$ | $0,76(.030)$ | $12,30(.484)$ | $8,64(.340)$ |
| DD | $66,93(2.635)$ | $52,42(2.064)$ | $61,11(2.406)$ | $10,74(.423)$ | $15,37(.605)$ | $10,90(.429)$ | $6,94(.273)$ | $0,76(.030)$ | $15,09(.594)$ | $10,04(.395)$ |

## D Subminiature

## $90^{\circ}$ Solder Contact PCB Connector - European Footprint

## Plug

## Reader's Resource

For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.

Part Numbers

| Shell Size | Layout | Through Hole | Dual FloatMount |
| :---: | :---: | :--- | :---: |
| $D E$ | 9 | DEM9PNM*1AON | DEMYPPNM*1AON |
| $D A$ | 15 | DAM15PNM*AON | DAMY15PNM*1AON |
| $D B$ | 25 | DBM25PNM*1AON | DBMY25PNM*1AON |
| $D C$ | 37 | DCM37PNM*1AON | DCMY37PNM*1AON |
| $D D$ | 50 | DDM5OPNM*1AON | DDMY50PNM*1AON |

Notes: * For Residual Magnetism Level of 200 gamma, add B. Example: DEM9PNMB1AON For shells with 50 microinches gold, add K52. DEM9PNM1AONK52


Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathbf{E} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,41(, 016) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,317(.0125) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |

## $90^{\circ}$ Solder Contact PCB Connector - European Footprint

## Receptacle

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.

## Part Numbers

| Shell Size | Layout | Through Hole | Dual FloatMount |
| :---: | :---: | :---: | :---: |
| $D E$ | 9 | DEM9SNM*1AON | DEMY9SNM*1AON |
| $D A$ | 15 | DAM15SNM*1AON | DAMY15SNM*1AON |
| $D B$ | 25 | DBM25SNM*1AON | DBMY25SNM*1AON |
| $D C$ | 37 | DCM37SNM*1AON | DCMY37SNM*1AON |
| $D D$ | 50 | DDM50SNM*1AON | DDMY50SNM*1AON |

Notes: * For Residual Magnetism Level of 200 gamma, add B. Example: DEM9SNMB1AON
For shells with 50 microinches gold, add K52. Example: DEM9SNM1AONK52


Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(, 005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(, 015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { K } \\ \pm 0,318(.0125) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |

## $90^{\circ}$ Solder Termination (Machined) with Metal Bracket - European Footprint 10,2 * or 9,4 * * mm

## Plug

Reader's Resource
For contact cavity arrangements, see page 224.
For P.C. hole patterns, see page 273. For panel cutouts, see page 221. For hardware views (European), see page 227.

Part Numbers

| Shell Size | Layout | Metal Bracket <br> Threaded Insert \# 4-40 | Metal Bracket <br> Threaded InsertM3 |
| :---: | :---: | :---: | :--- |
| $D E$ | 9 | DEM9PNM*1A7N | DEM9PNM*1A9N |
| $D A$ | 15 | DAM15PNM*1A7N | DAM15PNM*1A9N |
| $D B$ | 25 | DBM25NN*1A7N | DBM25PNM*1A9N |
| $D C$ | 37 | DCM37PNM*1A7N | DCM37PNM*1A9N |
| $D D$ | 50 | DDM50PNM*1A7N | DDM50PNM*1A9N |

Notes: * For Residual Magnetism Level of 200 gamma, add B. Example: DEM9PNMB1A7N
For shells with 50 microinches gold, add K52. Example: DEM9PNM1A7NK52


Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{B} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathbf{E} \\ \pm 0.38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0.25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{N} \\ \pm 0,15(, 006) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) | 10,7 (.42) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 0,76 (.030) | 10,7 (.42) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) | 10,7 (.42) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) | 10,7 (.42) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | 0,99 (.039) | 12,1 (.48) |

- Connector footprint measured from the front shell.
- Connector footprint measured from the rear shell.


## D Subminiature

Space/H igh Reliability

## $90^{\circ}$ Solder Termination (Machined) with Metal Bracket - European Footprint 10,2 * or 9,4 * * mm

## Receptacle

## Reader's Resource

For contact cavity arrangements,
see page 224.
For P.C. hole patterns, see page 273.
For panel cutouts, see page 221.
For hardware views (European),
see page 227.

Part Numbers

| Shell Size | Layout | Metal Bracket <br> Threaded Insert \# 4-40 | Metal Bracket <br> Threaded InsertM3 |
| :---: | :---: | :---: | :--- |
| DE | 9 | DEM9SNM*A7N | DEM9SNM*1A9N |
| $D A$ | 15 | DAM15SNM*1A7N | DAM15SNM*A9N |
| $D B$ | 25 | DBM25SNM*1A7N | DBM25SNM*A9N |
| $D C$ | 37 | DCM37SNM*1A7N | DCM37SNM*1A9N |
| $D D$ | 50 | DDM50SNM*1A7N | DDM50SNM*1A9N |

Notes: * For Residual Magnetism Level of 200 gamma, add B. Example: DEM9SNMB1A7N
For shells with 50 microinches gold, add K52. Example: DEM9SNM1A7NK52


Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \text { L } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{N} \\ \pm 0,15(.006) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) | 10,7 (.42) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) | 10,7 (.42) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) | 10,7 (.42) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) | 10,7 (.42) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 0,76 (.030) | 12,1 (.48) |

[^18]- Connector footprint measured from the rear shell.


## Solder Cup

## Plug

## Reader's Resource

For contact cavity arrangements, see page 224.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.

## Part Numbers

| Shell Size | Layout | Through Hole | Dual <br> Floout Mount |
| :---: | :---: | :--- | :--- |
| DE | 9 | DEM9PNM* | DEMY9PNM |
| DA | 15 | DAM15PNM * | DAMYY5PNM * |
| $D B$ | 25 | DBM25PNM * | DBMY25PNM * |
| DC | 37 | DCM37PNM * | DCMY37PNM * |
| $D D$ | 50 | DDM50PNM * | DDMY50PNM * |

Notes: * For Residual Magnetism Level of 200 gamma, add B. Example: DEM9PNMB For shells with 50 microinches gold, add K52. Example: DEM9PNMK52


Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\underset{ \pm 0,13(.005)}{\text { C }}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{W} \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} \mathrm{W} \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,317(.0125) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0.76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37(.605) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |

## D Subminiature

Space/H igh Reliability

## Solder Cup

## Receptacle

## Reader's Resource

For contact cavity arrangements,
see page 224.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.

## Part Numbers

| Shell Size | Layout | Through Hole | Dual <br> FloatMount |
| :---: | :---: | :--- | :--- |
| $D E$ | 9 | DEM9SNM* | DEMY9SNM* |
| $D A$ | 15 | DAM15SNM* | DAMY15SNM* |
| $D B$ | 25 | DBM25SNM* | DBMY25SNM* |
| $D C$ | 37 | DCM37SNM* | DCMY77SNM |
| $D D$ | 50 | DDM50SNM* | DDMY50SNM* |

Notes: * For Residual Magnetism Level of 200 gamma, add B. Example: DEM9SNMB
For shells with 50 microinches gold, add K52. Example: DEM9SNMK52

## Engaging Face



DD Configuration



Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,38(, 015) \\ \hline \end{gathered}$ | $\begin{gathered} K \\ \pm 0,318(, 0125) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(, 010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |

## D*MA Standard Density Crimp Contact Cable Connector

## Plug

## Reader's Resource

For contact cavity arrangements, see page 224.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.
Part Numbers

| Shell Size | Layout | Through Hole | Dual <br> Floout Mount |
| :---: | :---: | :---: | :---: |
| DE | 9 | DEMA9PNM* | DEMAY9PNM* |
| DA | 15 | DAMA15PN* | DAMAY15PNM* |
| $D B$ | 25 | DBMA25PNM | DBMAY25PNM* |
| $D C$ | 37 | DCMA37PNM* | DCMAY37PNM* |
| $D D$ | 50 | DDMA50PNM* | DDMAY50PNM* |

Notes: *For Residual Magnetism Level of 200 gamma, add B. Example: DEMA9PNMB
For shells with 50 microinches gold, add K52. Example: DEMA9PNMK52
For connectors without contacts, add F0. Example: DEMA9PNMF0 (FO not marked on the connector) For crimp (Size 20) contacts and tooling, see pages $187 \& 275$

Engaging Face


Dimensions


## D*MA Standard Density Crimp Contact Cable Connector

## Receptacle

## Reader's Resource

For contact cavity arrangements, see page 224.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.
Part Numbers

| Shell Size | Layout | Through Hole | Dual <br> FloatMount |
| :---: | :---: | :--- | :--- |
| $D E$ | 9 | DEMA9SNM* | DEMAY9SNM* |
| $D A$ | 15 | DAMA15SNM* | DAMAY15SNM* |
| $D B$ | 25 | DBMA25SNM* | DBMAY25SNM* |
| $D C$ | 37 | DCMA37SNM | DCMAY37SNM* |
| $D D$ | 50 | DDMA50SNM* | DDMAY50SNM* |

Notes: * For Residual Magnetism Level of 200 gamma, add B. Example: DEMA9SNMB
For shells with 50 microinches gold, add K52. Example: DEMA9SNMK52
For connectors without contacts, add F0. Example: DEMA9SNMFO (F0 not marked on the connector) For crimp (Size 20) contacts and tooling, see pages 187 \& 275.


Dimensions

| Shell Size | $\begin{gathered} \hline \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\underset{\substack{\text { C } \\(00,05)}}{ }$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{array}{r} \hline \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{array}$ | $\begin{gathered} \mathrm{F} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{W} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,318(.0125) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |

## D*MA High Density Crimp Contact Cable Connector

## Plug

## Reader's Resource

For contact cavity arrangements, see page 186 .
For panel cutouts, see page 221. For hardware views (Standard) see page 226.

Part Numbers

| Shell Size | Layout | Through Hole | Dual <br> FloatMount |
| :---: | :---: | :---: | :---: |
| DE | 15 | DEMA15PNM* | DEMAY15PNM* |
| DA | 26 | DAMA26PNM* | DAMAY26PNM* |
| DB | 44 | DBMA44PNM* | DBMAY44PNM* |
| DC | 62 | DCMA62PNM* | DCMAY62PNM* |
| DD | 78 | DDMA78PNM* | DDMAY78PNM* |

Notes: * For Residual Magnetism Level of 200 gamma, add B. Example: DEMA15PNMB
For shells with 50 microinches gold, add K52. Example: DEMA15PNMK52
For connectors without contacts, add FO. Example: DEMA15PNMFO (FO not marked on connector)
For crimp (Size 22) contacts and tooling, see pages 187 \& 275


Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{array}{r} \mathrm{D} \\ \pm 0,13(.005) \end{array}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { K } \\ \pm 0,318(.0125) \end{gathered}$ | $\begin{gathered} \stackrel{\mathrm{L}}{ } \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66(.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |

## D*MA High Density Crimp Contact Cable Connector

## Receptacle

## Reader's Resource

For contact cavity arrangements,
see page 186.
For panel cutouts, see page 221.
For hardware views (Standard)
see page 226.

Part Numbers

| Shell Size | Layout | Through Hole | Dual <br> Float Tount |
| :---: | :---: | :---: | :---: |
| DE | 15 | DEMA15SNM* | DEMAY15SNM* |
| DA | 26 | DAMA26SNM* | DAMAY26SNM* |
| DB | 44 | DBMA44SNM* | DBMAY44SNM* |
| DC | 62 | DCMA62SNM* | DCMAY62SNM* |
| $D D$ | 78 | DDMA78SNM* | DDMAY78SNM* |

Notes: * For Residual Magnetism Level of 200 gamma, add B. Example: DEMA15SNMB
For shells with 50 microinches gold, add K52. Example: DEMA15SNMK52
For connectors without contacts, add FO. Example: DEMA15SNMFO (FO not marked on the connector)
For crimp (Size 22) contacts and tooling, see pages 187 \& 275


Dimensions

| Shell Size | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathbf{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} W \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} K \\ \pm 0,317(.0125) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DD | 66,93 (2.635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |

Plug Contact Cavity Arrangements - High Density

## Face View Pin Insert

|  | $\left(\begin{array}{cccccc}1 & \circ & 0 & 0 & \circ & 5 \\ 6 & 0 & 0 & 0 & 0 & \\ 0 & 0 & 0 & 0 & \\ 11\end{array}\right.$ |  | $\left(\begin{array}{lllllllllllll} 1 & \circ & \circ & \circ & \circ & \circ & \circ & \circ & \circ & \circ & \circ & \circ & \circ \\ 16 & \circ \\ \circ & \circ & \circ & \circ & \circ & \circ & \circ & \circ & \circ & \circ & \circ & \circ & \circ \\ \circ & \circ & \circ \\ \circ & \circ & \circ & \circ & \circ & \circ & \circ & \circ & \circ & \circ & \circ & \circ & \circ \\ 31 \end{array}\right.$ |
| :---: | :---: | :---: | :---: |
| Shell Size | E | A | B |
| Contact Arrangement | 15 | 26 | 44 |
| Contact Size | \# 22 | \# 22 | \# 22 |



Shell Size
Contact Arrangement
Contact Size
D
78
\#22

## Receptacle Contact Cavity Arrangements - High Density

Face View Socket Insert

Shell Size
Contact Arrangement
Contact Size

$\mathbf{E}$
15
$\# 22$


$B$
44
$\# 22$


Shell Size
Contact Arrangement
Contact Size

| D |
| :---: |
| 78 |

\# 22

## Crimp Contacts


Socket

## Insertion/Extraction Tools

| CIET-20HD | Contact | Wire Size | Plastic Insertion/Extraction |  | Plastic Extraction |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Size | AWG | Part Number | Description | Part Number | Description |
|  | 20 | 20, 22, 24 | 980-2000-426 | CIET-20HD | 323-7010-000 | CET-20-11 |
|  | 2026 | 26, 28, 30 | 980-2000-426 | CIET-20HD | 323-7010-000 | CET-20-11 |
| d |  | 1\#18 | - | - | 274-5016-002 | CET-20-15 |
|  | 2018 | 2\#22 | - | - | 274-5016-002 | CET-20-15 |
|  | 22 D | 22,24, 26, 28 | 274-7048-000 | CIET-22D | - | - |
|  | High Power | 12,16 | 274-7003-000 | CIET-12 | - | - |
| Hand Crimp Tools |  |  |  |  |  |  |
| M22520/2-01 |  | Wire Size |  |  |  |  |
|  | Size | AWG | Part Number | Description | Part Number | Description |
| 2 |  |  | 995-0001-584 | M22520/2-01 | 995-0001-604 | M22520/2-08 |
|  | 20 | 20,22, 24 | 995-0001-585 | M22520/1-01 | 995-0001-244 | TH25 |
| ) | 2026 | 26,28, 30 | 995-0001-584 | M22520/2-01 | 995-0001-325 | L3198-20HD |
|  | 2018 | $\begin{aligned} & 1 \# 18 \\ & 2 \# 22 \end{aligned}$ | 995-0001-584 | M22520/2-01 | 980-0005-722 | K250 |
|  | 22D | 22,24,26,28 | 995-0001-584 | M22520/2-01 | 995-0001-739 | M22520/2-06 |

CBT-646 Vibra-Bowl Crimper


The CBT-646, Vibra-Bowl Crimper is a pneumatically powered, electronically controlled machine. It is designed to semi-automatically crimp closed barrel, machined contacts, as used in the aerospace and commercial industries. The machine will accommodate wire sizes 30 thru 12 AWG. The CBT-646 is actuated automatically upon insertion of a pre-stripped stranded or single conductor wire.

Machine Crimp Rate: 1300+ per hour
Power Requirements: Electrical $=115 \mathrm{VAC}, 60 \mathrm{~Hz}, 5 \mathrm{~A}$
Pneumatic $=85 \mathrm{psi}, 2 \mathrm{cu}$. ft. per min.

Products: D*MA

## Crimp Contacts

| Pin |  |  |
| :--- | :--- | :--- | :--- | :--- |

## CBT-646 Vibra-Bowl Crimper



The CBT-646, Vibra-Bowl Crimper is a pneumatically powered, electronically controlled machine. It is designed to semi-automatically crimp closed barrel, machined contacts, as used in the aerospace and commercial industries. The machine will accommodate wire sizes 30 thru 12 AWG. The CBT-646 is actuated automatically upon insertion of a pre-stripped stranded or single conductor wire.

Machine Crimp Rate:1300+ per hour
Power Requirements£lectrical= $115 \mathrm{VAC}, 60 \mathrm{~Hz}, 5 \mathrm{~A}$
Pneumatic $=85$ psi, 2 cu. ft. per min.

[^19]
## Solder Cup

Plug

## Reader's Resource

For contact cavity arrangements, see page 222.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.

## Part Numbers

| Shell Size | Layout | Through Hole | $\begin{aligned} & \text { Dual } \\ & \text { Float Mount } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| DE | 5W1 | DEM5W1PNM* | DEMY5W1PNM* |
| DA | 7W2 | DAM7W2PNM* | DAMY7W2PNM* |
| DA | 11W1 | DAM11W1PNM* | DAMY11W1PNM* |
| DA | 3W3 | DAM3W3PNM* | DAMY3W3PNM* |
| DA | 3WK3¢ | DAM3WK3PNM* | DAMY3WK3PNM* |
| DB | 5W5 | DBMP5W5PNM* | DBMY5W5PNM* |
| DB | 9W4 | DBM9W4PNM* | DBMY9W4PNM* |
| DB | 13W3 | DBM13W3PNM* | DBMY13W3PNM* |
| DB | 17W2 | DBM17W2PNM* | DBMY17W2PNM* |
| DB | 21W1 | DBM21W1PNM* | DBMY21W1PNM* |
| DC | 8W8 | DCM8W8PNM* | DCMY8W8PNM* |
| DC | 13W6 | DCM13W6PNM* | DCMY13W6PNM* |
| DC | 17W5 | DCM17W5PNM* | DCMY17W5PNM* |
| DC | 21WA4 | DCM21WA4PNM* | DCMY21WA4PNM* |
| DC | 25W3 | DCM25W3PNM* | DCMY25W3PNM* |
| DC | 27W2 | DCM27W2PNM* | DCMY27W2PNM* |
| DD | 24W7 | DDM24W7PNM* | DDMY24W7PNM* |
| DD | 36W4 | DDM36W4PNM* | DDMY36W4PNM* |
| DD | 43W2 | DDM43W2PNM* | DDMY43W2PNM* |
| DD | 47W1 | DDM47W1PNM* | DDMY47W1PNM* |

Notes: * For Residual Magnetism Level of 200 gamma, add B. Example: DEM5W1PNMB
For shells with 50 microinches gold, add K52. Example: DEM5W1PNMK52
of Keyed

DD Configuration


## Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\stackrel{\text { C }}{ }$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{W} \\ \pm 0,368(.0145) \end{gathered}$ | $\begin{gathered} \text { W } \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,317(.0125) \\ \hline \end{gathered}$ | $\begin{gathered} \text { K } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.213) | 16,92 (.666) | 24,99 (.984) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DA | 39,14 (1.541) | 25,25 (.994) | 33,32 (1.312) | 8,36 (.329) | 12,55 (.494) | 10,72 (.422) | 6,693 (.2635) | - | 1,206 (.0475) | - | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,96 (1.534) | 47,04 (1.852) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DC | 69,32 (2.729) | 55,42 (2.182) | 63,50 (2.500) | 8,36 (.329) | 12,55 (.494) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |
| DD | 66,93 (2,635) | 52,81 (2.079) | 61,11 (2.406) | 11,07 (.436) | 15,37 (.605) | 10,82 (.426) | - | 6,84 (.269) | - | 1,52 (.060) | 0,99 (.039) |

## Solder Cup

Receptacle

## Reader's Resource

For contact cavity arrangements, see page 223.
For panel cutouts, see page 221.
For hardware views (Standard), see page 226.

Part Numbers

| Shell Size | Layout | Through Hole | Dual Float Mount |
| :---: | :---: | :---: | :---: |
| DE | 5W1 | DEM5W1SNM* | DEMY5W1SNM* |
| DA | 7W2 | DAM7W2SNM* | DAMY7W2SNM* |
| DA | 11W1 | DAM11W1SNM* | DAMY11W1SNM* |
| DA | 3W3 | DAM3W3SNM* | DAMY3W3SNM* |
| DA | 3WK3¢ | DAM3WK3SNM* | DAMY3WK3SNM* |
| DB | 5W5 | DBM5W5SNM* | DBMY5W5SNM* |
| DB | 9W4 | DBM9W4SNM* | DBMY9W4SNM* |
| DB | 13W3 | DBM13W3SNM* | DBMY13W3SNM* |
| DB | 17W2 | DBM17W2SNM* | DBMY17W2SNM* |
| DB | 21W1 | DBM21W1SNM* | DBMY21W1SNM* |
| DC | 8W8 | DCM8W8SNM* | DCMY8W8SNM* |
| DC | 13W6 | DCM13W6SNM* | DCMY13W6SNM* |
| DC | 17W5 | DCM17W5SNM* | DCMY17W5SNM* |
| DC | 21WA4 | DCM21WA4SNM* | DCMY21WA4SNM* |
| DC | 25W3 | DCM25W3SNM* | DCMY25W3SNM* |
| DC | 27W2 | DCM27W2SNM* | DCMY27W2SNM* |
| DD | 24W7 | DDM24W7SNM* | DDMY24W75NM* |
| DD | 36W4 | DDM36W4SNM* | DDMY36W4SNM* |
| DD | 43W2 | DDM43W2SNM* | DDMY43W2SNM* |
| DD | 47W1 | DDM47W1SNM* | DDMY47W1SNM* |

Notes: * For Residual Magnetism Level of 200 gamma, add B. Example: DEM5W1SNMB
For shells with 50 microinches gold, add K52. Example: DEM5W1SNMK52
\& Keyed


## Dimensions

| Shell Size | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathbf{F} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \hline \mathrm{W} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,318(.0125) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \pm 0,25(.010) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 30,81 (1.123) | 16,33 (.643) | 24,99 (.984) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DA | 39,14 (1.541) | 24,66 (.971) | 33,32 (1.312) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DB | 53,04 (2.088) | 38,38 (1.511) | 47,04 (1.852) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DC | 69,32 (2.729) | 54,84 (2.159) | 63,50 (2.500) | 7,90 (.311) | 12,55 (.494) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |
| DD | 66,93 (2.635) | 52,42 (2.064) | 61,11 (2.406) | 10,74 (.423) | 15,37 (.605) | 10,90 (.429) | 6,94 (.273) | 1,206 (.0475) | 0,76 (.030) |

Cable (Size 8) Loose Contacts - Coaxial 50 Ohm - Straight

## Straight Crimp Braid



Plug


Receptacle

Note: Dimensions include outer sleeve

| Description | $\begin{aligned} & \text { Part Number } \\ & 50 \mu \text { in. } \\ & \text { Gold Over Copper } \end{aligned}$ | A max. | $\underset{\max }{\mathrm{B}}$ | $\underset{\min }{\text { D }}$ | Old | RG Cable Number New |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plug | DM53740-36 | 18,80 (.739) | 24,00 (.945) | 1,70 (.067) | $\begin{aligned} & \text { 187/U } \\ & \text { 188/U } \end{aligned}$ | $\begin{aligned} & 179 \mathrm{~B} / \mathrm{U} \\ & 316 \mathrm{~B} / \mathrm{U} \end{aligned}$ |
| Receptacle | DM53742-37 | 18,80 (.739) | 24,00 (.945) | 1,70 (.067) | $\begin{aligned} & \text { 187/U } \\ & \text { 188/U } \end{aligned}$ | $\begin{aligned} & \hline 179 \mathrm{~B} / \mathrm{U} \\ & 316 \mathrm{~B} / \mathrm{U} \end{aligned}$ |

## Staight Solder Braid



Receptacle

| Description | $\begin{aligned} & \text { Part Number } \\ & 50 \mu \text { in. } \\ & \text { Gold Over Copper } \end{aligned}$ | A max. | $\underset{\text { max. }}{\mathrm{B}}$ | $\underset{\min }{\mathrm{D}}$ | Old | RG Cable Number | New |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plug | DM53740-5147 | 18,80 (.739) | 24,00 (.945) | 1,70 (.067) | $\begin{aligned} & \hline \text { 187/U } \\ & 188 / U \end{aligned}$ |  | $\begin{aligned} & 179 \mathrm{~B} / \mathrm{U} \\ & 316 \mathrm{~B} / \mathrm{U} \end{aligned}$ |
| Receptacle | DM53742-5127 | 18,80 (.739) | 24,00 (.945) | 1,70 (.067) | $\begin{aligned} & \hline \text { 187/U } \\ & \text { 188/U } \end{aligned}$ |  | $\begin{aligned} & \hline 179 B / U \\ & 316 B / U \end{aligned}$ |


| Cable (Size 8) Loose Contacts - High Power - Solder |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plug |  |  |  |  |  |  |
|  |  | Part Number <br> $50 \mu$ in. Gold Over Copper Non-Magnetic | Part Number $50 \mu \mathrm{in}$. Gold Over Copper Non-Magnetic (European) | Part Number $50 \mu$ in. Gold | Current Rating | Wire Size |
|  |  | DM53745-72 | DM115224-1040A | DM53745-28 | 40 A | 8 AWG |
|  |  | DM53745-71 | DM115224-1020A | DM53745-27 | 20 A | 12 AWG |
|  |  | DM53745-70 | DM115224-1010A | DM53745-25 | 10 A | 16 AWG |

Receptacle


| Part Number <br> $50 \mu$ in. Gold Over Copper <br> Non-Magnetic | Part Number <br> $50 \mu$ in. Gold Over Copper <br> Non-Magnetic (European) | Part Number <br> $50 \mu$ in. Gold | Current Rating | Wire Size |
| :---: | :---: | :---: | :---: | :---: |
| DM53744-62 | DM115224-2040A | DM53744-21 | 40 A | 8 AWG |
| DM53744-64 | DM115224-2020A | DM53744-25 | 20 A | 12 AWG |
| DM53744-63 | DM115224-2010A | DM53744-24 | 10 A | 16 AWG |

## Cable (Size 8) Loose Contacts — High Power - Crimp

Plug

$\left.\begin{array}{ccccccccc}\hline \begin{array}{c}\text { Part Number } \\ 50 \mu \text { in. Gold Over Copper } \\ \text { Non-Magnetic }\end{array} & \begin{array}{c}\text { Part Number } \\ 50 \mu \text { in. Gold }\end{array} & \text { XA } \\ \text { max. }\end{array} \quad \begin{array}{c}\text { XB } \\ \text { max. }\end{array} \quad \begin{array}{c}\text { Part Number } \\ \text { 50 in. Gold Over Copper } \\ \text { Non-Magnetic (European) }\end{array}\right)$
Receptacle

## Crimp High Power Tooling

| M300-BT |  | Crimp Tool/Locator |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wire Size | Crimp Tool | Tool Setting Number Standard Contacts | Tool Setting Number European Contacts | Locator |
|  | 8 AWG | M300-BT | 6 | 6 | TP968 |
|  | 10 AWG | M300-BT | 5 | 2 | TP968 |
|  | 12 AWG | M300-BT | 1 | 1 | TP968 |

## Metal Backshell

Metal Backshells provide strain relief.
Various profiles available for different cable routing requirements.

## Product Features

Qualified to MIL-Spec M85049

## Deep Straight Clamp



Kit consists of 1 shell, 2 cable clamps,
2 screws, 2 hex nuts

| Shell Size | Layout | Part Number Non-Magnetic | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,572(.0225) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\underset{\max }{\mathrm{D}}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \text { G } \\ \pm 0,38(.015) \end{gathered}$ | $\underset{\text { max. }}{\mathrm{H}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DE24657-16 | 30,56 (1.203) | 12,484 (.4915) | 24,99 (.984) | 14,68 (.578) | 9,53 (.375) | 9,53 (.375) | 19,05 (.750) | 31,75 (1.250) |
| DA | 15 | DA24658-15 | 38,89 (1.531) | 12,484 (.4915) | 33,32 (1.312) | 14,68 (.578) | 18,11 (.713) | 7,93 (.312) | 19,05 (.750) | 31,75 (1.250) |
| DB | 25 | DB24659-15 | 52,78 (2.078) | 12,484 (.4915) | 47,04 (1.852) | 14,68 (.578) | 25,40 (1.000) | 7,93 (.312) | 25,40 (1.000) | 39,70 (1.563) |
| DC | 37 | DC24660-16 | 69,04 (2.718) | 12,484 (.4915) | 63,50 (2.500) | 14,68 (.578) | 34,93 (1.375) | 7,93 (.312) | 25,40 (1.000) | 39,70 (1.563) |
| DD | 50 | DD24661-13 | 66,68 (2.625) | 15,253 (.6005) | 61,11 (2.406) | 17,45 (.687) | 35,71 (1.406) | 10,31 (.406) | 28,57 (1.125) | 42,88 (1.688) |

## Round Cable Clamp



Kit consists of 1 shell, 2 screws, 2 hex nuts

| Shell Size | Layout | Part Number Non-Magnetic | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{aligned} & \varnothing D \\ & \text { max. } \end{aligned}$ | $\begin{gathered} \mathbf{E} \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \text { G } \\ \pm 0,76(.030) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DE44994-2 | 30,68 (1.208) | 12,70 (.500) | 24,99 (.984) | 10,31 (.406) | 16,79 (.661) | 3,18 (.125) | 26,18 (1.031) |
| DA | 15 | DA20961-16 | 38,89 (1.531) | 12,70 (.500) | 33,33 (1.312 | 10,31 (.406) | 24,99 (.984) | 3,18 (.125) | 26,18 (1.031) |
| DB | 25 | DB20962-18 | 52,78 (2.078) | 12,70 (.500) | 47,04 (1.852) | 15,06 (.593) | 38,48 (1.515) | 4,75 (.187) | 26,98 (1.062) |
| DC | 37 | DC20963-17 | 69,04 (2.718) | 12,70 (.500) | 63,50 (2.500) | 18,23 (.718) | 55,14 (2.171) | 6,35 (.250) | 26,98 (1.062) |
| DD | 50 | DD20964-19 | 66,68 (2.625) | 15,47 (.609) | 61,11 (2.406) | 20,62 (.812) | 53,16 (2.093) | 7,92 (.312) | 26,98 (1.062) |

## Short Straight Clamp



Kit consists of 1 shell,
2 or 3 screws, 2 or 3 hex nuts


CABLE
ENTRY


| Shell Size | Layout | Part Number Non-Magnetic | No. of Cable Locking Screws Included | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B B } \\ \pm 0,38(.015) \end{gathered}$ | $\pm 0,13(.005)$ | $\begin{gathered} E(.015) \\ \pm 0,38(.0 \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,38(.015) \end{gathered}$ | $\pm 0,89(.035)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DA | 15 | DA19678-167 | 2 | 38,88 (1.531) | 12,70 (.500) | 33,33 (1.312) | 7,51 (.296) | 7,93 (.312) | 16,36 (.644) |
| DB | 25 | DB19678-168 | 2 | 52,78 (2.078) | 12,70 (.500) | 47,04 (1.852) | 7,51 (.296) | 20,22 (.796) | 16,36 (.644) |
| DC | 37 | DC19678-138 | 3 | 69,04 (2.718) | 12,70 (.500) | 63,50 (2.500) | 7,51 (.296) | 17,45 (.687) | 16,36 (.644) |
| DD | 50 | DD19678-161 | 3 | 66,68 (2.625) | 15,47 (.609) | 61,11 (2.406) | 9,91 (.390) | 17,45 (.687) | 17,63 (.694) |

## $90^{\circ}$ Entry



| Shell Size | Layout | Part Number Non-Magnetic | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,76(.030) \end{gathered}$ | $\underset{\sim}{\text { C }}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,76(.030) \\ \hline \end{gathered}$ | $\begin{gathered} \stackrel{\mathrm{F}}{2} \\ \pm 0,76(.030) \end{gathered}$ | $\begin{gathered} \mathrm{G} \\ \pm 0,76(.030) \end{gathered}$ | $\begin{gathered} \mathrm{H} \\ \pm 0,76(.030) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DE19977-47 | 30,56 (1.203) | 18,24 (.718) | 24,99 (.984) | 11,10 (.437) | 11,10 (.437) | 11,89 (.468) | 7,14 (.281) |
| DA | 15 | DA19977-40 | 38,89 (1.531) | 18,24 (.718) | 33,33 (1.312) | 11,10 (.437) | 11,10 (.437) | 11,89 (.468) | 7,14 (281) |
| DB | 25 | DB19977-43 | 52,78 (2.078) | 24,58 (.968) | 47,04 (1.852) | 11,10 (.437) | 15,88 (.625) | 11,89 (.468) | 7,14.281) |
| DC | 37 | DC19977-45 | 69,04 (2.718) | 30,15 (1.187) | 63,50 (2.500) | 11,10 (.437) | 20,63 (.812) | 11,89 (.468) | 7,14 (.281) |
| DD | 50 | DD19977-44 | 66,68 (2.625) | 31,75 (1.250) | 61,11 (2.406) | 14,28 (.562) | 23,01 (.906) | 13,49 (.531) | 8,71 (.343) |



 Order 2 per connector

NOTE:
(1) A 6 inch/pound (female) and 4 inch/pound (male) maximum torque during assembly is recommended on steel screw lock assemblies.
(2) A third flat washer is supplied for front panel mounting of tab shell connectors.

| Part Number <br> Non-Magnetic Brass <br> Gold Finish | A <br> $0,38(.015)$ |
| :---: | :---: |
| D20418-52 | $7,92(.312)$ |
| - | $12,70(.500)$ |
| D20418-70 | $14,50(.571)$ |
| D20418-101 | $15,88(.625)$ |

## Male Screw Lock

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kit consists of 1 screw and 1 clip Order 2 per connector |  | Shell Size | Part Number | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ |
| Material: | Copper Alloy | DE, DA, DB, DC | D20419-74 | 14,10 (.555) | 6,35 (.250) | 1,22 (.048) |
| Finish: | Gold over Copper | DE, DA, DB, DC | D20419-48 | 14,10 (.555) | 7,14 (.281) | 1,70 (.067) |
|  | Gold over Copper | $D E, D A, D B, D C$ | D20419-73 | 14,10 (.555) | 7,14 (.281) | 1,70 (.067) |
|  |  | $D E, D A, D B, D C$ | D20419-84 | 14,10 (.555) | 7,14 (.281) | 2,34 (.092) |
|  |  | DD | D20420-67 | 16,66 (.656) | 7,14 (.281) | 1,22 (.048) |
|  |  | DD | D20420-49 | 16,66 (.656) | 6,35 (.250) | 1,70 (.067) |
|  |  | DD | D20420-63 | 16,66 (.656) | 7,14 (.281) | 1,22 (.048) |
|  |  | DD | D20420-88 | 16,66 (.656) | 7,92 (.312) | 2,34 (.092) |

## NASA/GSFC Cross Reference

| NASA/GSFC Part Number | ITT Cannon Part Number | NASA/GSFC Part Number | ITT Cannon Part Number | NASA/GSFC Part Number | ITT Cannon Part Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| G08P1 | 030-2042-002 | 311-P-10-12S-B-15 | DBM13W3S-NMB-76 | 311-P-10-24P-B-12 | DDM43W2P-NMB-77 |
| G0851 | 031-1147-002 | $311-P-10-12 S-C-15$ | DBM-13W3S-NMC-76 | 311-P-10-24S-C-12 | DDM-43W2S-NMB-77 |
| S-311-P-4/6GCP1 | DM53740-17 | 311-P-10-13P-B-12 | DBM17W2PNMB77 | 311-P-10-24S-C-15 | DDM-43W2S-NMC-76 |
| S-311-P-4/6GCP2 | DM53740-15 | 311-P-10-13P-B-15 | DBM-17W2P-NMB-76 | 311-P-10-25P-C-15 | DDM47W1P-NMC-76 |
| S-311-P-4/6GCP3 | DM53740-16 | 311-P-10-13P-C-12 | DBM17W2P-NMC-77 | 311-P-10-25S-C-15 | DDM-47W1S-NMC-76 |
| S-311-P-4/6GCP4 | DM53740-18 | 311-P-10-13P-C-15 | DBM-17W2P-NMC-76 | 311-P-10-3S-B-12 | DBM25PNMB77 |
| S-311-P-4/6GCRP1 | DM53741-12 | 311-P-10-13S-B-12 | DBM17W2SNMB77 | 311-P-10-3P-B-15 | DBM25PNMB76 |
| S-311-P-4/6GCRP2 | DM53741-11 | 311-P-10-13S-C-12 | DBM-17W2S-NMC-77 | 311-P-10-3P-C-12 | DBM25PNMC77 |
| S-311-P-4/6GCRP3 | DM53741-10 | 311-P-10-13S-C-15 | DBM-17W2S-NMC-76 | 311-P-10-3P-C-15 | DBM25PNMC76 |
| S-311-P-4/6GCRP4 | DM53741-13 | 311-P-10-14P-B-12 | DBM-21W1P-NMB-77 | 311-P-10-3S-B-12 | DBM25PNMB77 |
| S-311-P-4/6GCRS1 | DM53743-18 | 311-P-10-14P-B-15 | DBM-21W1P-NMB-76 | 311-P-10-3S-B-15 | DBM-25S-NMB-76 |
| S-311-P-4/6GCRS2 | DM53743-16 | 311-P-10-14S-B-12 | DBM-21W1S-NMB-77 | 311-P-10-3S-C-12 | DBM-255-NMC-77 |
| S-311-P-4/6GCRS3 | DM53743-17 | 311-P-10-14S-B-15 | DBM-21W1S-NMB-76 | 311-P-10-3S-C-15 | DBM-25S-NMC-76 |
| S-311-P-4/6GCRS4 | DM53743-19 | 311-P-10-14S-C-15 | DBM-21W1S-NMC-76 | 311-P-10-4P-B-12 | DCM37PNMB77 |
| S-311-P-4/6GCS1 | DM53742-18 | 311-P-10-15P-B-12 | DCM-8W8P-NMB-77 | 311-P-10-4P-B-15 | DCM37PNMB76 |
| S-311-P-4/6GCS2 | DM53742-16 | 311-P-10-15P-B-15 | DCM8W8PNMB76 | 311-P-10-4P-C-12 | DCM-37P-NMC-77 |
| S-311-P-4/6GCS3 | DM53742-17 | 311-P-10-15P-C-12 | DCM-8W8P-NMC-77 | 311-P-10-4P-C-15 | DCM37PNMC76 |
| S-311-P-4/6GCS4 | DM53742-19 | 311-P-10-15P-C-15 | DCM8W8PNMC76 | 311-P-10-4S-B-12 | DCM37SNMB77 |
| S-311-P-4/6GHP6 | DM51157-8 | 311-P-10-15S-B-12 | DCM-8W8S-NMB-77 | 311-P-10-4S-B-15 | DCM-37S-NMB-76 |
| S-311-P-4/6GHRP6 | DM51157-5005 | 311-P-10-15S-B-15 | DCM8W8SNMB76 | 311-P-10-4S-C-12 | DCM-37S-NMC-77 |
| S-311-P-4/6GHRS6 | DM51155-5005 | 311-P-10-15S-C-12 | DCM-8W8S-NMC-77 | 311-P-10-4S-C-15 | DCM-37S-NMC-76 |
| S-311-P-4/6GHS6 | DM51155-7 | 311-P-10-15S-C-15 | DCM-8W8S-MNC-76 | 311-P-10-5P-B-12 | DDM50PNMB77 |
| 311P409-1P-B-12 | DEMA9PNMBK47FO | 311-P-10-16P-B-12 | DCM-13W6P-NMB-77 | 311-P-10-5P-B-15 | DDM50PNMB76 |
| 311P409-1P-B-15 | DEMAK9PNMBK47FO | 311-P-10-16P-B-15 | DCM-13W6P-NMB-76 | 311-P-10-5P-C-12 | DDM-50P-NMC-77 |
| 311P409-1S-B-12 | DEMAgSNM BK47FO | 311-P-10-16P-C-12 | DCM-13W6P-NMC-77 | 311-P-10-5P-C-15 | DDM50PNMC76 |
| 311P409-1S-B-15 | DEMAK9SNMBK47FO | 311-P-10-16P-C-15 | DCM-13W6P-NMC-76 | 311-P-10-5S-B-12 | DDM50SNMB77 |
| 311P409-2P-B-12 | DEMA15PNMBK47FO | 311-P-10-16S-B-12 | DCM-13W6S-NMB-77 | 311-P-10-5S-B-15 | DDM50SNMB76 |
| 311P409-2P-B-15 | DEMAK15PNMBK47FO | 311-P-10-16S-C-12 | DCM-13W6S-NMC-77 | 311-P-10-5S-C-12 | DDM-50S-NMC-77 |
| 311P409-2S-B-12 | DEMA15SNMBK47FO | 311-P-10-16S-C-15 | DCM13W6SNMC76 | 311-P-10-5S-C-15 | DDM-50S-NMC-76 |
| 311P409-2S-B-15 | DEMAK15SNMBK47FO | 311-P-10-17P-B-12 | DCM17W5PNMB77 | 311-P-10-6P-B-12 | DEM-5W1P-NMB-77 |
| 311P409-3P-B-12 | DEMA25PNMBK47FO | 311-P-10-17P-B-15 | DCM-17W5P-NMB-76 | 311-P-10-6P-B-15 | DEM-5W1P-NMB-76 |
| 311P409-3P-B-15 | DEMAK25PNMBK47FO | 311-P-10-17P-C-12 | DCM-17W5P-NMC-77 | 311-P-10-6P-C-15 | DEM-5W1P-NMC-76 |
| 311P409-3S-B-12 | DEMA25SNMBK47FO | 311-P-10-17P-C-15 | DCM-17W5P-NMC-76 | 311-P-10-6S-B-12 | DEM-5W1S-NMB-77 |
| 311P409-3S-B-15 | DEMAK25SNM ${ }^{\text {L }}$ 47FO | 311-P-10-17S-B-12 | DCM-17W5S-NMB-77 | 311-P-10-6P-C-15 | DEM-5W1S-NMC-76 |
| 311P409-4P-B-12 | DEMA37PNMBK47FO | 311-P-10-17S-B-15 | DCM17W5S-NMB-76 | 311-P-10-7P-B-12 | DAM3W3PNMC76 |
| 311P409-4P-B-15 | DEMAK37PNMBK47FO | 311-P-10-17S-C-12 | DCM-17W5S-NMC-77 | 311-P-10-7P-B-15 | DAM-3W3P-NMB-76 |
| 311P409-4S-B-12 | DEMA37SNMBK47FO | 311-P-10-17S-C-15 | DCM-17W5S-NMC-76 | 311-P-10-7P-C-12 | DAM3W3P-NMC-77 |
| 311P409-4S-B-15 | DEMAK37SNMBK47FO | 311-P-10-18P-B-12 | DCM-21WA4P-NMB-77 | 311-P-10-7P-C-15 | DAM-3W3P-NMC-76 |
| 311P409-5P-B-12 | DEMA50PNMBK47FO | 311-P-10-18P-B-12 | DCM21WA4P-NMB-76 | 311-P-10-7S-B-12 | DAM3W3SNMB77 |
| 311P409-5S-B-15 | DEMAK50PNMBK47FO | 311-P-10-18P-C-15 | DCM-21WA4P-NMC-76 | 311-P-10-7S-B-15 | DAM3W3SNMB76 |
| 311P409-5S-B-12 | DEMA50SNMBK47FO | 311-P-10-18S-B-12 | DCM-21WA4S-NMB-77 | 311-P-10-7S-C-12 | DAM3W3S-NMC-76 |
| 311P409-5S-B-15 | DEMAK50PNMBK47FO | 311-P-10-18S-B-15 | DCM21WA4S-NMB-76 | 311-P-10-7S-C-15 | DAM-3W3S-NMC-76 |
| S-311-P-4/10G10P1 | 330-5291-081-02 | 311-P-10-19P-B-12 | DCM-21W4P-NMB-77 | 311-P-10-8P-B-12 | DAM-7W2P-NMB-77 |
| S-311-P-4/10G10S1 | 031-1007-052-05 | 311-P-10-19S-B-12 | DCM-21W4S-NMB-77 | 311-P-10-8P-B-15 | DAM-7W2P-NMB-76 |
| 311-P-10-B-1S-B-15 | DEMB9S-NMB-76 | 311-P-10-19S-C-15 | DCM21W4S-NMC-76 | 311-P-10-8P-C-15 | DAM-7W2P-NMC-76 |
| 311-P-10-B-4S-B-15 | DCMB37S-NMB-76 | 311-P-10-2P-B-12 | DAM15PNMB77 | 311-P-10-8S-B-12 | DAM-7W2S-NMB-77 |
| 311-P-10-1P-B-12 | DEMPPNMB77 | 311-P-10-2P-B-15 | DAM15PNMB76 | 311-P-10-8P-C-12 | DAM7W2S-NMC-77 |
| 311-P-10-1P-B-15 | DEM-9P-NMB-76 | 311-P-10-2P-C-12 | DAM15PNMC77 | 311-P-10-8P-C-15 | DAM-7W2S-NMC-76 |
| $311-\mathrm{P}-10-1 \mathrm{P}-\mathrm{C}-12$ | DEM9PNMC77 | $311-\mathrm{P}-10-2 \mathrm{P}-\mathrm{C}-15$ | DAM15PNMC76 | 311-P-10-9P-B-12 | DAM-11W1P-NMB-77 |
| 311-P-10-1P-C-15 | DEM9PNMC76 | 311-P-10-2S-B-12 | DAM15SNMB77 | 311-P-10-9P-B-15 | DAM-11W1P-NMB-76 |
| 311-P-10-1S-B-12 |  | 311-P-10-2S-B-15 |  | 311-P-10-9P-C-12 | DAM-11W1P-NMC-77 |
| 311-P-10-1S-B-15 | DEM-9S-NMB-76 | 311-P-10-2S-C-15 | DAM-15S-NMC-76 | 311-P-10-9P-C-15 | DAM-11W1P-NMC-76 |
| 311-P-10-1S-C-12 | DEM-9S-NMC-77 | 311-P-10-2S-C-15 | DAM-15S-NMC-76 | 311-P-10-9S-B-12 | DAM-11W1S-NMB-77 |
| 311-P-10-1S-C-15 | DEM9SNMC76 | 311-P-10-20P-B-12 | DCM-25W3P-NMB-77 | 311-P-10-9S-B-15 | DAM-11W1S-NMB-76 |
| 311-P-10-10P-B-12 | DBM5W5PNMB77 | 311-P-10-20P-C-15 | DCM25W3P-NMB-76 | 311-P-10-9S-C-12 | DAM-11W1S-NMC-77 |
| 311-P-10-10P-B-15 | DBM-5W5P-NMB-76 | 311-P-10-20S-B-12 | DCM-25W36-NMB-77 | 311-P-10-9S-C-15 | DAM-11W1S-NMC-76 |
| 311-P-10-10P-C-12 | DBM-5W5P-NMC-77 | 311-P-10-20S-C-12 | DCM-25W3S-NMC-77 | 311-P-10B-1S-B-12 | DEMB9SNMB77 |
| 311-P-10-10P-C-15 | DBM-5W5P-NMC-76 | 311-P-10-20S-C-15 | DCM-25W3S-NMC-76 | 311-P-10B-1S-C-12 | DEMB-9S-NMC-77 |
| 311-P-10-10S-B-12 | DBM-5W5S-NMB-77 | 311-P-10-21P-C-15 | DCM27W2P-NMC-76 | 311-P-10B-1S-C-15 | DEMB9S-NMC-76 |
| 311-P-10-10S-B-15 | DBM-5W5S-NMB-76 | 311-P-10-21S-C-15 | DCM-27W2S-NMC-76 | 311-P-10B-13S-B-15 | DBMB-17W2S-NMB-76 |
| 311-P-10-10S-C-12 | DBM-5W5S-NMC-77 | 311-P-10-22P-B-12 | DDM-24W7P-NMB-77 | 311-P-10B-17S-B-15 | DCMB-17W5S-NMB-76 |
| 311-P-10-10S-C-15 | DBM-5W5S-NMC-76 | 311-P-10-22P-B-15 | DDM24W7PNMB76 | 311-P-10B-2S-B-12 | DAMB15SNMB77 |
| 311-P-10-11P-B-12 | DBM-9W4P-NMB-77 | 311-P-10-22P-C-15 | DDM-24W7P-NMC-76 | 311-P-10B-2S-C-12 | DAMB-15S-NMC-77 |
| 311-P-10-11P-C-15 | DBM-9W4P-NMC-76 | 311-P-10-22S-B-12 | DDM24W7SNMB77 | 311-P-10B-2S-C-15 | DAMB15SNMC76 |
| 311-P-10-11S-B-12 | DBM-9W4S-NMB-77 | 311-P-10-22S-B-15 | DDM-24W7S-NMB-76 | 311-P-10B-22S-B-15 | DDMB-247S-NMB-76 |
| 311-P-10-11S-C-15 | DBM-9W4S-NMC-76 | 311-P-10-22S-C-15 | DDM-24W7S-NMC-76 | 311-P-10B-3S-B-12 | DBMB-25S-NMB-77 |
| 311-P-10-12P-B-12 | DBM13W3P-NMB-77 | 311-P-10-23P-B-12 | DDM-36W4P-NMB-77 | 311-P-10B-3S-B-15 | DBMB-25S-NMB-76 |
| 311-P-10-12P-B-15 | DBM-13W3P-NMB-76 | 311-P-10-23S-B-12 | DDM-36W4S-NMB-77 | 311-P-10B-3S-C-12 | DBMB-25S-NMC-77 |
| 311-P-10-12P-C-15 | DBM-13W3P-NMC-76 | 311-P-10-23S-B-15 | DDM36W4SNMB76 | 311-P-10B-3S-C-15 | DBMB25SNMC76 |
| 311-P-10-12S-B-12 | DBM-13W3S-NMB-77 | 311-P-10-23S-C-15 | DDM-36W4S-NMC-76 | 311-P-10B-4S-B-12 | DCMB-37S-NMB-77 |

## NASA/GSFC Cross Reference

| NASA/GSFC <br> Part Number | ITT Cannon <br> Part Number | NASA/GSFC <br> Part Number | IT Cannon <br> Part Number | NASA/GSFC <br> Part Number |
| :---: | :---: | :---: | :---: | :---: |
| 311-P-10B-4S-C-12 Cannon |  |  |  |  |
| 311-P-10B-4S-C-15 | DCMB-37S-NMC-77 | $311-$ P-10B-5S-C-12 | DDMB-50S-NMC-77 | 311-P-10B-8S-B-15 |
| 311-P-10B-5S-B-12 | DCMB37S-NMC-76 | 311-P-10B-5S-C-15 | DDMB50S-NMC-76 | 311-P-10B-9S-B-12 |
| 311-P-10B-5S-B-15 | DDMB-50S-NMB-77 | $311-$ P-10B-6S-B-15 | DEMB-5W1S-NMB-76 |  |

## ESA/SCC Cross Reference

| ESA-SCC Part Number | ITT Cannon Part Number | ESA-SCC Part Number | ITT Cannon Part Number | ESA-SCC Part Number | ITT Cannon Part Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 340100101B DEM5W1SNMB | DEM5W1SNMBK52 | 340100101B DBM17W2POL3NMB | DBM17W2POL3NMBK52 | 340100101B DAM7W2P1A7NNMB | DAM7W2P1A7NNMBK52 |
| 340100101B DAM3W3SNMB | DAM3W3SNMBK52 | $340100101 B$ DBM21W1POL3NMB | DBM21W1POL3NMBK52 | $340100101 B$ DAM11W1P1A7NNMB | DAM11W1P1A7NNMBK52 |
| 340100101B DAM7W2SNMB | DAM7W2SNMBK52 | 340100101B DCM13W6POL3NMB | DCM13W6POL3NMBK52 | 3401001018 DBM9W4P1A7NNMB | DBM9W4P1A7NNMBK52 |
| $340100101 B$ DAM11W1SNMB | DAM11W1SNMBK52 | 340100101B DCM17W5POL3NMB | DCM17W5POL3NMBK52 | 340100101 B DBM13W3P1A7NNMB | DBM13W3P1A7NNMBK52 |
| 340100101 D DBM5W5SNMB | DBM5W5SNMBK52 | 340100101B DCM21WA4POL3NMB | DCM21WA4POL3NMBK52 | $340100101 B$ DBM17W2P1A7NNMB | DBM17W2P1A7NNMBK52 |
| 340100101B DBM9W4SNMB | DBM9W4SNMBK52 | 340100101B DCM25W3POL3NMB | DCM25W3POL3NMBK52 | 340100101B DBM21W1P1A7NNMB | DBM21W1P1A7NNMBK52 |
| $340100101 B$ DBM13W3SNMB | DBM13W3SNMBK52 | 340100101B DCM27W2POL3NMB | DCM27W2POL3NMBK52 | 340100101B DCM13W6P1A7NNMB | DCM13W6P1A7NNMBK52 |
| $340100101 B$ DBM17W2SNMB | DBM17W2SNMBK52 | 340100101B DDM24W7POL3NMB | DDM24W7POL3NMBK52 | 3401001018 DCM17W5P1A7NNMB | DCM17W5P1A7NNMBK52 |
| $340100101 B$ DBM21W1SNMB | DBM21W1SNMBK52 | 340100101B DDM36W4POL3NMB | DDM36W4POL3NMBK52 | 340100101 B DCM21WA4P1A7NNMB | DCM21WA4P1A7NNMBK52 |
| 340100101B DCM8W85NMB | DCM8W8SNMBK52 | 340100101B DDM43W2POL3NMB | DDM43W2POL3NMBK52 | $340100101 B$ DCM25W3P1A7NNMB | DCM25W3P1A7NNMBK52 |
| 340100101 B DCM13W6SNMB | DCM13W6SNMBK52 | 340100101B DDM47W1POL3NMB | DDM47W1POL3NMBK52 | 340100101B DCM27W2P1A7NNMB | DCM27W2P1A7NNMBK52 |
| $340100101 B$ DCM17W5S | DCM17W5SNMBK52 | $340100101 B$ DEM5W1S1AONNMB | DEM5W1S1AONNMBK52 | 3401001018 DDM24W7P1A7NNM | DDM24W7P1A7NNMBK52 |
| $340100101 B$ DCM21WA4SNMB | DCM21WA4SNMBK52 | $340100101 B$ DAM7W2S1AONNMB | DAM7W2S1AONNMBK52 | 340100101 B DDM36W4P1A7NNMB | DDM36W4P1A7NNMBK52 |
| 3401001018 DCM25W3SNMB | DCM25W3SNMBK52 | $340100101 B$ DAM11W1S1AONNMB | DAM11W1S1AONNMBK52 | $340100101 B$ DDM43W2P1A7NNMB | DDM43W2P1A7NNMBK52 |
| $340100101 B$ DCM27W2SNMB | DCM27W2SNMBK52 | 340100101B DBM9W4S1AONNMB | DBM9W4S1AONNMBK52 | $340100101 B$ DDM47W1P1A7NNMB | DDM47W1P1A7NNMBK52 |
| $340100101 B$ DDM24W7SNMB | DDM24W7SNMBK52 | 340100101B DBM13W3S1AONNMB | DBM13W3S1AONNMBK52 | 340100101B DEM5W1S1A9NNMB | DEM5W1S1A9NNMBK52 |
| 3401001018 DDM36W4SNMB | DDM36W4SNMBK52 | 340100101 B DBM17W2S1AONNMB | DBM17W2S1AONNMBK52 | $340100101 B$ DAM7W2S1A9NNMB | DAM7W2S1A9NNMBK52 |
| $340100101 B$ DDM43W2SNMB | DDM43W2SNMBK52 | 340100101B DBM21W1S1AONNMB | DBM21W1S1AONNMBK52 | 340100101B DAM11W1S1A9NNMB | DAM11W1S1A9NNMBK52 |
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| 340100101B DEM5W1PNMB | DEM5W1PNMBK52 | 340100101B DCM17W5S1AONNMB | DCM17W5S1AONNMBK52 | 340100101B DBM13W3S1A9NNMB | DBM13W3S1A9NNMBK52 |
| 340100101B DAM3W3PNMB | DAM3W3PNMBK52 | 340100101B DCM21WA4S1AONNMB | DCM21WA4S1AONNMBK52 | 340100101B DBM17W2S1A9NNMB | DBM17W2S1A9NNMBK52 |
| 340100101B DAM7W2PNMB | DAM7W2PNMBK52 | 340100101 B DCM25W3S1AONNMB | DCM25W3S1AONNMBK52 | 340100101 B DBM21W1S1A9NNMB | DBM21W1S1A9NNMBK52 |
| $340100101 B$ DAM11W1PNMB | DAM11W1PNMBK52 | 3401001018 DCM27W2S1AONNMB | DCM27W2S1AONNMBK52 | 3401001018 DCM13W6S1A9NNMB | DCM13W6S1A9NNMBK52 |
| 340100101B DBM5W5PNMB | DBM5W5PNMBK52 | 340100101B DDM24W7S1AONNMB | DDM24W7S1AONNMBK52 | 340100101 D DCM17W5S1A9NNMB | DCM17W5S1A9NNMBK52 |
| 340100101B DBM9W4PNMB | DBM9W4PNMBK52 | 340100101B DDM36W4S1AONNMB | DDM36W4S1AONNMBK52 | 340100101B DCM21WA4S1A9NNMB | DCM21WA4S1A9NNMBK52 |
| 340100101 B DBM13W3PNMB | DBM13W3PNMBK52 | 340100101B DDM43W2S1AONNMB | DDM43W2S1AONNMBK52 | 340100101B DCM25W3S1A9NNMB | DCM25W3S1A9NNMBK52 |
| $340100101 B$ DBM17W2PNMB | DBM17W2PNMBK52 | 340100101B DDM47W1S1AONNMB | DDM47W1S1AONNMBK52 | 340100101 B DCM27W2S1A9NNMB | DCM27W2S1A9NNMBK52 |
| $340100101 B$ DBM21W1PNMB | DBM21W1PNMBK52 | $340100101 B$ DEM5W1P1AONNMB | DEM5W1P1AONNMBK52 | 340100101 D DM2 $24 W 751$ A9NNMB | DDM24W7S1A9NNMBK52 |
| $340100101 B$ DCM8W8PNMB | DCM8W8PNMBK52 | 340100101B DAM7W2P1AONNMB | DAM7W2P1AONNMBK52 | 3401001018 DDM36W4S1A9NNMB | DDM36W4S1A9NNMBK52 |
| $340100101 B$ DCM13W6PNMB | DCM13W6PNMBK52 | 340100101 B DAM11W1P1AONNMB | DAM11W1P1AONNMBK52 | 340100101 D DDM43W2S1A9NNMB | DDM43W2S1A9NNMBK52 |
| 340100101B DCM17W5PNMB | DCM17W5PNMBK52 | 340100101 D DBM9W4P1AONNMB | DBM9W4P1AONNMBK52 | 340100101 D DM47W1S1A9NNMB | DDM47W1S1A9NNMBK52 |
| $340100101 B$ DCM21WA4PNMB | DCM21WA4PNMBK52 | 340100101B DBM13W3P1AONNMB | DBM13W3P1AONNMBK52 | $340100101 B$ DEM5W1P1A9NNMB | DEM5W1P1A9NNMBK52 |
| $340100101 B$ DCM25W3PNMB | DCM25W3PNMBK52 | 340100101B DBM17W2P1AONNMB | DBM17W2P1AONNMBK52 | 340100101B DAM7W2P1A9NNMB | DAM7W2P1A9NNMBK52 |
| $340100101 B$ DCM27W2PNMB | DCM27W2PNMBK52 | $340100101 B$ DBM21W1P1AONNMB | DBM21W1P1AONNM ${ }^{\text {K }} 52$ | 340100101 B DAM11W1P1A9NNMB | DAM11W1P1A9NNMBK52 |
| $340100101 B$ DDM24W7PNMB | DDM24W7PNMBK52 | 340100101 D DCM13W6P1A0NNMB | DCM13W6P1AONNMBK52 | 340100101B DBM9W4P1A9NNMB | DBM9W4P1A9NNMBK52 |
| 340100101 B DDM36W4PNMB | DDM36W4PNMBK52 | 340100101B DCM17W5P1AONNMB | DCM17W5P1AONNMBK52 | 340100101B DBM13W3P1A9NNMB | DBM13W3P1A9NNMBK52 |
| $340100101 B$ DDM43W2PNMB | DDM43W2PNMBK52 | 340100101B DCM21WA4P1AONNMB | DCM21WA4P1AONNMBK52 | $340100101 B$ DBM17W2P1A9NNMB | DBM17W2P1A9NNMBK52 |
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| 340100101 D DEM5W1SOL3NMB | DEM5W1SOL3NMBK52 | 340100101B DCM27W2P1AONNMB | DCM27W2P1AONNMBK52 | 340100101B DCM13W6P1A9NNMB | DCM13W6P1A9NNMBK52 |
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| 340100101B DAM11W1SOL3NMB | DAM11W1SOL3NMBK52 | 0100101B DDM36W4P1AONNMB | DDM36W4P1AONNMBK52 | 340100101B DCM21WA4P1A9NNMB | DCM21WA4P1A9NNMBK52 |
| 340100101 D DBM9W4SOL3NMB | DBM9W4SOL3NMBK52 | 340100101B DDM43W2P1A0NNMB | DDM43W2P1AONNMBK52 | 340100101 B DCM25W3P1A9NNMB | DCM25W3P1A9NNMBK52 |
| 340100101B DBM13W3SOL3NMB | DBM13W3SOL3NMBK52 | 340100101 B DDM47W1P1A0NNMB | DDM47W1P1AONNMBK52 | 340100101 B DCM27W2P1A9NNMB | DCM27W2P1A9NNMBK52 |
| 340100101B DBM17W2SOL3NMB | DBM17W2SOL3NMBK52 | $340100101 B$ DEM5W1S1A7NNMB | DEM5W1S1A7NNMBK52 | 3401001018 DDM24W7P1A9NNMB | DDM24W7P1A9NNMBK52 |
| 340100101B DBM21W1SOL3NMB | DBM21W1SOL3NMBK52 | 340100101B DAM7W2S1A7NNMB | DAM7W2S1A7NNMBK52 | 3401001018 DDM36W4P1A9NNMB | DDM36W4P1A9NNMBK52 |
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| 340100101B DCM21WA4SOL3NMB | DCM21WA4SOL3NMBK52 | 340100101B DBM13W3S1A7NNMB | DBM13W3S1A7NNMBK52 | 340100101B DEM5W1SF179ANMB | DEM5W1SF179ANMBK52 |
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| 340100101 B DCM27W20L3NMB | DCM27W2OL3NMBK52 | 340100101 D DBM21W1S1A7NNMB | DBM21W1S1A7NNMBK52 | 340100101B DAM11W1SF179ANMB | DAM11W1SF179ANMBK52 |
| 340100101B DDM24W7SOL3NMB | DDM24W7SOL3NMBK52 | 340100101B DCM13W6S1A7NNMB | DCM13W6S1A7NNMBK52 | 340100101B DBM9W4SF179ANMB | DBM9W4SF179ANMBK52 |
| 340100101B DDM36W4SOL3NMB | DDM36W4SOL3NMBK52 | $340100101 B$ DCM17W5S1A7NNMB | DCM17W5S1A7NNMBK52 | $340100101 B$ DBM13W3SF179ANMB | DBM13W3SF179ANMBK52 |
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| 340100101 D DEM5W1POL3NMB | DEM5W1POL3NMBK52 | 340100101 B DCM27W2S1A7NNMB | DCM27W2S1A7NNMBK52 | $340100101 B$ DCM13W6SF179ANMB | DCM13W6SF179ANMBK52 |
| 340100101B DAM3W3POL3NMB | DAM3W3POL3NMBK52 | 340100101B DDM24W7S1A7NNMB | DDM24W7S1A7NNMBK52 | $340100101 \mathrm{DCM17}$ | CM17W5SF179ANMBK52 |
| 340100101 D DAM7W2POL3NMB | DAM7W2POL3NMBK52 | 340100101B DDM36W4S1A7NNMB | DDM36W4S1A7NNMBK52 | 340100101B DCM21WA4SF179ANMB | DCM21WA4SF179ANMBK52 |
| 340100101B DAM11W1POL3NMB | DAM11W1POL3NMBK52 | 340100101 D DDM43W2S1A7NNMB | DDM43W2S1A7NNMBK52 | 340100101 B DCM25W3SF179ANMB | DCM25W3SF179ANMBK52 |
| $340100101 B$ DBM9W4POL3NMB | DBM9W4POL3NMBK52 | 340100101B DDM47W1S1A7NNMB | DDM47W1S1A7NNMBK52 | 340100101 B DCM27W2SF179ANMB | DCM27W2SF179ANMBK52 |
| $340100101 B$ DBM13W3POL3NMB | DBM13W3POL3NMBK52 | $340100101 B$ DEM5W1P1A7NNMB | DEM5W1P1A7NNMBK52 | $340100101 B$ DDM24W7SF179ANMB | DDM24W7SF179ANMBK52 |

## ESA/SCC Cross Reference

| $\begin{aligned} & \text { ESA-SCC } \\ & \text { Part Number } \end{aligned}$ | ITT Cannon Part Number | $\begin{aligned} & \text { ESA-SCC } \\ & \text { Part Number } \end{aligned}$ | ITT Cannon Part Number | $\begin{aligned} & \text { ESA-SCC } \\ & \text { Part Number } \end{aligned}$ | ITT Cannon Part Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 340100101B DDM36W4SF179ANMB | DDM36W4SF179ANMBK52 | 340100101B DAM15S1A9NNMB | DAM15S1A9NNMBK52 | 340100415B | DM115740-13 |
| 340100101B DDM43W2SF179ANMB | DDM43W2SF179ANMBK52 | 340100101B DBM25S1A9NNMB | DBM25S1A9NNMBK52 | 340100419B | DM115740-12 |
| 340100101B DDM47W1SF179ANMB | DDM47W1SF179ANMBK52 | 340100101B DCM37S1A9NNMB | DCM37S1A9NNMBK52 | 340100412 B | DM115742-15 |
| 340100101B DEM5W1PF179ANMB | DEM5W1PF179ANMBK52 | $340100101 B$ DDM50S1A9NNMB | DDM50S1A9NNMBK52 | 340100416B | DM115742-14 |
| 340100101B DAM7W2PF179ANMB | DAM7W2PF179ANMBK52 | 340100101B DEM9P1A9NNMB | DEM9P1A9NNMBK52 | 340100420B | DM115742-13 |
| 340100101B DAM11W1PF179ANMB | DAM11W1PF179ANMBK52 | 340100101B DAM15P1A9NNMB | DAM15P1A9NNMBK52 | 340100413B | DM115741-7 |
| 340100101 B DBM9W4PF179ANMB | DBM9W4PF179ANM BK52 | $340100101 B$ DBM25P1A9NNMB | DBM25P1A9NNMBK52 | 340100417B | DM115741-8 |
| 340100101B DBM13W3PF179ANMB | DBM13W3PF179ANMBK52 | 340100101B DCM37P1A9NNMB | DCM37P1A9NNMBK52 | 340100414B | DM115743-20 |
| 340100101B DBM17W2PF179ANMB | DBM17W2PF179ANMBK52 | $340100101 B$ DDM50P1A9NNMB | DDM50P1A9NNM BK52 | 340100418 B | DM115743-22 |
| 340100101B DBM21W1PF179ANMB | DBM21W1PF179ANMBK52 | 340100101B DEM9SF179ANMB | DEM9SF179ANMBK52 | 340102207B | DE-59-20 |
| 340100101B DCM13W6PF179ANMB | DCM13W6PF179ANMBK52 | 340100101B DAM15SF179ANMB | DAM15SF179ANMBK52 | 340102208B | DE-60-20 |
| 340100101B DCM17W5PF179ANMB | DCM17W5PF179ANMBK52 | 340100101B DBM25SF179ANMB | DBM25SF179ANMBK52 | 340102209B | DA-59-20 |
| 340100101B DCM21WA4PF179ANMB | BDCM21WA4PF179ANMBK52 | 340100101B DCM37SF179ANMB | DCM37SF179ANMBK52 | 340102210B | DA-60-20 |
| 340100101B DCM25W3PF179ANMB | DCM25W3PF179ANMBK52 | 340100101B DDM50SF179ANMB | DDM50SF179ANMBK52 | 340102211 B | DB-59-20 |
| 340100101B DCM27W2PF179ANMB | DCM27W2PF179ANMBK52 | 340100101B DEM9PF179ANMB | DEM9PF179ANMBK52 | 340102212B | DB-60-20 |
| 340100101B DDM24W7PF179ANMB | DDM24W7PF179ANMBK52 | 340100101B DAM15PF179ANMB | DAM15PF179ANMBK52 | 340102213B | DC-59-20 |
| 340100101B DDM36W4PF179ANMB | DDM36W4PF179ANMBK52 | 340100101B DBM25PF179ANMB | DBM25PF179ANMBK52 | 340102214B | DC-60-20 |
| 340100101B DDM43W2PF179ANMB | DDM43W2PF179ANMBK52 | 340100101B DCM37PF179ANMB | DCM37PF179ANMBK52 | 340102215B | DD-59-20 |
| 340100101B DDM47W1PF179ANMB | DDM47W1PF179ANMBK52 | 340100101B DDM50PF179ANMB | DDM50PF179ANMBK52 | 340102216B | DD-60-20 |
| 340100101B DEM9SNMB | DEM9SNMBK52 | 340100102 B DEMA9SNMB | DEMA9SNMBK52 | 340102201B | D20418-52 |
| 340100101 B DAM15SNMB | DAM15SNMBK52 | 340100102B DAMA15SNMB | DAMA15SNMBK52 | 340102206B | D115418-70 |
| $340100101 B$ DBM25SNMB | DBM25SNMBK52 | $340100102 B$ DBMA25SNMB | DBMA25SNMBK52 | 340102258B | D20418-101 |
| 3401001018 DCM37SNMB | DCM37SNMBK52 | $340100102 B$ DCMA37SNMB | DCMA375NMBK52 | 340102202B | D20419-74 |
| 340100101 B DDM50SNMB | DDM $50 S N M B K 52$ | 340100102 B DDMA50SNMB | DDMA50SNMBK52 | 340102203B | D20419-48 |
| 340100101B DEM9PNMB | DEM9PNMBK52 | 340100102 B DEMA9PNMB | DEMA9PNMBK52 | 340102204B | D20420-67 |
| $340100101 B$ DAM15PNMB | DAM15PNMBK52 | 340100102B DAMA15PNMB | DAMA15PNMBK52 | 340102205B | D20420-49 |
| 3401001018 DBM25PNMB | DBM25PNMBK52 | $340100102 B$ DBMA25PNMB | DBMA25PNMBK52 | 340102244 B | D20419-73 |
| $340100101 B$ DCM37PNMB | DCM37PNMBK52 | 340100102B DCMA37PNMB | DCMA37PNMBK52 | 340102245B | D20419-84 |
| $340100101 B$ DDM50PNMB | DDM50PNMBK52 | 340100102B DDMA50PNMB | DDMA50PNMBK52 | 340102246B | D20420-63 |
| 340100101 B DEM9SOL3NMB | DEM9S0L3NMBK52 | 340102217 B | DA19678-174 | 340102247B | D20420-88 |
| 3401001018 DAM15SOL3NMB | DAM15SOL3NMBK52 | 340102218B | DB19678-175 | 340102225B | DA19678-167 |
| 340100101 B DBM25SOL3NMB | DBM25SOL3NMBK52 | 340102219 B | DC19678-173 | 340102226 B | DB19678-168 |
| 3401001018 DCM37S0L3NMB | DCM37SOL3NMBK52 | $340102220 B$ | DD19678-176 | 340102227B | DC19678-138 |
| 3401001018 DDM50SOL3NMB | DDM50SOL3NMBK52 | $340102221 B$ | DA19678-157 | 340102228B | DD19678-161 |
| $340100101 B$ DEM9POL3NMB | DEM9POL3NMBK52 | $340102222 B$ | DB19678-171 | $340102239 B$ | DE19977-47 |
| 340100101B DAM15POL3NMB | DAM15POL3NMBK52 | 340102223B | DC19678-162 | 340102240B | DA19977-40 |
| 340100101 D DBM25POL3NMB | DBM25POL3NMBK52 | $340102224 B$ | DD19678-172 | 340102241B | DB19977-43 |
| 3401001018 DCM37POL3NMB | DCM37POL3NMBK52 | 340104001B | DM115224-1040A | 340102242B | DC19977-45 |
| 3401001018 DDM $50 P O L 3 N M B$ | DDM50POL3NMBK52 | 340104003B | DM115224-1020A | 340102243B | DD19977-44 |
| 340100101 B DEM9S1AONNMB | DEM9S1AONNMBK52 | 340104005B | DM115224-1010A | 340102234B | DE24657-16 |
| 340100101B DAM15S1AONNMB | DAM15S1AONNMBK52 | 340104002B | DM115224-2040A | 340102235B | DA24658-15 |
| 340100101 B DBM25S1AONNMB | DBM25S1AONNMBK52 | 340104004 B | DM115224-2020A | 340102236 B | DB24659-15 |
| $340100101 B$ DCM37S1AONNMB | DCM37S1AONNMBK52 | 340104006B | DM115224-2010A | 340102237B | DC24660-16 |
| $340100101 B$ DDM50S1AONNMB | DDM50S1AONNMBK52 | 340104007B | DM115224-3040A | 340102238B | DD24661-13 |
| 340100101 B DEM9P1AONNMB | DEM9P1AONNMBK52 | 340104008B | DM115224-4040A | $340102229 B$ | DE115386-101A |
| 340100101B DAM15P1AONNMB | DAM15P1AONNMBK52 | 340104009B | DM115224-3020A | 340102230B | DA115386-104A |
| 3401001018 DBM25P1AONNMB | DBM25P1AONNMBK52 | 340104010B | DM115224-4020A | 340102231B | DB115386-102A |
| 340100101 B DCM37P1AONNMB | DCM37P1AONNMBK52 | 340104011 B | DM115224-3010A | 340102232 B | DC115386-100A |
| 340100101B DDM50P1AONNMB | DDM50P1AONNMBK52 | 340104012 B | DM115224-4010A | 340102233B | DD115386-103A |
| 340100101B DEM9S1A7NNMB | DEM9S1A7NNMBK52 | 340100401B | DM115740-5036 | 340100501B | 030-8882-002 |
| 340100101 B DAM15S1A7NNMB | DAM15S1A7NNMBK52 | 340100405B | DM115740-5046 | 340100502B | 031-8944-000 |
| 3401001018 DBM25S1A7NNMB | DBM25S1A7NNMBK52 | 340100409 B | DM115740-5047 | 340100503 B | 030-8848-020 |
| 3401001018 DCM37S1A7NNMB | DCM37S1A7NNMBK52 | 340100402B | DM115742-5028 | $340100504 B$ | 031-8787-020 |
| 3401001018 DDM50S1A7NNMB | DDM50S1A7NNMBK52 | 340100406 B | DM115742-5039 | 340100505B | 330-8782-001 |
| $340100101 B$ DEM9P1A7NNMB | DEM9P1A7NNMBK52 | 340100410B | DM115742-5075 | 340100506B | 031-8843-001 |
| 340100101 B DAM15P1A7NNMB | DAM15P1A7NNMBK52 | 340100403B | DM115741-5048 | 340100507B | 330-8944-000 |
| 3401001018 DBM25P1A7NNMB | DBM25P1A7NNMBK52 | 340100407B | DM115741-5032 | 340100508B | 031-8902-000 |
| $340100101 B$ DCM37P1A7NNMB | DCM37P1A7NNMBK52 | 340100404B | DM115743-5064 |  |  |
| $340100101 B$ DDM50P1A7NNMB | DDM50P1A7NNMBK52 | 340100408B | DM115743-5040 |  |  |
| 3401001018 DEM9S1A9NNMB | DEM9S1A9NNMBK52 | 340100411B | DM115740-19 |  |  |

## Selection Guide

| Locking Hardware |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Backshell | Style | Female Screw Lock see page 209 | Male Screw Lock see page 208 | Sliding Lock Retainer Assembly see page 210 | Slide Lock Post see page 211 | Spring Latch Plate see page 212 | Spring Latch see page 212 |
| EMI Shielded | Snap-Together Metalized Plastic Straight Exit see page 200 | - | - | - | - | - | - |
| EMI Shielded | Snap-Together Metalized Plastic $40^{\circ}$ Exit see page 200 | - | - | - | - | - | - |
| EMI Shielded | Die Cast Zinc Metal see page 202 | - | $\Delta$ | - | - | - | - |
| Metal | Deep Straight Clamp see page 203 | $\bullet$ | $\bullet$ | $\bullet$ | - | $\bullet$ | - |
| Metal | Round Cable Clamp see page 203 | $\bullet$ | $\bullet$ | $\bullet$ | - | $\bullet$ | $\bullet$ |
| Metal | Short Straight Clamp see page 204 | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |
| Metal | $90^{\circ}$ Entry see page 204 | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |
| Plastic | Snap-Together Universal see page 205 | $\bullet$ | $\bullet$ | - | - | - | - |
| Plastic | One-Piece Snap-Together see page 205 | - | $\Delta$ | - | - | - | - |
| Plastic | One-Piece Plastic Straight Exit see page 206 | - | - | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |
| Plastic | $\begin{gathered} \text { One-Piece Plastic } \\ 90^{\circ} \text { Exit } \\ \text { see page } 206 \\ \hline \end{gathered}$ | - | - | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |
| Plastic | Dataphone see page 206 | - | $\triangle$ | - | - | - | - |
| Plastic | Quick Disconnect for IDC Cable see page 207 | - | - | - | - | - | - |
| Plastic | Quick Disconnect for Round Cable Straight and $90^{\circ}$ Exit see page 207 | - | - | - | - | - | - |

A Supplied with backshell

- Optional, compatible locking hardware
- Not compatible


## Selection Guide

| Locking Hardware |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Locking Hook see page 207 | Locking Spring see page 207 | Jackscrew Assembly see page 213 | J ackpost Assembly see page 213 | Recessed J ackscrew see page 201 | Extended Jackscrew see page 201 | Thumbscrew see page 201 | Jackpost for In-Line Connections see page 201 |
| - | - | - | - | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |
| - | - | - | - | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |
| - | - | - | - | - | - | - | - |
| - | - | - | $\bullet$ | - | - | - | - |
| - | - | - | $\bullet$ | - | - | - | - |
| - | - | - | $\bullet$ | - | - | - | - |
| - | - | - | - | - | - | - | - |
| - | - | $\bullet$ | - | - | - | - | - |
| - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - |
| $\bullet$ | $\bullet$ | - | - | - | - | - | - |
| $\bullet$ | $\bullet$ | - | - | - | - | - | - |

## D Subminiature Accessories

## Snap-Together Metalized Plastic

Metalized plastic backshells reduce EMI/RFI emissions.
Metalized plastic provides a light weight solution.
Design includes integral strain relieving cable clamp.

## Product Features

Improves conformance to FCC DOC \# 20780 shielding requirements
No crimp ferrule tooling needed
Quick and simple assembly using snaptogether design feature

## Attenuation




Note: Cable grounding tang not available on DE size backshell.

| Specifications |  |
| :--- | :--- |
| Attenuation: | $-49 \mathrm{~dB} @ 100 \mathrm{MHz}$ |
| Temperature Range: | $-20^{\circ} \mathrm{C}$ to $80^{\circ} \mathrm{C}$ |


| Materials and Finishes |  |  |
| :--- | :--- | :---: |
| Material: | Thermoplastic, UL 94V-0 rated |  |
| Finish: | Nickel over Copper |  |

## Straight Exit

|  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Shell Size | Layout | Part Number | $\begin{gathered} \text { A } \\ \pm 0,15(.006) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,30(.012) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,30(.012) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,30(.120) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,20(.008) \end{gathered}$ | $\begin{aligned} & \varnothing \mathrm{H} \\ & \text { Max. } \end{aligned}$ |
| Kit consists of 1 front shell, 1 rear shell, 1 cable clamp, 2 screws Optional locking hardware sold separately, see page 201. | DE | 9 | DE121073-154 | 24,95 (.982) | 30,81 (1.213) | 23,70 (.933) | 16,00 (.630) | 35,99 (1.417) | 7,32 (.288) |
|  | DA | 15 | DA121073-150 | 33,30 (1.311) | 39,09 (1.539) | 31,80 (1.252) | 16,00 (.630) | 42,00 (1.654 | 8,31 (.327) |
|  | DB | 25 | DB121073-151 | 47,00 (1.850) | 53,01 (2.087) | 45,01 (1.772) | 16,00 (.630) | 42,00 (1.654 | 10,52 (.414) |
|  | DC | 37 | DC121073-152 | 63,45 (2.498) | 69,29 (2.728) | 60,30 (2.374) | 16,00 (.630) | 42,00 (1.654 | 12,32 (.485) |
|  | DD | 50 | DD121073-153 | 61,10 (2.410) | 66,90 (2.634) | 58,30 (2.295) | 19,00 (.748) | 42,00 (1.654 | 13,00 (.512) |



Kit consists of 1 front shell, 1 rear shell, 1 cable clamp, 2 screws
Optional locking hardware sold separately, see page 201.


| $\begin{aligned} & \text { Shell } \\ & \text { Size } \end{aligned}$ | Layout | Part Number | $\begin{gathered} \text { B } \\ \pm 0,30(.012) \end{gathered}$ | $\begin{array}{r} \text { C } \\ +0,30(.012) \\ \hline \end{array}$ | $\begin{array}{r} D \\ \pm 0,30(.012) \\ \hline \end{array}$ | $\pm 0,20(.008)$ | Cable Diameter |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Min. | Max. |
| DE | 9 | DE121073-54 | 35,99 (1.417) | 22,00 (.866) | 16,00 (.630) | 35,99 (1.417) | 3,51 (.138) | 7,49 (.295) |
| DA | 15 | DA121073-50 | 44,29 (1.744) | 27,31 (1.075) | 16,00 (.630) | 42,01 (1.654) | 6,50 (.256) | 8,99 (.354) |
| DB | 25 | DB121073-51 | 57,99 (2.283) | 41,00 (1.614) | 16,00 (.630) | 42,01 (1.654) | 6,50 (.256) | 11,00 (.433) |
| DC | 37 | DC121073-52 | 74,50 (2.933) | 57,51 (2.264) | 16,00 (.630) | 42,01 (1.654) | 6,50 (.256) | 11,00 (.433) |
| DD | 50 | DD121073-53 | 72,97 (2.873) | 54,99 (2.165) | 19,00 (.748) | 42,01 (1.654) | 8,99 (.354) | 13,00 (.512) |

## Locking Hardware for Snap-Together EMI Shielded Backshell



Extended J ackscrew


| Part Number: | 250-8501-009 (M3) <br> $250-8501-010 ~(\# 4-40) ~$ |
| :--- | :--- |
| Material: | Brass |
| Finish: | Nickel |
| Quantity Required |  |
| per Connector: | 2 |

Thumbscrew


| Part Number: | 250-8501-013 |
| :--- | :--- |
| Material: | Brass |
| Finish: | Nickel |
| Quantity Required <br> per Connector: | 2 |

## Jackpost for In-Line Connections

## Rectangular Nut



J ackpost


J ackpost Assembly


Assembly consists of 1 rectangular nut, 1 jackpost, 1 \# 4-40 lock washer.

| Part Number: | D121073-19 |
| :--- | :--- |
| Material: | Brass |
| Finish: | Nickel |
| Quantity Required <br> per Connector: | 2 |

## Die Cast Zinc Metal Backshell

## Straight Exit



Die cast metal backshells reduce EMI/RFI emissions.
Die cast metal backshells offer improved shielding in a rugged package.

## Product Features

Improves conformance to FCC DOC \# 20780
shielding requirements
No crimp ferrule tooling needed
Kit consists of 1 front shell, 1 rear shell, 2 screws, 2 hex nuts, 2 mounting screws,
2 end brackets, 1 set of compression inserts
(see this page)

| Shell <br> Size | Part <br> Layout | A <br> Number | $\pm 0,13(.005)$ | $\mathbf{B}$ | $\mathbf{C}, 13(.005)$ | $\pm 0,13(.005)$ | $\mathbf{D}$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE,13(.005) | $\pm 0,13(.005)$ | $\pm 0,13(.005)$ |  |  |  |  |  |  |
| DA | 9 | $980-2000-345$ | $31,12(1.225)$ | $37,21(1.465)$ | $15,75(.620)$ | $15,75(.620)$ | $10,16(.400)$ | $24,99(.084)$ |
| DA | 15 | $980-2000-346$ | $39,12(1.540)$ | $40,64(1.600)$ | $15,75(.620)$ | $15,75(.620)$ | $10,16(.400)$ | $33,32(1.312)$ |
| DB | 25 | $980-2000-347$ | $53,09(2.090)$ | $39,37(1.550)$ | $17,53(.690)$ | $15,75(.620)$ | $13,34(.525)$ | $47,17(1.857)$ |
| DC | 37 | $980-2000-348$ | $69,34(2.730)$ | $45,72(1.800)$ | $21,95(.864)$ | $15,75(.620)$ | $18,44(.726)$ | $63,50(2.500)$ |
| DD | 50 | $980-2000-349$ | $66,70(2.626)$ | $45,72(1.800)$ | $21,95(.864)$ | $18,54(.730)$ | $18,44(.726)$ | $61,11(2.406)$ |

Specifications

| Attenuation: | -50 dB @ 1000 MHz |
| :--- | :--- |
| Temperature Range: | $-20^{\circ} \mathrm{C}$ to $80^{\circ} \mathrm{C}$ |

## Materials and Finishes

| Backshell Material: | Znc |
| :--- | :--- |
| Backshell Finish: | Clear Znc |
| Compression Inserts: | PVC |
| Hardware Material: | Steel |
| Hardware Finish: | Clear Znc |

db


## Compression Inserts (Included With Die Cast Zinc Metal Backshell)

Compression inserts accommodate a wide variety of cable sizes.

| Position | Cable Diameter |
| :---: | :---: |
| 9,15 | $.190 / .350$ |
| 25 | $.190 / .460$ |
| 37,50 | $.300 / .680$ |

9 and 15 Position*


25 Position*


37 and 50 Position*


* Inserts may be supplied mirror image

| Position | \#1 |  | \#2 |  | \#3 |  | \#4 |  | \#5 |  | \#6 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | O.D. | I.D. | O.D. | I.D. | O.D. | I.D. | O.D. | I.D. | O.D. | I.D. | O.D. | I.D. |
| 9, 15 | 12,07 (.475) | 8,13 (320) | 9,14 (.360) | 8,00 (.315) | 9,14 (.360) | 6,48(.255) | 9,14 (.360) | 7,24 (.285) | 9,14 (.360) | 5,33 (.210) | - | - |
| 25 | 15,24 (.600) | 11,43 (.450) | 11,43 (.450) | 10,41 (.410) | 11,43 (.450) | 9,40 (.370) | 11,43 (.450) | 7,62 (.300) | 11,43 (.450) | 5,84 (.230) | - | - |
| 37,50 | 16,64 (.655) | 14,48 (.570) | 17,78 (.700) | 15,75 (.620) | 20,57 (.810) | 16,51 (.650) | 16,64 (.655) | 12,70 (.500) | 16,64 (.655) | 10,80 (.425) | 16,64 (.655) | 8,89 (.350) |

## Metal Backshell

Metal Backshells provide strain relief.
Various profiles available for different cable routing requirements.

## Product Features

Qualified to MIL-Spec M85049

Materials and Finishes

| Backshell Material: | Low Carbon Steel |
| :--- | :--- |
| Finish: | Yellow Chromate over <br> Cadmium |
| Hardware Material: | Steel |

## Deep Straight Clamp



Kit consists of 1 shell, 2 cable clamps,
2 screws, 2 hex nuts

| Shell <br> Size | Layout | Part <br> Number | Mil Spec <br> Part Number | $\mathbf{A}$ <br> $\pm 0,38(.015)$ | $\mathbf{B}$ <br> $\pm 0,572(.025)$ | $\mathbf{C}$ <br> $\pm 0,13(.005)$ | $\mathbf{D}$ <br> max. | $\mathbf{E}$ <br> $\pm 0,38(.015)$ | $\mathbf{F}$ <br> $\pm 0,38(.015)$ | $\mathbf{G}$ <br> $\pm 0,38(.015)$ | max. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DE24657 | M85049/48-1-1 | $30,56(1.203)$ | $12,484(.4915)$ | $24,99(.984)$ | $14,68(.578)$ | $9,53(.375)$ | $9,53(.375)$ | $19,05(.750)$ | $31,75(1.250)$ |
| DA | 15 | DA24658 | M85049/48-1-2 | $38,89(1.531)$ | $12,484(.4915)$ | $33,32(1.312)$ | $14,68(.578)$ | $18,11(.713)$ | $7,93(.312)$ | $19,05(.750)$ | $31,75(1.250)$ |
| DB | 25 | DB24659 | M85049/48-1-3 | $52,78(2.078)$ | $12,484(.4915)$ | $47,04(1.852)$ | $14,68(.578)$ | $25,40(1.000)$ | $7,93(.312)$ | $25,40(1.000)$ | $39,70(1.563)$ |
| DC | 37 | DC24660 | M85049/48-1-4 | $69,04(2.718)$ | $12,484(.4915)$ | $63,50(2.500)$ | $14,68(.578)$ | $34,93(1.375)$ | $7,93(.312)$ | $25,40(1.000)$ | $39,70(1.563)$ |
| DD | 50 | DD24661 | M85049/48-1-5 | $66,68(2.625)$ | $15,253(.6005)$ | $61,11(2.406)$ | $17,45(.687)$ | $35,71(1.406)$ | $10,31(.406)$ | $28,57(1.125)$ | $42,88(1.688)$ |

## Round Cable Clamp


$(.015 \pm .005)$
Kit consists of 1 shell, 2 screws, 2 hex nuts

| Shell Size | Layout | Part Number | Mil Spec Part Number | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(, 005) \end{gathered}$ | $\begin{aligned} & \varnothing D \\ & \text { max. } \end{aligned}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { G } \\ \pm 0,76(.030) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DE44994 | M85049/48-2-1 | 30,68 (1.208) | 12,70 (.500) | 24,99 (.984) | 10,31 (.406) | 16,79 (.661) | 3,18 (.125) | 26,18 (1.031) |
| DA | 15 | DA20961 | M85049/48-2-2 | 38,89 (1.531) | 12,70 (.500) | 33,33 (1.312) | 10,31 (.406) | 24,99 (.984) | 3,18 (.125) | 26,18 (1.031) |
| DB | 25 | DB20962 | M85049/48-2-3 | 52,78 (2.078) | 12,70 (.500) | 47,04 (1.852) | 15,06 (.593) | 38,48 (1.515) | 4,75 (.187) | 26,98 (1.062) |
| DC | 37 | DC20963 | M85049/48-2-4 | 69,04 (2.718) | 12,70 (.500) | 63,50 (2.500) | 18,23 (.718) | 55,14 (2.171) | 6,35 (.250) | 26,98 (1.062) |
| DD | 50 | DD20964 | M85049/48-2-5 | 66,68 (2.625) | 15,47 (.609) | 61,11 (2.406) | 20,62 (.812) | 53,16 (2.093) | 7,92 (.312) | 26,98 (1.062) |



| $\begin{aligned} & \text { Shell } \\ & \text { Size } \end{aligned}$ | Layout | Part Number | Mil Spec Part Number | No. of Cable Locking Screws Included | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{array}{r} \mathrm{E} \\ \pm 0,38(.015) \\ \hline \end{array}$ | $\begin{gathered} \text { F } \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} { }^{G}(0,89(.035) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DA | 15 | DA19678-1 | M85049/48-3-2 | 2 | 38,88 (1.531) | 12,70 (.500) | 33,33 (1.312) | 7,51 (.296) | 7,93 (.312) | 16,36 (.644) |
| DB | 25 | DB19678-2 | M85049/48-3-3 | 2 | 52,78 (2.078) | 12,70 (.500) | 47,04 (1.852) | 7,51 (.296) | 20,22 (.796) | 16,36 (.644) |
| DC | 37 | DC19678-3 | M85049/48-3-4 | 3 | 69,04 (2.718) | 12,70 (.500) | 63,50 (2.500) | 7,51 (.296) | 17,45 (.687) | 16,36 (.644) |
| DD | 50 | DD19678-4 | M85049/48-3-5 |  | 66,68 (2.625) | 15,47 (.609) | 61,11 (2.406) | 9,91 (.390) | 17,45 (.687) | 17,63 (.694) |

DE-9 is not available.

## $90^{\circ}$ Entry



Kit consists of 1 shell, 1 cable clamp, 1 screw, 1 nut, 2 rivnuts (assembled)


| $\begin{aligned} & \text { Shell } \\ & \text { Size } \end{aligned}$ | Layout | Part Number | $\begin{gathered} \text { Mil Spec } \\ \text { Part Number } \end{gathered}$ | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,76(.030) \end{gathered}$ | $\underset{ \pm 0,13(.005)}{\text { C }}$ | $\begin{gathered} \mathbf{E} \\ \pm 0,76(.030) \end{gathered}$ | $\begin{gathered} \mathbf{F} \\ \pm 0,76(.030) \end{gathered}$ | $\begin{gathered} G \\ \pm 0,76(.030) \end{gathered}$ | $\begin{gathered} \mathrm{H} \\ \pm 0,76(.030) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DE19977-5 | M85049/50-1 | 30,56 (1.203) | 18,24 (.718) | 24,99 (.984) | 11,10 (.437) | 11,10 (.437) | 11,89 (.468) | 7,14 (.281) |
| DA | 15 | DA19977-1 | M85049/50-2 | 38,89 (1.531) | 18,24 (.718) | 33,33 (1.312) | 11,10 (.437) | 11,10 (.437) | 11,89 (.468) | 7,14 (.281) |
| DB | 25 | DB19977-2 | M85049/50-3 | 52,78 (2.078) | 24,58 (.968) | 47,04 (1.852) | 11,10 (.437) | 15,88 (.625) | 11,89 (.468) | 7,14 (.281) |
| DC | 37 | DC19977-3 | M85049/50-4 | 69,04 (2.718) | 30,15 (1.187) | 63,50 (2.500) | 11,10 (.437) | 20,63 (.812) | 11,89 (.468) | 7,14 (.281) |
| DD | 50 | DD19977-4 | M85049/50-5 | 66,68 (2.625) | 31,75 (1.250) | 61,11 (2.406) | 14,28(.562) | 23,01 (.906) | 13,49 (.531) | 8,71 (.343) |

## Plastic Backshell

## Snap-Together Universal



One-Piece Snap-Together


Low cost
Easy to assemble
Mounting hardware included
2 thumbscrews, 2 cable clamps
Materials and Finishes
Backshell Material: Polypropylene
Hardware Material: Steel
Hardware Finish: Yellow chromate over zinc

| Shell <br> Size | Layout | Part <br> Number | A | C | $\varnothing \mathbf{D}$ <br> max. | E |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $D E$ | 9 | DEBS-9 | $35,20(1.386)$ | $24,99(.984)$ | $5,69(.224)$ | $27,51(1.083)$ |
| DA | 15 | DABS-15 | $43,31(1.705)$ | $33,33(1.312)$ | $5,69(.224)$ | $31,19(1.228)$ |
| DB | 25 | DBBS-25 | $57,20(2.252)$ | $47,04(1.852)$ | $6,50(.256)$ | $38,30(1.508)$ |

DC-37 and DD-50 are not available.

## One-Piece Plastic

## Straight Exit <br>  <br> Kit consists of 1 shell, 1 cable clamp, 1 set screw <br> Mounting hardware included <br> 2 screws \# 4-24 x 5/16 long self-tapping <br> Accommodates spring latches

| Materials and Finishes |  |
| :--- | :--- |
| Backshell Material: | Black Thermoplastic, <br> UL 94V-2 rated |
| Hardware Material: | Steel |
| Hardware Finish: | Yellow Chromate over <br> Cadmium or Zinc |



| Shell Size | Layout | Part Number | $\begin{array}{r} \mathrm{A} \\ \pm 0,38(.015) \\ \hline \end{array}$ | $\begin{gathered} \text { B } \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,38(.015) \\ \hline \end{gathered}$ | $\begin{gathered} \not \varnothing E \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \\ \hline \end{gathered}$ | $\begin{array}{r} \quad \mathrm{G} \\ \pm 0,25(.010) \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DE51218 | 30,94 (1.218) | 25,40 (1.000) | 24,99 (.984) | 12,70 (.500) | 7,14(.281) | - | - |
| DA | 15 | DA51210 | 39,27 (1.546) | 25,40 (1.000) | 33,33 (1.312) | 12,70 (.500) | 9,14 (.360) | - | - |
| DB | 25 | DB51212 | 53,16 (2.093) | 31,75 (1.250) | 47,04 (1.852) | 12,70 (.500) | - | 12,52 (.493) | 9,15 (.360) |
| DC | 37 | DC51214 | 69,44 (2.734) | 38,10 (1.500) | 63,50 (2.500) | 12,70 (.500) | - | 17,63 (.694) | 9,15 (.360) |
| DD | 50 | DD51216 | 67,06 (2.640) | 38,10 (1.500) | 61,11 (2.406) | 15,47 (.609) | - | 18,64 (.734) | 11,89 (.468) |



Kit consists of 1 shell, 1 cable clamp,
1 set screw
Mounting hardware included
2 screws \# 4-24 x 5/16 long self-tapping

| Materials and Finishes |  |
| :--- | :--- |
| Backshell Material: | Black Thermoplastic, <br> UL 94V-2 rated |
| Hardware Material: | Steel |
| Hardware Finish: | Yellow Chromate over <br> Cadmium or Zinc |



| $\begin{aligned} & \text { Shell } \\ & \text { Size } \end{aligned}$ | Layout | Part Number | $\begin{gathered} \mathrm{A} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \varnothing \mathrm{H} \\ \pm 0,25(, 010) \end{gathered}$ | $\begin{gathered} \mathrm{J} \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \text { K } \\ \pm 0,25(.010) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DE51219 | 37,95 (1.494) | 25,40 (1.000) | 24,99 (.984) | 12,70 (.500) | 7,14 (.281) | - | - |
| DA | 15 | DA51211 | 46,28 (1.822) | 25,40 (1.000) | 33,33 (1.312) | 12,70 (.500) | 9,14 (.360) | - | - |
| DB | 25 | DB51213 | 60,15 (2.368) | 31,75 (1.250) | 47,04 (1.852) | 12,70 (.500) | - | 12,52 (.493) | 9,15 (.360) |
| DC | 37 | DC51215 | 76,43 (3.009) | 38,10 (1.500) | 63,50 (2.500) | 12,70 (.500) | - | 17,63 (.694) | 9,15 (.360) |
| DD | 50 | DD51217 | 74,04 (2.915) | 38,10 (1.500) | 61,11 (2.406) | 15,47 (.609) | - | 18,64 (.734) | 11,89 (.468) |

## Dataphone



Available in 25 position only
Mounting hardware included
2 screws \# 4-40 x 11/16 long

| Materials and Finishes |  |
| :--- | :--- |
| Backshell Material: | Black Thermoplastic, <br> UL 94V-0 rated |
| Hardware Material: | Steel |
| Hardware Finish: | Clear Chromate over <br> Cadmium or Zinc |


| Shell <br> Size | Layout | Part <br> Number | Max. Cable <br> Entry |
| :---: | :---: | :---: | :---: |
| DB | 25 | DB51226-1B | $7,92(.312)$ |

## Quick Disconnect for IDC Cable

IDC


Kit consists of 1 front shell, 1 rear shell, 2 strain reliefs, 5 screws


* Order optional locking hardware separately.

| Materials and Finishes |  | $\begin{aligned} & \text { Shell } \\ & \text { Size } \end{aligned}$ | Layout | Part Number | $\underset{\text { max. }}{A}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,20(.008) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Material: |  |  |  |  |  |  |  |
|  | UL 94V-0 rated | DE | 9 | DE115386-1B | 40,69 (1.602) | 24,99 (.984) | 14,99 (.590) |
|  |  | DA | 15 | DA115386-2B | 49,00 (1.929) | 33,30 (1.311) | 23,29 (.917) |
|  |  | DB | 25 | DB115386-3B | 62,69 (2.468) | 47,04 (1.852) | 36,98 (1.456) |
|  |  | DC | 37 | DC115386-4B | 79,20 (3.118) | 63,50 (2.500) | 53,49 (2.106) |

## Quick Disconnect for Round Cable

## Straight and $90^{\circ}$ Exit

Kit consists of 1 front shell, 1 rear shell, 1 cable clamp, 1 spacer, 4 self-tapping screws, 2 machined screws

Materials and Finishes

| Material: | Black Thermoplastic, |
| :--- | :--- |
|  | UL 94V-0 rated |



* Order optional locking hardware separately.

| Shell <br> Size | Layout | Part <br> Number | A <br> max. | B <br> max. | $\mathbf{C}$ <br> $\pm 0,15(, 006)$ | Dax. <br> max. | $\mathbf{E}$ <br> min. | $\mathbf{F}$ <br> min. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DE115339 | $41,33(1.627)$ | $32,41(1.276)$ | $25,00(.984)$ | $16,51(.650)$ | $7,70(.303)$ | $6,70(.264)$ |
| DA | 15 | DA115339-1 | $49,63(1.954)$ | $32,41(1.276)$ | $33,30(1.311)$ | $16,51(.650)$ | $7,70(.303)$ | $6,70(.264)$ |
| DB | 25 | $D B 115339-2$ | $63,65(2.506)$ | $40,44(1.592)$ | $47,04(1.852)$ | $16,51(.650)$ | $7,70(.303)$ | $17,70(.697)$ |
| DC | 37 | $D C 115339-3$ | $79,86(3.144)$ | $42,42(1.670)$ | $63,50(2.500)$ | $16,51(.650)$ | $7,70(.303)$ | $17,70(.697)$ |
| DD | 50 | DD115339-4 | $77,57(3.054)$ | $42,42(1.670)$ | $61,10(2.406)$ | $19,51(.768)$ | $10,69(.421)$ | $17,70(.697)$ |

## Optional Locking Hardware/Mechanism

Optional hardware provides quick disconnect for either flat IDC cable or round jacketed cable.

Order 2 per connector

## Material:

Corrosion-resistant steel

Locking Hook


Locking Spring


| Lock Hook <br> PartNumber |
| :---: |
| 015-8755-000 |
| $015-8755-001$ |

NOTE: Not for use on rear panel mounted connectors.

## Screw Lock Assemblies

ITT Cannon offers the largest variety of locking and latching hardware.
Refer to the accessories selection guide on pages 198-199 for use with ITT Cannon backshells.

## Product Features

Ensures positive mating
Provides locking and latching for high vibration applications


Rear Panel Mount


## Male Screw Lock



Kit consists of 1 screw and 1 clip Order 2 per connector

| Material: | Steel |
| :--- | :--- |
| Finish: | Yellow Chromate over <br>  |


| Shell Size | Part Number | $\begin{gathered} \text { A } \\ \pm 0,38(, 015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| DE, DA, DB, DC | D20419 | 14,10 (.555) | 6,35 (.250) | 1,22 (.048) |
| $D E, D A, D B, D C$ | D20419-18 | 14,10 (.555) | 7,14 (.281) | 1,70 (.067) |
| $D E, D A, D B, D C$ | D20419-21 | 14,10 (.555) | 7,14 (.281) | 2,34 (.092) |
| DE, DA, DB, DC | D20419-104 | 14,10 (.555) | 7,92 (.312) | 2,34 (.092) |
| DD | D20420 | 16,66 (.656) | 6,35 (.250) | 1,22 (.048) |
| DD | D20420-13 | 16,66 (.656) | 7,14 (.281) | 1,70 (.067) |
| DD | D20420-15 | 16,66 (.656) | 7,14 (.281) | 2,34 (.092) |
| DD | D20420-86 | 16,66 (.656) | 7,92 (.312) | 2,34 (.092) |

Female Screw Lock
Kit consists of 1 nut, 3 washers, 1 lock
washer, 1 hex nut
Order 2 per connector
Material:


NOTE: (1) A 6 inch/pound (female) and 4 inch/pound (male) maximum torque during assembly is recommended on steel screw lock assemblies.
(2) A third flat washer is supplied for front panel mounting of tab shell connectors.

| Yellow Chromate <br> over Cadmium | Mil Spec <br> Part Number | Zinc With <br> Clear Chromate | A <br> $\pm 0,38(, 015)$ |
| :---: | :---: | :---: | :---: |
| D20418-2 | M24308/26-1 | D20418-80 | $7,92(.312)$ |
| D20418-50 | - | - | $12,70(.500)$ |
| D20418-39 | M24308/26-2 | - | $15,88(.625)$ |
| D20418-74 | - | - | $19,05(.750)$ |

Female Screw Lock for High Volume Applications


Order 2 per connector
Tool required for installation. See page 211.

| Material: | Steel |
| :--- | :--- |
| Finish: | Zinc |



NOTE: Not suitable for rear panel mounting

| Part <br> Number | Thread <br> Code | Nominal Panel Thickness |
| :---: | :---: | :---: |
| $980-2000-858$ | $\# 4-40$ | $1,09-0,91(.043-. .036)$ |
| $980-2000-859$ | M3 | $1,09-0,91(.043-.036)$ |

Screw Locks for Connectors with Integral Threaded Inserts


Jackpost


| Part | Thread Code |  |
| :---: | :---: | :---: |
| Number | THD A | THD B |
| D121073-39 | \#4-40 UNC-2B | \#4-40 UNC-2A |
| D121073-40 | M3 | \#4-40 UNC-2A |
| D121073-41 | \#4-40 UNC-2B | M3 |
| D121073-42 | M3 | M3 |

Kit consists of 1 jackpost, 1 lock washer Order 2 per connector

| Material: | Brass |
| :--- | :--- |
| Finish: | Nickel |

## Slide Lock Assemblies

ITT Cannon offers the largest variety of locking and latching hardware. Refer to the accessories selection guide on pages 198-199 for use with ITT Cannon backshells.

## Product Features

Ensures positive mating Provides locking and latching for high vibration applications


## Sliding Lock Retainer Assembly

screws, 2 lock washers, 2 hex nuts
Order 1 kit per connector

| Description | Material | Finish/ Treatment |
| :---: | :---: | :---: |
| Sliding Lock Plate | Stainless Steel | Passivated |
| Screw, Mounting | Steel | Yellow Chromate Over |
| Washer, Lock |  | Cadmium or |
| Nut, Hex |  | Znc |



| Shell <br> Size | Layout | Part <br> Number | A <br> $\pm 0,38(015)$ | B <br> $\pm 0,38(.015)$ | $C$ <br> $\pm 0,13(.005)$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DE51224-1 | $35,05(1.380)$ | $12,70(.500)$ | $25,00(.984)$ |
| DA | 15 | DA51220-1* | $43,70(1.720)$ | $12,70(.500)$ | $33,32(1.312)$ |
| DB | 25 | DB51221-1 | $57,40(2.260)$ | $12,70(.500)$ | $47,04(1.852)$ |
| DC | 37 | DC51222-1 | $73,86(2.908)$ | $12,70(.500)$ | $63,50(2.500)$ |
| DD | 50 | DD51223-1 | $71,47(2.814)$ | $15,47(.609)$ | $61,11(2.406)$ |

* Meets IEEE 802.3 Ethernet Specification


## Slide Lock Post Assemblies

| Kit consists of 1 post, 2 washers, 1 lock |
| :--- |
| washer, 1 hex nut |
| Order 2 kits per connector |
| Part Number: $\quad$ D53018 |
| Materials and Finishes |
| Material: $\quad$ Steel |
| Finish: $\quad$ Yellow Chromate over |



NOTE: When rear-mounting connector to a $1 / 16^{\prime \prime}$ panel, delete the 2 washers.

## Slide Lock Post for High Volume Applications



Order 2 per connector
Tool required for installation. See this page.

| Part Number: | $980-2000-860$ |
| :--- | :--- |
| Panel Thickness: | $1,09-0,91$ (.043-.036) |



Materials and Finishes

| Material: | Stainless Steel |
| :--- | :--- |
| Treatment: | Passivated |

Tool for High Volume Applications


## Spring Latch Assemblies

ITT Cannon offers the largest variety of locking and latching hardware. Refer to the accessories selection guide on pages 198-199 for use with ITT Cannon Connectors.

Product Features
Low Cost
Minimizes field connection time
Positive lock between connectors
Packaged 2 kits per bag

## Unlocked



## Locked



## Materials and Finishes

| Material: | Stainless Steel |
| :--- | :--- |
| Treatment: | Passivated |

## Spring Latch Plate Assembly



Kit consists of 1 plate, 1 screw, 1 lock washer,
1 hex nut
Order 2 kits per connector

## Spring Latch Assembly



Kit consists of 1 spring, 1 screw, 1 bracket,
1 lock washer, 1 hex nut
Order 2 kits per connector
Front panel mounting

## D Subminiature Accessories

Locking H ardware

## J ackscrew/J ackpost Assemblies

ITT Cannon offers the largestvariety of locking and latching hardware. Refer to the accessories selection guide on pages 198-199 for use with ITT Cannon Connectors.


J ackscrew Assembly


Kit consists of 2 studs, 2 heads, 1 tube retaining compound Order one kit per connector
Part Number: $\quad$ D110550

Materials and Finishes
Material: Stainless Steel


J ackpost Assembly


Kit consists of 2 posts, 2 hex nuts, 2 lock washers
Order one kit per connector

| Part Number: | D110551 |
| :--- | :--- |
| Materials and Finishes |  |
| Material: | Stainless Steel |
| Treatment: | Passivated |



NOTE: J ackpost is not compatible with rear-panel mount connectors.

## Guide Pin Plate

## Female



| Plate and Hardware Material: | Steel |
| :--- | :--- |
| Plate and Hardware Finish: | Yellow Chromate <br> over Zinc or <br> Cadmium |


| $\begin{aligned} & \text { Shell } \\ & \text { Size } \end{aligned}$ | Layout | Part Number | $\begin{gathered} \mathrm{A} \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{G} \\ \pm 0,41(.016) \end{gathered}$ | $\begin{gathered} \mathrm{H} \\ \pm 0,41(.016) \end{gathered}$ | $\pm 0,41(.016)$ | $\begin{gathered} K \\ \pm 0,41(.016) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DE111920 | 49,61 (1.953) | 40,08 (1.578) | 25,00 (.986) | 18,65 (.734) | 15,27 (.601) | 9,52 (.375) | 25,40 (1.000) | 30,58 (1.204) | 12,29 (.484) | 6,15 (.242) |
| DA | 15 | DA22214 | 57,96 (2.282) | 48,41 (1.906) | 33,32 (1.312) | 22,81 (.898) | 19,43 (.765) | 9,52 (.375) | 25,40 (1.000) | 38,91 (1.532) | 12,29 (.484) | 6,15 (.242) |
| DB | 25 | DB22254 | 71,63 (2.820) | 62,13 (2.446) | 47,04 (1.852) | 29,67 (1.168) | 26,29 (1.035) | 9,52 (.375) | 25,40 (1.000) | 51,21 (2.016) | 11,91 (.469) | 5,94 (.234) |
| DC | 37 | DC22071 | 88,11 (3.469) | 78,59 (3.094) | 63,50 (2.500) | 37,90 (1.492) | 34,52 (1.359) | 9,52 (.375) | 25,40 (1.000) | 67,49 (2.657) | 11,91 (.469) | 5,94 (.234) |
| DD | 50 | DD21961 | 85,72 (3.375) | 76,20 (3.000) | 61,11 (2.406) | 36,50 (1.437) | 33,32 (1.312) | 11,10 (.437) | 28,58 (1.125) | 65,10 (2.563) | 14,30 (.563) | 7,16 (.282) |



## Guide Pin Plate

Male


| Shell Size | Layout | Part Number | $\begin{gathered} \text { A } \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0.25(.010) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,38(.015) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{G} \\ \pm 0.13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{H} \\ \pm 0.25(.010) \end{gathered}$ | $\begin{gathered} \mathrm{J} \\ \pm 0.38(.015) \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ \pm 0,13(.005) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DE111919 | 49,61 (1.953) | 40,08 (1.578) | 33,91 (1.335) | 18,65 (.734) | 25,40 (1.000) | 19,05 (.750) | 25,00 (.984) | 12,29 (.484) | 30,58 (1.204) | 6,15 (.242) |
| DA | 16 | DA22213 | 57,94 (2.281) | 48,41 (1.906) | 42,24 (1.663) | 22,81 (.898) | 25,40 (1.000) | 19,05 (.750) | 33,32 (1.312) | 12,29 (.484) | 38,89 (1.531) | 6,15 (.242) |
| DB | 25 | DB22255 | 71,63 (2.820) | 62,13 (2.446) | 55,96 (2.203) | 29,67 (1.168) | 25,40 (1.000) | 19,05 (.750) | 47,04 (1.852) | 12,29 (.484) | 51,99 (2.047) | 6,15 (.242) |
| DC | 37 | DC22070 | 88,09 (3.468) | 78,42 (3.094) | 72,42 (2.851) | 37,90 (1.492) | 25,40 (1.000) | 19,05 (.750) | 63,50 (2.500) | 12,29 (.484) | 68,25 (2.687) | 6,15 (.242) |
| DD | 50 | DD21962 | 85,72 (3.375) | 76,20 (3.000) | 69,82 (2.749) | 36,50 (1.437) | 28,58 (1.125) | 22,20 (.874) | 61,11 (2.406) | 15,06 (.593) | 66,93 (2.635) | 7,52 (.296) |



## Connector Saver

## Connector Saver



Connector Savers are used to minimize wear on cable or panel connectors.

## Engaging Face, Pin Side



Note: Hardware removed for clarity.

| Shell <br> Size | Layout | Part <br> Numbers | $\mathbf{A}$ <br> $\pm 0,40(.015)$ | $\mathbf{B}$ <br> $\pm 0,25(.010)$ | $\mathbf{C}$ <br> $\pm 0,25(.010)$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DEBU111515 | $30,81(1.213)$ | $24,99(.984)$ | $16,92(.666)$ |
| DA | 15 | DABU111512 | $39,14(1.541)$ | $33,32(1.312)$ | $25,25(.994)$ |
| DB | 25 | DBBU111511 | $53,04(2.088)$ | $47,04(1.852)$ | $38,96(1.534)$ |

Note: DC-37 and DD-50 not available.
Specifications
Temperature: $-55^{\circ} \mathrm{C}$ to $105^{\circ} \mathrm{C}$
Current Rating: 7 A
Dielectric Withstanding Voltage: 500 VAC at Sea Level

Materials and Finishes

| Description | Material | Finish |
| :--- | :---: | :---: |
| Shells | Steel | Tin/Lead |
| Insulator | Black Thermoplastic, UL 94V-0 | - |
| Contacts | Copper Alloy | Gold Over Nickel |
| Spacer | Zinc Alloy | - |
| Locking Hardware | Steel | Clear Chromate Over Znc |

## Gender Changer

## Male/Male



Gender Changers modify the mating interface to allow connectors of the same genders to mate.

## Product Features

Low cost way to correct design errors
Optional hardware allows design flexibility


Note: Grounding dimples available on male/male only

| Shell <br> Size | Layout | Part Number <br> Without Hardware | Part Number <br> With Hardware | A <br> $\pm 0,38(.015)$ | B <br> $\pm 0,13(.005)$ | C <br> $\pm 0,13(, 005)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $D E$ | 9 | DE111805-1 | DE111805-5 | $30,81(1.213)$ | $24,99(.984)$ | $16,92(.666)$ |
| $D A$ | 15 | DA111806-1 | DA111806-5 | $39,14(1.541)$ | $33,32(1.312)$ | $25,25(.994)$ |
| $D B$ | 25 | $D B 111807-1$ | DB111807-5 | $53,04(2.088)$ | $47,04(1.852)$ | $38,96(1.534)$ |
| $D C$ | 37 | $D C 111808-1$ | DC111808-5 | $69,32(2.729)$ | $63,50(2.500)$ | $55,42(2.182)$ |

Note: DD-50 not available in male/male.

## Female/Female

ender Changers modify the mating interface to allow connectors of the same genders to mate.

## Product Features

Low cost way to correct design errors
Optional hardware allows design flexibility


| Shell <br> Size | Layout | Part Number <br> Without Hardware | Part Number <br> With Hardware | A <br> $\pm 0,38(.015)$ | B <br> $\pm 0,13(.005)$ | C <br> $\pm 0,13(.005)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DE111813 | DE111813-3 | $30,81(1.213)$ | $24,99(.984)$ | $16,33(.643)$ |
| DA | 15 | DA111810 | DA111810-3 | $39,14(1.541)$ | $33,32(1.312)$ | $24,66(.971)$ |
| DB | 25 | DB111811 | DB111811-2 | $53,04(2.088)$ | $47,04(1.852)$ | $38,38(1.511)$ |

Note: DC-37 and DD-50 not available for female/female.

## Specifications

Temperature: $-55^{\circ} \mathrm{C}$ to $105^{\circ} \mathrm{C}$
Current Rating: 3 A
Dielectric Withstanding Voltage: 500 VAC at Sea Level
Materials and Finishes

| Description | Material | Finish |  |
| :--- | :---: | :---: | :---: |
| Shells | Steel | Tin/Lead |  |
| Insulator | M/M | Glass Epoxy | - |
| F/F | Black Thermoplastic, UL 94V-0 | - |  |
| Rivets (M/M) | Copper Alloy | Gold Over Nickel |  |
| Locking Hardware | Copper Alloy | Tin/Lead |  |

## Dust Cap



Dust caps provide protection from moisture and dust for unused I/O ports.

## Product Features

Conductive Dust Caps provide a surface resistivity of at least $1 \times 10^{5} \mathrm{ohms} / \mathrm{sq}$ Dust Caps meet the static decay test requirements of MIL-B-81705C, Type II. Dust Caps have an integral flange for easy application and removal.

## Materials and Finishes

Material: $\quad$ Black Polyethylene

## Interfacial Seal



Interfacial seals provide moisture resistance at the mating interface.

Product Features
Other Interfacial Seals in the Combo D ${ }^{\circledR}$
layouts are available upon request.

| Materials and Finishes |
| :--- |
| Material: Silastic Sheet |


| Shell Size | Layout | Part Number | A | B |
| :---: | :---: | :---: | :---: | :---: |
| DE | 9 | DE53750 | 16,66 (.656) | 8,41 (.331) |
| DA | 15 | DA53750-1 | 24,99 (.984) | 8,41 (.331) |
| DB | 25 | DB53750-2 | 38,88 (1.531) | 8,41 (.331) |
| DC | 37 | DC53750-3 | 55,14 (2.171) | 8,41 (.331) |
| DD | 50 | DD53750-4 | 52,78 (2.078) | 11,10 (.437) |
| DC | 21WA4 | 075-0354-003 | 55,14 (2.171) | 8,41 (.331) |

Potting Shell


NOTE: C dim. applies at point of maximum integral interface length.

| Part Number | I.D. | A | B | C | D |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DE-59-20 | Socket | $20,32(.800)$ | $11,43(.450)$ | $16,36(.644)$ | $7,59(.299)$ |
| DA-59-20 | Socket | $28,45(1.120)$ | $11,68(.460)$ | $24,59(.968)$ | $7,62(.300)$ |
| DB-59-20 | Socket | $42,42(1.670)$ | $11,68(.460)$ | $38,25(1.506)$ | $7,49(.295)$ |
| DC-59-20 | Socket | $58,93(2.320)$ | $11,68(.460)$ | $54,81(2.158)$ | $7,37(.290)$ |
| DD-59-20 | Socket | $56,90(2.240)$ | $14,48(.570)$ | $53,11(2.091)$ | $10,41(.410)$ |
| $D E-60-20$ | Pin | $21,84(.860)$ | $12,95(.510)$ | $17,78(.700)$ | $8,92(.351)$ |
| DA-60-20 | Pin | $30,48(1.200)$ | $12,95(.510)$ | $26,52(1.044)$ | $9,02(.355)$ |
| $D B-60-20$ | Pin | $44,20(1.740)$ | $13,46(.530)$ | $39,60(1.559)$ | $9,09(.358)$ |
| $D C-60-20$ | Pin | $60,71(2.390)$ | $13,46(.530)$ | $56,90(2.240)$ | $9,37(.369)$ |
| $D D-60-20$ | Pin | $58,17(2.290)$ | $16,00(.630)$ | $54,28(2.137)$ | $12,04(.474)$ |

## D Subminiature

Selection Index Page
Reader's Resource
Dimensional Reference Data
Panel Mounting ..... 220
Panel Cutouts ..... 221
Contact Cavity Arrangements
Combo D® - Plug ..... 222
Combo D® - Receptacle ..... 223
Standard - Plug and Receptacle ..... 224
Pushfit/Boardlock - Standard and European ..... 225
Alternate Technical Configurations
50 Ohm Coaxial Contact - Straight and $90^{\circ}$ ..... 225
Bracket - Standard and European ..... 226
Hardware Views
Standard ..... 226
European ..... 227
Printed Circuit Board (PCB) Hole Patterns Combination Layouts Coaxial $90^{\circ}$ - Standard
Plug ..... 228
Receptacle ..... 231
Coaxial $90^{\circ}$ - European
Plug ..... 234
Receptacle ..... 236
Coaxial Straight - Standard/European
Plug238
Receptacle ..... 241
High Power $90^{\circ}$ - Standard
Plug ..... 244
Receptacle ..... 247
High Power $90^{\circ}$ - European
Plug ..... 250
Receptacle ..... 252
High Power/High Voltage Straight - Standard/European
Plug ..... 254
Receptacle ..... 257
$90^{\circ}$ PC Tails (Size 20 Signal Contacts only) - European Plug ..... 260
Receptacle ..... 263
Straight PC Tails (Size 20 Signal Contacts only) - Standard/European Plug ..... 266
Receptacle ..... 269
Standard Layouts $90^{\circ}$ Standard - Plug and Receptacle ..... 272
$90^{\circ}$ European - Plug and Receptacle ..... 273
Straight PC Tails - Plug and Receptacle Standard/European ..... 274
Lease Tooling ..... 275
Glossary of Terms ..... 276
Obsolete Products/Available Products Not Previously Listed ..... 282
Part Number Index ..... 283
Product Safety and Warranty ..... 297

## Panel Mounting

Figure 1A


SOCKET FRONT MOUNTING SOCKET REAR MOUNTING

Figure 1B

PIN REAR MOUNTING PIN FRONT MOUNTING


SOCKET FRONT MOUNTING SOCKET REAR MOUNTING

Figure 2



SOCKET REVERSE
FLOAT MOUNTING

SOCKET REVERSE FLOAT MOUNTING

## Panel Cutouts

## Standard Cutout

Rear Mounting Cutout (Optional)


## Front Panel Mounting



Standard Shell


Dual Float Mount Shell


Standard Shell


Dual Float Mount Shell

| Standard Shell |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shell Size | Mounting Method | $\begin{gathered} \mathrm{A} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{B} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{G} \\ \pm 0,05(.002) \end{gathered}$ | $\begin{gathered} \mathrm{H} \\ \pm 0,05(.002) \end{gathered}$ | $\pm 0,05(, 002)$ |
| DE | Front | 22,19 (.874) | 11,09 (.437) | 24,99 (.984) | 12,49 (.492) | 13,03 (.513) | 6,52 (.257) | 3,04 (.120) | 1,52 (.060) | 2,10 (.083) |
|  | Rear | 20,47 (.806) | 10,23 (.403) | 24,99 (.984) | 12,49 (.492) | 11,40 (.449) | 5,71 (.225) | 3,04 (.120) | 1,52 (.060) | 3,35 (.132) |
| DA | Front | 30,53 (1.202) | 15,26 (.601) | 33,32 (1.312) | 16,66 (.656) | 13,03 (.513) | 6,52 (.257) | 3,04 (.120) | 1,52 (.060) | 2,10 (.083) |
|  | Rear | 28,80 (1.134) | 14,40 (.567) | 33,32 (1.312) | 16,66 (.656) | 11,40 (.449) | 5,71 (.225) | 3,04 (.120) | 1,52 (.060) | 3,35 (.132) |
| DB | Front | 44,27 (1.743) | 22,14 (.872) | 47,04 (1.852) | 23,52 (.926) | 13,03 (.513) | 6,52 (.257) | 3,04 (.120) | 1,52 (.060) | 2,10 (.083) |
|  | Rear | 42,51 (1.674) | 21,25 (.837) | 47,04 (1.852) | 23,52 (.926) | 11,40 (.449) | 5,71 (.225) | 3,04 (.120) | 1,52 (.060) | 3,35 (.132) |
| DC | Front | 60,73 (2.391) | 30,37 (1.196) | 63,50 (2.500) | 31,75 (1.250) | 13,03 (.513) | 6,52 (.257) | 3,04 (.120) | 1,52 (.060) | 2,10 (.083) |
|  | Rear | 59,08 (2.326) | 29,54 (1.163) | 63,50 (2.500) | 31,75 (1.250) | 11,40 (.449) | 5,71 (.225) | 3,04 (.120) | 1,52 (.060) | 3,35 (.132) |
| DD | Front | 58,34 (2.297) | 29,18 (1.149) | 61,11 (2.406) | 30,55 (1.203) | 15,82 (.623) | 7,92 (.312) | 3,04 (.120) | 1,52 (.060) | 2,10 (.083) |
|  | Rear | 56,33 (2.218) | 28,16 (1.109) | 61,11 (2.406) | 30,55 (1.203) | 14,09 (.555) | 7,06 (.278) | 3,04 (.120) | 1,52 (.060) | 3,35 (.132) |
| Dual Float Mount Shell |  |  |  |  |  |  |  |  |  |  |
| Shell Size | Mounting Method | $\begin{gathered} A \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { B } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { C } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { D } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \text { F } \\ \pm 0,13(.005) \end{gathered}$ | $\begin{gathered} \mathrm{G} \\ \pm 0,05(.002) \end{gathered}$ | $\begin{gathered} \mathrm{H} \\ \pm 0,05(.002) \end{gathered}$ | $\underset{ \pm 0,05(, 002)}{ }$ |
| DE | Front | 23,01 (.906) | 11,50 (.453) | 24,99 (.984) | 12,49 (.492) | 13,84 (.545) | 6,93 (.273) | 2,23 (.088) | 1,11 (.044) | 2,10 (.083) |
|  | Rear | 21,28(.838) | 10,64 (.419) | 24,99 (.984) | 12,49 (.492) | 12,21 (.481) | 6,12 (.241) | 2,23 (.088) | 1,11 (.044) | 3,35 (.132) |
| DA | Front | 31,34 (1.234) | 15,67 (.617) | 33,32 (1.312) | 16,66 (.656) | 13,84 (.545) | 6,93 (.273) | 2,23 (.088) | 1,11 (.044) | 2,10 (.083) |
|  | Rear | 29,61 (1.166) | 14,80 (.583) | 33,32 (1.312) | 16,66 (.656) | 12,21 (.481) | 6,12 (.241) | 2,23 (.088) | 1,11 (.044) | 3,35 (.132) |
| DB | Front | 45,08 (1.775) | 22,55 (.888) | 47,04 (1.852) | 23,52 (.926) | 13,84 (.545) | 6,93 (.273) | 2,23 (.088) | 1,11 (.044) | 2,10 (.083) |
|  | Rear | 43,33 (1.706) | 21,66 (.853) | 47,04 (1.852) | 23,52 (.926) | 12,21 (.481) | 6,12 (.241) | 2,23 (.088) | 1,11 (.044) | 3,35 (.132) |
| DC | Front | 61,54 (2.423) | 30,78 (1.212) | 63,50 (2.500) | 31,75 (1.250) | 13,84 (.545) | 6,93 (.273) | 2,23 (.088) | 1,11 (.044) | 2,10 (.083) |
|  | Rear | 59,79 (2.354) | 29,89 (1.177) | 63,50 (2.500) | 31,75 (1.250) | 12,21 (.481) | 6,12 (.241) | 2,23 (.088) | 1,11 (.044) | 3,35 (.132) |
| DD | Front | 59,15 (2.329) | 29,59 (1.165) | 61,11 (2.406) | 30,55 (1.203) | 16,63 (.655) | 8,33 (.328) | 2,23 (.088) | 1,11 (.044) | 2,10 (.083) |
|  | Rear | 57,15 (2.250) | 28,57 (1.125) | 61,11 (2.406) | 30,55 (1.203) | 14,90 (.587) | 7,46 (.294) | 2,23 (.088) | 1,11 (.044) | 3,35 (.132) |

## Plug Contact Cavity Arrangements - Combo D®

Face View Pin Insert


## Receptacle Contact Cavity Arrangements - Combo D®

Face View Socket Insert


Note: Size 8 Cavities will Accommodate Removable Coaxial, High Power and/or High Voltage Contacts.

Plug Contact Cavity Arrangements
Face View Pin Insert

|  | $\left(\begin{array}{lllll}1 & 2 & 3 & 4 & 5 \\ 0 & 0 & 0 & 5 \\ 0 & 0 & 0 & 0 \\ 8 & 7 & 8 & 0 \\ \hline\end{array}\right.$ |  |  |
| :---: | :---: | :---: | :---: |
| Shell Size | E | A | B |
| Contact Arrangement | 9 | 15 | 25 |
| ContactSize | \# 20 | \# 20 | \# 20 |


C
37
$\# 20$



## Receptacle Contact Cavity Arrangements

Face View Socket Insert

## Shell Size Contact Arrangement ContactSize


$E$
9
\#20

## 

$C$
37
$\# 20$




| $A$ | B |
| :---: | :---: |
| 15 | 25 |
| $\# 20$ | $\# 20$ |

$B$
25 \# 20


Pushfit/Boardlock - Standard
Straight (Z)
$90^{\circ}$ (C)


Pushfit/Boardlock - European

## Straight (-146)

$90^{\circ}(-146)$


Alternate 50 Ohm Coaxial Configuration


## Hardware Views (Standard)



Tab Shells (K)
Clinch Nut (E)



| Dimensions - Plug |  |  |
| :---: | :---: | :---: |
|  | $\mathbf{K}$ | K <br> Shell Size |
| $\pm 0,317(.0125)$ | $\pm 0,25(.010)$ |  |
| $D E$ | $1,206(.0475)$ | - |
| DA | $1,206(.0475)$ | - |
| $D B$ | - | $1,52(.060)$ |
| $D C$ | - | $1,52(.060)$ |
| $D D$ | - | $1,52(.060)$ |


| Dimensions - Receptacle |  |
| :---: | :---: |
| Shell Size | $\pm 0,318(.0125)$ |
| DE | $1,206(.0475)$ |
| DA | $1,206(.0475)$ |
| DB | $1,206(.0475)$ |
| DC | $1,206(.0475)$ |
| DD | $1,206(.0475)$ |

## Dual Float Mount (Y)



## Alternate Bracket Configuration

Supplied with connectors without boardlocks.


Standard Footprint (P)



Plastic Bracket with Bushing (1A5N)


Metal Bracket with Bushing (IAFN)


Clinch Nut (X/E)


Plastic Bracket with Captive Nut (1ATN/1AVN)
Plastic Bracket with Post (1APN/1A6N)


Metal Bracket with Captive Nut (1A9N/1A7N)





| Shell Size | D | D |
| :--- | :---: | :---: |
| Contact Arrangement | $24 \mathrm{W7}$ | 36 W 4 |
| No. of Size 20 Cavities | $17 \# 20$ | $32 \# 20$ |
| No. of Size 8 Cavities | $7 \# 8$ | $4 \# 8$ |



| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,76(.030)$ | $1,14(.045)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |
| Size 8 Contact Type | Recommended PCB Hole $\varnothing$ |
| Coaxial (C or X) | $1,14(.045)$ |





## Shell Size Contact Arrangement No. of Size 20 Cavities No. of Size 8 Cavities


$0 \# 20$
8 \# 8

$\longleftarrow \quad 63,50(2.500)$ $\qquad$


Shell Size


| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,76(.030)$ | $1,14(.045)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(120)$ |
| With Boardlock | $3,10(.122)$ |


| Size 8 Contact Type | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| Coaxial (C or $X)$ | $1,14(.045)$ |



| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,76(.030)$ | $1,14(.045)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |
| Size 8 Contact Type | Recommended PCB Hole $\varnothing$ |
| Coaxial (C or X) | $1,14(.045)$ |





> Shell Size Contact Arrangement No. of Size 20 Cavities No. of Size 8 Cavities



| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |
| Size 8 Contact Type | Recommended PCB Hole $\varnothing$ |
| Coaxial (C or $X)$ | $1,14(.045)$ |

Shell Size
Contact Arrangement
No. of Size 20 Cavities
No. of Size 8 Cavities


Shell Size
Contact Arrangement
No. of Size 20 Cavities
No. of Size 8 Cavities
A
11 W 1
$10 \# 20$
$1 \# 8$


Shell Size Contact Arrangement No. of Size 20 Cavities No. of Size 8 Cavities


B
13W3 10 \# 20
3 \# 8


| Shell Size | B | 0,60 (.024) | 1,00 (.039) |
| :---: | :---: | :---: | :---: |
| Contact Arrangement | 17W2 15 | Mounting Type | Recommended PCB Hole $\varnothing$ |
| No. of Size 20 Cavities No. of Size 8 Cavities | 15\#20 | Without Boardlock | 3,05 (.120) |
|  |  | With Boardlock | 3,10 (.122) |
|  |  | Size 8 Contact Type | Recommended PCB Hole $\varnothing$ |
|  |  | Coaxial ( Cor X) | 1,14 (.045) |



Shell Size
Contact Arrangement
No. of Size 20 Cavities
No. of Size 8 Cavities



| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |
| Size 8 Contact Type | Recommended PCB Hole $\varnothing$ |
| Coaxial (C or X) | $1,14(.045)$ |



Shell Size Contact Arrangement No. of Size 20 Cavities No. of Size 8 Cavities


A
$3 W 3$
$0 \# 20$
$3 \# 8$


A 7 W 2
$5 \# 20$
$2 \# 8$


Shell Size Contact Arrangement No. of Size 20 Cavities No. of Size 8 Cavities


Shell Size
Contact Arrangement No. of Size 20 Cavities No. of Size 8 Cavities


| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| $0,76(.030)$ | $1,14(.045)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |



B
13W3 10\#20


Size 8 Contact Type Recommended PCB Hole $\varnothing$
Coaxial (Cor X) $\quad 1,14(.045)$


Shell Size
Contact Arrangement
No. of Size 20 Cavities
No. of Size 8 Cavities



Shell Size
Contact Arrangement No. of Size 20 Cavities No. of Size 8 Cavities

| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| $0,76(.030)$ | $1,14(.045)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |
| Size 8 Contact Type | Recommended PCB Hole $\varnothing$ |
| Coaxial (Cor X) | $1,14(.045)$ |

$C$
27 W 2
$25 \# 20$
$2 \# 8$


## Contact Arrangement No. of Size 20 Cavities No. of Size 8 Cavities

| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| $0,76(.030)$ | $1,14(.045)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |
| Size 8 Contact Type | Recommended PCB Hole $\varnothing$ |
| Coaxial (C or X) | $1,14(.045)$ |




Shell Size
Contact Arrangement
No. of Size 20 Cavities
No. of Size 8 Cavities


Shell Size Contact Arrangement No. of Size 20 Cavities No. of Size 8 Cavities



$$
\begin{gathered}
\text { C } \\
\text { 21WA4 } \\
17 \# 20 \\
4 \# 8
\end{gathered}
$$



| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ | $C$ <br> $27 W 2$ <br> 20 |
| :---: | :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ | 2520 |
| $2 \# 8$ |  |  |




Shell Size
Contact Arrangement
No. of Size 20 Cavities
No. of Size 8 Cavities

D
43 W 2
$41 \# 20$
$2 \# 8$


D
47W1
46 \# 20
1\#8

| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| $0,76(.030)$ | $1,14(.045)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |
| Size 8 Contact Type | Recommended PCB Hole $\varnothing$ |
| Coaxial (C or X) | $1,14(.045)$ |


| Shell Size | B |
| :--- | :---: |
| Contact Arrangement | $9 W 4$ |
| No. of Size 20 Cavities | $5 \# 20$ |
| No. of Size 8 Cavities | $4 \# 8$ |



| Size 8 Contact Type | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| High Power (H) | $3,56(.140)$ |



C
21WA4
$17 \# 20$
$17 \# 20$
$4 \# 8$



Shell Size

| Shell | 24ize |
| :--- | :---: |
| Contact Arrangement | $17 \# 20$ |
| No. of Size 20 Cavities | $7 \# 8$ |
| No. of Size 8 Cavities |  |

    Shell Size D
    Contact Arrangement 43W2
    No. of Size 20 Cavities \(41 \# 20\)
    No. of Size 8 Cavities 2 \# 8
    


| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,76(.030)$ | $1,14(.045)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |
| Size 8 Contact Type | Recommended PCB Hole $\varnothing$ |
| High Power ( H$)$ | $3,56(.140)$ |




C
$8 W 8$
$0 \# 20$

| Contacte Arrangement |  |
| :--- | :--- |
| Noo of Size 20 Cavities | $0 \# 20$ |

Shell Size
Contactarrangement
No. of Size 2 Cavities
No. of Size 8 Cavities

C Contact Arrangement No. of Size 8 Cavities




## Shell Size <br> Contact Arrangement <br> No. of Size 20 Cavities <br> No. of Size 8 Cavities

| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,76(.030)$ | $1,14(.045)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |
| Size 8 Contact Type | Recommended PCB Hole $\varnothing$ |
| High Power (H) | $3,56(.140)$ |



Contact Arrangement No. of Size 20 Cavities No. of Size 8 Cavities



B
$5 W 5$
$0 \# 20$
$0 \# 20$
$5 \# 8$


| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |
| Size 8 Contact Type | Recommended PCB Hole $\varnothing$ |
| High Power (P) | $3,28(.129)$ |





B
13W3
10 \# 20
$3 \# 8$


| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |
| Size 8 Contact Type | Recommended PCB Hole $\varnothing$ |
| High Power (P) | $3,28(.129)$ |



Shell Size
Contact Arrangement
No. of Size 20 Cavities
No. of Size 8 Cavities




| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |
| Size 8 Contact Type | Recommended PCB Hole $\varnothing$ |
| High Power (P) | $3,28(.129)$ |

${ }^{C}$ 27W2
2 \#8





## Shell Size


43W2
$41 \# 20$
$2 \# 8$


| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| $0,76(.030)$ | $1,14(.045)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |
| Size 8 Contact Type | Recommended PCB Hole $\varnothing$ |
| High Power (H) | $3,56(.140)$ |
| High Voltage (V) | $1,96(.077)$ |



## PC B H ole Pattern - Standard/European



## Shell Size Contact Arrangement <br> No. of Size 20 Cavities

No. of Size 8 Cavities


Shell Size

## Contact Arrangement <br> No. of Size 20 Cavities

 No. of Size 8 Cavities| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| $0,76(.030)$ | $1,14(.045)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |
| Size 8 Contact Type | Recommended PCB Hole $\varnothing$ |
| High Power (H) | $3,56(.140)$ |
| High Voltage (V) | $1,96(.077)$ |



ס

| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| $0,76(.030)$ | $1,14(.045)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |
| Size 8 Contact Type | Recommended PCB Hole $\varnothing$ |
| High Power (H) | $3,56(.140)$ |
| High Voltage (V) | $1,96(.077)$ |



Shell Size Contact Arrangement No. of Size 20 Cavities No. of Size 8 Cavities


A
7W2
$5 \# 20$
$0 \# 8$


A
11 W 1
10 \#20


Shell Size
Contact Arrangement
17W2
15 \# 20
No. of Size 8 Cavities
0 \# 8


B
21W1
$20 \# 20$
$0 \# 8$


Shell Size
Contact Arrangement
No. of Size 20 Cavities
No. of Size 8 Cavities
$\stackrel{C}{C}$
13W6
7\#20



## Contact Arrangement No. of Size 20 Cavities

No. of Size 8 Cavities

## $C$ 17 W 5 $12 \# 20$ <br> 0 \# 8

C
21WA4
17 \# 20



| Shell Size | D |
| :--- | :---: |
| Contact Arrangement | 24 W7 |
| No. of Size 20 Cavities | $17 \# 20$ |
| No. of Size 8 Cavities | $0 \# 8$ |



Shell Size D
$43 W 2$
$41 \# 20$
$0 \# 8$

D
36 W 4
$32 \# 20$
0 \# 8


Contact Arrangement
No. of Size 20 Cavities

| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |



Contact Arrangement
No. of Size 20 Cavities
No. of Size 8 Cavities


Shell Size
Contact Arrangement
No. of Size 20 Cavities
No. of Size 8 Cavities


$$
\begin{gathered}
\text { B } \\
13 W 3 \\
10 \# 20 \\
0 \# 8
\end{gathered}
$$



Shell Size
Contact Arrangement
No. of Size 20 Cavities
No. of Size 8 Cavities
B
17 W 2
$15 \# \# 2$
$0 \# 8$


B
21W1
20 \# 20
0 \# 8

| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |

13W6
$7 \# 20$
$0 \# 8$

Shell Size
Contact Arrangement
No. of Size 20 Cavities No. of Size 20 Cavities
No. of Size 8 Cavities


$$
\begin{aligned}
& \text { 17W5 } \\
& 10 \text { \# }
\end{aligned}
$$

0 \# 8

0

## Shell Size Contact Arrangement No. of Size 20 Cavities No. of Size 8 Cavities



| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |



| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |



Shell Size Contact Arrangement No. of Size 20 Cavities No. of Size 8 Cavities


Shell Size
Contact Arrangement No. of Size 20 Cavities B 5\#20
$B$
$21 \mathrm{W1}$
$20 \# 20$
$0 \# 8$


Shell Size
Contact Arrangement
No. of Size 20 Cavities
No. of Size 8 Cavities

B 13W3
$10 \#$ 10 \# 20


W
\# 20
\# 8
0 \# 8



A
7 W 2
$5 \# 20$
0 \# 8


A
11W1
10\#20
0 \# 8
20

| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |



ס



Shell Size Contact Arrangement No. of Size 20 Cavities No. of Size 8 Cavities

| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |



Shell Size
Contact Arrangement No. of Size 20 Cavities No. of Size 8 Cavities


A
7W2
$5 \# 20$
$0 \# 8$
0 \# 8


A
11W1
$10 \# 20$
$0 \# 8$


Shell Size
Contact Arrangement No. of Size 20 Cavities No. of Size 8 Cavities

B
17W2
15 \# 20
0 \# 8


| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |



Shell Size
Contact Arrangement
No. of Size 20 Cavities
No. of Size 8 Cavities
${ }^{C}$
13W6
7\#20
0 \# 8


## Shell Size <br> Contact Arrangement No. of Size 20 Cavities No. of Size 8 Cavities

$$
\begin{gathered}
\text { C } \\
17 W 5 \\
12 \# 20 \\
0 \# 8
\end{gathered}
$$



Shell Size
Contact Arrangement No. of Size 20 Cavities No. of Size 8 Cavities $C$
25 W 3
$22 \# 20$
$0 \# 8$
$C$
$27 W 2$
$25 \# 20$
0 \# 8

| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |



Shell Size
Contact Arrangement
No. of Size 20 Cavities
No. of Size 8 Cavities


Shell Size
Contact Arrangement
No. of Size 20 Cavities
No. of Size 8 Cavities

D
24W7
$17 \# 20$
$0 \# 8$


D
36W4
32 \# 20
0 \# 8


ס

| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |



9 Contacts


## 15 Contacts




37 Contacts


50 Contacts

| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,76(.030)$ | $1,14(.045)$ |
| $1,00(.040)$ | $1,40(.055)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |



9 Contacts


## 15 Contacts



25 Contacts


37 Contacts


50 Contacts

| Signal Contact $\varnothing$ | Recommended PCB Hole $\varnothing$ |
| :---: | :---: |
| $0,60(.024)$ | $1,00(.039)$ |
| Mounting Type | Recommended PCB Hole $\varnothing$ |
| Without Boardlock | $3,05(.120)$ |
| With Boardlock | $3,10(.122)$ |

## PC B H ole Pattern - Standard/E uropean



37 Contacts


15 Contacts


50 Contacts


Products: D*A, MDSM, 75 Ohm Crimp Coax

The ABT-607 is a pneumatic powered and controlled machine. It is designed for customers with moderate volume. This machine is designed to semi-automatically crimp stamped and formed contacts onto pre-stripped stranded or single conductor electrical wire. This machine will accomodate size 34 thru 12 AWG wire and is actuated by the use of a foot pedal.

Machine Crimp Rate: 800 per hour
Power Requirements: Pneumatic $=100$ psi, 2 cu. ft. per min.


ABT-620 UCCS


Products: D*A, MDSM

The ABT-620 Universal Cannon Crimper/Stripper is a pneumatic powered, microprocessor controlled machine. It is designed to semi-automatically strip insulation from stranded or single conductor electrical wire and attach a stamped and formed contact by crimping. The machine will accommodate 34 thru 12 AWG wire. Primary application of the machine is the termination of jacketed cable where the individual leads cannot be stripped on fully automated equipment. The ABT-620 UCCS operates automatically upon insertion of a wire or it can be switched over to foot pedal operation as desired.

Machine Strip/Crimp Rate: 1200+ per hour
Power Requirements: Electrical $=115 \mathrm{VAC}, 60 \mathrm{~Hz}, 20 \mathrm{~A}$
Pneumatic $=80 \mathrm{psi}, 3 \mathrm{cu}$. ft. per min.


## Products: D*MA

The CBT-646, Vibra-Bowl Crimper is a pneumatically powered, electronically controlled machine. It is designed to semi-automatically crimp closed barrel, machined contacts, as used in the aerospace and commercial industries. The machine will accommodate wire sizes 30 thru 12 AWG. The CBT-646 is actuated automatically upon insertion of a pre-stripped stranded or single conductor wire.

Machine Crimp Rate: 1300+ per hour
Power Requirements: Electrical $=115 \mathrm{VAC}, 60 \mathrm{~Hz}, 5 \mathrm{~A}$ Pneumatic $=85 \mathrm{psi}, 2 \mathrm{cu}$. ft. per min.

## Glossary of Terms

In every job speciality there are certain words and phrases used by the "insiders" which after a time become almost a language unique to that speciality. D Subminiature technology is a typical example of that condition.

The following pages provide some explanations, in an attempt to clarify some of the terms that are commonly used by engineers and sales staff at ITT Cannon.

The list is not comprehensive, but highlights many of the expressions commonly used. Should you have any comments or additions please contact us. Feedback will be appreciated.

Accelerated Aging - A connector test in which temperature, voltage, current, or other parameters are increased beyond the normal operating values to observe deterioration in a relatively short period of time.

Accessories - Auxiliary devices such as cable clamps, endbells, gaskets, or any number of mechanical hardware devices that can be added to a connector.

Alloy - A composition of two or more elements, of which at least one is a metal. In connector applications it is usually a combination of metals which is used to create an alloy superior in performance to any of its individual components.

Alternating Current - A flow of electricity which reaches a maximum in one direction, decreases to zero, then reverses itself and reaches maximum in the opposite direction. This cycle is repeated continuously. The number of such cycles per second is the frequency. The average value of the voltage during any cycle is zero. Abbreviated ac.

Ambient Temperature - The temperature of the environment surrounding the connector. Usually the air. Normally used as the reference when specifying the OPERATING TEMPERATURE range of the connector.

Ampere - A unit of electrical current or rate of flow of electrons. One volt across one ohm of resistance causes a current of 1 ampere. Abbreviated Amp or A.

Anodize - A protective, insulating oxide layer formed on a metal by electrolytic action. Occasionally used as the outer most layer in connector plating, anodize is a very tough, nonconductive plating.

Attenuation - Power loss in an electrical system, expressed in decibels.

AWG - American Wire Gauge. A standard for wire diameters based on the approximate circular mil area of the wire. As numbers get larger, wire diameters decrease in size (a size 16 AWG wire has a larger diameter than a size 22 AWG).

Backshell - (Also known as Endbell) The outer rear end of the connector which is attached by means of internal threads or screws. It adapts the connector to its wire connections in a variety of ways. Typical backshells might have cable clamps to secure a wire bundle, ridges for heat shrink tubing, pipe threads, or shielded termination mechanisms. Backshells may be straight, $90^{\circ}$, or $45^{\circ}$.

Bandwidth - The range of frequencies within which performance falls within specific limits. Usually the bandwidth is given as an operating range and the operating specifications apply only to that bandwidth, unless otherwise stated.

Bar - A centimeter-gram-second unit of pressure (force exerted on a unit of area) equal to $1,000,000$ dynes per square centimeter. Formerly known as microbar. Its symbol is $b$.

Base Metal - The metal which the connector or connector component is made and over which various platings will be deposited.

Beryllium Copper - An alloy of copper used to make contacts. It is relatively expensive, but has superior spring qualities, is resistant to fatigue, and can operate at higher temperatures than other materials such as phosphor bronze. It is used when numerous insertion and extraction cycles are required.

Body - The main portion of the connector made of the shell, insulator, and contacts.

Boot - A rear accessory, usually made of a resilient material, which is used around a multiconductor cable to add additional insulation, strength, abrasion resistance, or sealing.

Brass - Metal alloy of copper and zinc used for contacts. It is low cost, an excellent conductor, and resists fatigue.

Breakdown - An electrical discharge through a connector insulator or insulation on a wire. A catastrophic failure mode.

Breakdown Voltage - The voltage at which an insulator ruptures.

Breakout - The point at which wires are separated from a multi-conductor cable or wire bundle for routing to other points.

C - Abbreviation for Centigrade, or more properly Celsius, since the term Centigrade was officially abandoned by international agreement in 1948. See CELSIUS.

Cable Assembly - A cable (or bundle of cables) with plugs and/or receptacles on each end.

Cable Clamp - A rear connector clamping accessory which tightens over a cable or wire bundle to provide strain relief to the cable. The cable clamp may be part of a more elaborate endbell or it may be used alone. Some cable clamps also provide cable jacket sealing using a resilient gland; for example the MS3057-C, others provide only strain relief.

Cadmium - A metallic element chemically related to zinc and mercury, widely used for plating. It has an extraordinary ability to resist outdoor corrosion. It is especially resistant to alkali. Cadmium is electrically conductive and it is easy to solder. Its symbol is Cd .

CECC - Abbreviation for Electronic Components Committee of CENELEC, the European committee for Electrotechnical Standardization. CECC uses the IEC test methods, and thus is based upon worldwide standards.

Celsius - A temperature scale in which the freezing point of water is $0^{\circ}$ and the boiling point is $100^{\circ}$ at normal atmospheric pressure. Formerly known as Centigrade, but officially changed to Celsius by international agreement in 1948.

CEN - Abbreviation for European Committee for Standardization. A European standards group corresponding to the ISO at the European level.

CENELEC - Abbreviation for European Committee for Electrical Standardization. A European standards group corresponding to the IEC at the European level.

Chamfer - A bevel cut on the inside edge of an insulator contact cavity or a mounting hole. In a contact cavity the chamfer is intended to guide the mating pin into the cavity. In a mounting hole it is a countersink to accept a cone shaped bolt.

Characteristic Impedance - The characteristic impedance of a transmission line is the impedance of the line when it is terminated in a perfect load (a load that absorbs all the energy and reflects none, such that VSWR $=1.00$ ).

Clearance Hole - See Through Hole.
Closed Entry - An insulator design which limits the diameter of the mating contacts.

## Glossary of Terms

Closed Socket Contact - A socket contact in which the mating cavity limits the entry of a contact or probe having a diameter larger than the mating pin.

Coax - Abbreviation for coaxial.
Coaxial Cable - A cable that comprises a single copper wire surrounded by insulating material, wire shielding or mesh, and a plastic protective sheath.

Component - An essential functional part of the connector.

Contact - The conductive element in a connector which makes the actual connection between the wire and the mating connector for the purpose of transferring electrical energy. Ideally the contact should add nothing to the circuit. In the real world, however, contacts typically have a small CONTACT RESISTANCE and associated potential drop.

Contact Alignment - The overall play that a contact has in the insulator cavity to allow the mating contacts to self align. Also called contact float.

Contact Arrangement - See LAYOUT.
Contact Cavity - A defined hole in the connector insulator into which the contacts fit. The cavities are generally marked with a unique designation or number for ease of identification.

Contact Resistance - The maximum amount of resistance which a contact introduces into the connection when carrying a specified current (usually stated in milliohms). When not stated, values are typically given for "Initial" or "new" contacts. Most specifications also limit the maximum resistance during or after each of a series of extreme tests, such as "Contact Resistance After Corrosion Test". These figures are typically slightly higher than "Initial".

Contact Retention - The maximum allowable axial load which can be applied to a contact from either direction without it being dislodged from the insulator. Usually stated in Newtons or pounds of force.

Contact Separation Force - The force required to separate a pair of mated contacts. Usually stated in Newtons or pounds of force.

Contact Size - This usually relates to the maximum size wire this contact can nominally accommodate. It is based on that AWG size most closely corresponds to the circular mil area of the engaging end of a pin contact for that size. For example, a size 16 contact can accomodate a size 16 AWG wire maximum and the pin corresponds to the CMA of a size 16 AWG. Note, however, that oversized crimp pots are available for some crimp contacts which will allow, for example, a size 16 contact to accommodate a size 14 AWG wire.

Contact Spacing - The distance between the centers of adjacent contacts.

Creepage - The conduction of electricity across the surface of an insulator.

Creepage Distance - The shortest distance between contacts of opposite polarities, or between a live contact and ground, measured over the surface of the insulator.

Creepage Path - A path across the surface of the insulator between two conductors. Lengthening the path reduces the possibility of arc damage.

Crimp - A method of attaching a contact to a wire through the application of pressure.

Crimp Contact - A contact which is terminated to a wire by means of crimping with an appropriate die and tool. After termination, an insertion tool is normally used to insert the crimped contact into the connector. Removable crimp contacts can be FRONT RELEASE or REAR RELEASE. An extraction tool is usually required to remove the contact.

Crosstalk - Undesired electrical currents in conductors caused by electromagnetic or electrostatic coupling from other conductors or from external sources. Also, leakage of optical power from one optical conductor to another.

CSA - Abbreviation for Canadian Standards Association.

Current - The movement of electrons through a conductor. Current is measured in amperes. Its symbol is L.

Current Rating - The maximum current that a particular wire, contact, or connector can accommodate. NOTE: When several wires are used in a single connector or elevated temperature or altitude is involved, derating curves must be applied to these ratings. A typical derating system is MIL-W-5088 which allows the user to calculate the derating effects of current, ambient temperature, number of wires in the bundle, and altitude.

Decibel - A standard unit of measure for transmission gain or loss. It expresses the ratio of power input to power output. Abbreviated dB. The term dBm is used when 1 milliwatt is the reference level.

Derating - To reduce the voltage, current, or power rating of a connector to improve its reliability or to permit operation at high ambient temperatures or altitudes.

Derating Curve - A graph of the change in power handling capability of a connector as a function of ambient temperature or altitude. Typically the graphed function is curved, hence the name.

Diallyl Phthalate - A thermosetting plastic used for insulators and some types of connector housings. It has outstanding resistance to chemicals, excellent dimensional stability, and superior electrical insulating properties.

Dielectric - An insulator used to isolate two conductors having a low loss factor (RF cables). The perfect insulator is a vacuum.

Dielectric Constant - That property (K) of an insulating material which is the ratio of the parallel capacitance (C) of a given configuration of electrodes with the material as the dielectric, to the capacitance of the same electrode configuration with a vacuum as the dielectric.

Digital - A signal comprising discrete elements.
DIN - Abbreviation for Deutsche Industrie Norm, a German standards organization.

Direct Current - An essentially constant value of current that flows in only one direction. Abbreviated dc.

Dust Cap - A cover used in place of a mating connector to seal it against dirt and moisture. Usually secured to the connector by a captive chain, wire, or rope.

Electroplating - To deposit a metal on the surface of a conductor using electrolysis.

EMI/RFI - Electro-Magnetic Interference and Radio Frequency Interference. This is unwanted stray electronic radiation which may enter, and/or be emitted by an electronic system. The most common method of shielding interconnections againstthis radiation is to use wires with a metallic braided shield and a connector system which will extend the shield through the interconnection. This type of design will keep radiation from entering, or being emitted by the system. Backshells for shielded cable and connectors with threads or grounding fingers are typically used for this purpose. Call for the specific EMI/RFI accommodations of the connectors in this catalog.

## Glossary of Terms

EN - Abbreviation for Euro Norm. A European market-wide product standard.

Endbell - See BACKSHELL.
Extraction Tool - A device used to remove a (removable) contact from a connector insulator. The extraction tool may be inserted into the mating face of the insulator (FRONT RELEASE) or the wire side (REAR RELEASE). In either case, the contact comes out the rear, or wire side, of the connector.

Fahrenheit - A temperature scale in which the freezing point of water is defined as $32^{\circ}$ and the boiling point is $212^{\circ}$ at normal atmospheric pressure. See the conversion tables for converting Fahrenheit to Celsius. Abbreviated F.

Female Contact - See SOCKET CONTACT.
Ferrule - A bell shaped ring which is placed over a WIRE SEALING GROMMET to provide uniform axial compression of the grommet and to minimize the transmission of torque to the grommet when the backshell is screwed on to the rear of the connector. Ferrules are a part of the sealing mechanism at the rear of a connector. Ferrules are normally a separate component part of the connector although some backshells have integrated ferrules. Ferrules are usually made from a thermoplastic material, but occasionally ferrules are made of metal.

Finish - The metalic coatings used on contacts and metal connectors. These are thin layers of metal designed to improve conductivity, solderability, or to resistcorrosion. Typical contact finishes are gold or silver. Typical shell finishes are olive drab over cadmium, electroless nickel, or black anodize.

Flange - A square mounting flange with four mounting holes for bolting the connector to a panel. The mounting holes may be through holes or threaded.

Flanged Receptacle - (Also known as a Box Mount or Wall Mount) The shell of this connector has a square flange with mounting holes at each corner. Mounting holes are usually through holes, but may be threaded. Flanged receptacles can usually be front or rear panel mounted depending upon panel thickness. Some connectors have two different versions, one for front mounting, and one for rear panel mounting.

Flash Plating - As commonly used in connector terminology, flash refers to extremely thin platings of metal, for example: gold flash is a very thin plating of gold. So thin, that the thickness is generally not specified.

Front Mounting - A receptacle that can only be mounted to the front of a panel with its mounting FLANGE outside the equipment.

Front Release - For crimp type removable contacts, front release means that the appropriate extraction tool is inserted from the front, or mating face, of the connector. The contact is then pushed out the rear (wire side) of the connector.

Gas Tight - The mating of two contact surfaces which are so tight that corrosive gasses can not enter the joint.

Gold - A precious metal that is more conductive than silver or copper. Because it does not corrode and is highly conductive, it is used as plating for contacts. Its chemical symbol is Au.

Grommet Cavity - A defined hole in the WIRE SEALING GROMMET through which the wires are passed. The cavities are generally marked with a unique designation or number for ease of use.

Guide Pin - A special pin which is inserted into a socket contact before the contact can be inserted into the connector insulator. Guide pins provide a rounded surface at the front of the socket and greatly aid in pushing the contact into the insulator thus avoiding damage to both the insulator and the contact. Typically, small size socket contacts require the use of guide pins while larger sizes can be inserted without them.

Harness - A group of wires or cables bundled together with attached connectors and/or components in a preshaped assembly.

Hz - Symbol for Hertz, an international unit of frequency equal to one cycle per second. That is, $20,000 \mathrm{~Hz}$ is 20,000 cycles per second.

I/O - Input/Output
IEC - Abbreviation for the International Electrotechnical Commission. An international organization that develops standards exclusively for electrical engineering. CENELEC is the equivalent organization at the European level.

Impedance Match - When a transmission line is terminated so that VSWR $=1.00$. Another definition is when a source is terminated in an impedance that allows optimum energy transfer.

Indentor - The part of a crimping die which indents the contact barrel to form the actual crimp. Indentors normally make six or eight multiple indentions for each crimp.

Initial - A test result taken prior to any other environmental testing. For example, contact resistance is frequently specified "Initial", that is, with "new" contacts. Most specifications also limit the maximum resistance during or after each of a series of extreme tests, such as "Contact Resistance After Corrosion Test". These figures are typically slightly higher than "Initial".

Insert - See INSULATOR.
Insert Arrangement - See LAYOUT.
Insert Retention Force - The maximum allowable force which should be applied to the face of the insulator without dislodging it from the shell or causing any change in connector performance specifications. Usually stated in Newtons or pounds of force.

Insertion Force - The effort, usually stated in ounces or Newtons, required to engage two contacts or connector halves.

Insertion Loss - The attenuation that results when a transducer is inserted in a transmission line. It is the ratio of the power input to the transducer to the power out of the transducer expressed in decibels.

Insertion Tool - A small, hand-held tool used to insert contacts into a connector.

Insulation - A material that has high electrical resistance and is suitable for covering or encasing electrical components to prevent a short circuit.

Insulation Displacement Connector (IDC) - A connector contact with sharp tines which pierce and displace the wire insulation and make direct electrical connection with the conductor. Normally used with multipin connectors which must be terminated to flat cable. This is a fast, low cost method to terminate many conductors simultaneously.

Insulation Resistance - The minimum resistance (usually stated in Megohms) between adjacent contacts and between the contacts and the shell at a specific voltage. When not stated, values are typically given for new insulators. Most specifications also specify minimum resistance figures during or after each of a series of extreme tests, such as "Insulation Resistance During Dry Heat' ${ }^{\prime}$

Insulation Support - An extended portion at the rear of a crimp contact that is crimped around the wire insulation to provide extra strain relief. This crimp is in addition to the crimp over the conductor which provides the actual electrical termination.

## Glossary of Terms

Insulator - The insulating element into which the contacts are mounted in a connector. This can be a resilient material, thermoplastic, or a thermoset compound, among other materials.

Insulator Rotation - A method of differentiating a circular connector if more than one connector with the same sex and layout is to be used in a system. The insulator is permanently positioned in the shell so that only a connector with the same degree of rotation can be mated with it. Possible rotations are specific to each layout with some layouts having many possible rotations and others having none. A chart of valid rotations is listed by layout for connectors capable of being rotated. Most connector series use the military convention of assigning letter designations for specific degrees of rotation (for example: W, X, Y, Z). See KEYING.

Interchangeable - The characteristic of connectors in which a connector half of one manufacturer or series will directly replace that of another manufacturer and provide the same electrical and mechanical function.

Intermateable - The characteristic of connectors in which a connector half of one manufacturer or series will mate directly with the connector half of another manufacturer.

Intermittent - Occurring at intervals. A connection which passes electrical current only in random or undesirable intervals.

Intermountable - The characteristic of connectors in which one manufacturer's connector or series will mount in exactly the same panel space and mounting holes as another manufacturer's product.

ISO - Abbreviation for the International Standards Organization. A group that operates at the international level and sets most standards for industry, with the exception of electrical engineering and telecommunications which are set by the IEC and ITU respectively. CEN is the equivalent organization at the European level.

J acket - The outermost layer of insulation in a cable composed of several wires.

Jackscrew - A screw attached to one half of a connector pair used to mechanically align, draw them together, and lock them in place.

Key - A mechanism used to polarize connectors by the user. See KEYING.

Keying - A method of differentiating a connector if more than one connector with the same sex and layout is to be used in a system. The key is usually a pin or other projection which can be located in a contact cavity or slot. The key will prevent a connector without a matching orifice from mating. Keying and POLARIZATION serve the same function, but keying can be done by the user, while polarization is manufactured into the connector and normally can not be altered by the user.

Layout - The number, size, and geometric arrangement of the contacts in a connector. When a connector is said to have a certain "layout" it refers to a specific contact configuration. For example, Combo $D^{\circledR}$ has 2 pages of drawings showing the arrangement of the contacts in the insulator. Each of these contact cavity arrangements can be referred to as a layout.

Locator - A part of a crimping tool TURRET. Rotation of the locator sets the tool for a particular size or sex contact. See TURRET.

Male Contact - See PIN CONTACT.
Mating Life - The minimum number of times a connector can be mated and unmated and still meet all of its design specifications. The maximum life may be much higher than this figure.

Mil - One thousandth of an inch (.001). Used in the United States as a unit of length in wire diameters and linear dimensions.

Mil-Spec - Abbreviation for Military Specification.

Milliampere - One one-thousandth (.001) of an ampere. Abbreviated mA.

Millimeter - Metric unit of linear measure. 1 millimeter $=.03937$ inches. Abbreviated mm.

Milliohm - One one-thousandth (.001) of an ohm. Abbreviated $\mathrm{m} \Omega$.
$\mathrm{mm}^{2}$ - Millimeters squared. A standard for wire diameters used in Europe instead of AWG. As numbers get larger, wire diameters increase in size. The relationship between $\mathrm{mm}^{2}$ and AWG is reverse logarithmic. $1 \mathrm{~mm}^{2}=1973$ circular mils. A conversion graph is needed to make accurate comparisons between AWG and $\mathrm{mm}^{2}$. Call for assistance.

Mounting Clip - Any of a variety of mounting accessories used to secure a connector or connector pair to a rigid surface.

Multi-Conductor Cable - Two or more individual wires surrounded by a jacketing material.

Nest - The portion of a crimping die that supports the contact barrel during crimping.

Newton - A unit of acceleration. One Newton is the force capable of accelerating 1 kilogram to one meter per second per second. 1 pound force = 4.448221 Newtons. Abbreviated N.

Ohm - The unit of electrical resistance. One ohm is the value of resistance through which a potential difference of one volt will maintain a current of one ampere. Its symbol is the Greek letter omega ( $\Omega$ ).

Operating Temperature - The range of AMBIENT TEMPERATURES over which the connector can operate and still meet all of its design specifications.

Operating Voltage - The range of voltages over which the connector can be operated. Safety precautions must be taken anytime a voltage in excess of 50 V is to be used in a circuit. Check your local and national codes for guidelines.

Outgassing - The circumstance in which an insulator releases gasses trapped within it under a vacuum or conditions of decreased pressure, high heat, or both.

Panel - The outside surface of a piece of equipment on to which connectors are mounted. The panel is usually made of metal.

Panel Mount - A connector designed to be mounted on a panel by means of screws or jam nut.

PCB - Abbreviation for Printed Circuit Boards.
Performance Class 1 - Performance class per European specification DIN 41652, specifying contact performance to 500 mating cycles, followed by testing per DIN 41640, Part 21. The contact is subjected to severe environmental conditions, including industrial gasses, after the 500 mating cycles, and must meet basic contact resistance, engaging force, and separation force tests.

Performance Class 2 - Performance class per European specification DIN 41652, specifying contact performance to 200 mating cycles, followed by testing per DIN 41640, Part 21. The contact is subjected to severe environmental conditions, including industrial gasses, after the 200 mating cycles, and must meet basic contact resistance, engaging force, and separation force tests.

## Glossary of Terms

Performance Class 3 - Performance class per European specification DIN 41652, specifying contact performance to 50 mating cycles, followed by testing per DIN 41640, Part 21. The contact is subjected to severe environmental conditions, including industrial gasses, after the 50 mating cycles, and must meet basic contact resistance, engaging force, and separation force tests.

Peripheral Seal - A resilient seal used to keep moisture from entering the connector at the point where the plug and receptacle shells meet. A common method is to use flat gaskets on receptacles and 0 -rings on plugs.

Phosphor Bronze - An alloy of copper, tin, and phosphorus used to make spring contacts. It is typically used in lower cost contacts where frequent insertions and withdrawals and high temperatures are not a factor.

Pin - A male contact. See PIN CONTACT.
Pin Contact - The contact which has a long shaft at the engagement end which enters the socket contact.

Plating - See FINISH.
Plug - The male portion of a connector pair usually employing a coupling nut to secure it to the receptacle half. A plug may have either pin or socket contacts.

Polarization - A mechanical mechanism that allows connector halves to intermate in only one specific orientation. This can be accomplished by asymmetrical shapes of the two halves as in a D Subminiature connector, insulator rotation, keys, keyways, ramps, or other means. Polarization prevents connectors of the same size and/or same layout from intermating when this is undesirable, such as when two otherwise identical connectors are used on the same panel. Polarization is typically done by the assembler and can not be changed by the user, while keying is typically done by the user with an auxiliary keying device.

Polarizing Pin - A mechanism used to polarize connectors, manufactured into the connector. See KEYING.

Potting - The permanent sealing of a cable to a connector using an insulating material such as potting compound to exclude moisture or provide strain relief. See POTTING CUP.

Potting Compound - A sealing material used in potting to fill a potting cup.

Potting Cup - A bell-shaped (plastic) backshell with an enlarged opening for the wires. After the connector is loaded with wired contacts, the potting cup is attached to the rear of the connector. The inside of the cup is then filled with a potting compound. When the compound hardens, it forms a solid, permanent, watertight mass around the wires.

Potting Ring - A portion of the POTTING CUP which secures the bell shaped cup to the rear of the connector, usually by means of internal threads.

Pre-Tin - To apply tin-lead solder to the contact solder cup and/or conductor prior to soldering the two together.

Rear Mounting - A receptacle that mounts through the panel from the rear, with its mounting flange inside the equipment. Typically, rear mount receptacles are slightly longer than front mount types to allow for the thickness of the panel. Flange mount receptacles usually come in front and rear mount versions. All J am nut receptacles are rear mount.

Rear Release - For crimp type removable contacts, rear release means that the appropriate extraction tool is inserted from the rear, or wire side, of the connector. The contact is then pulled out the rear of the connector.

Receptacle - The connector half that mates with the plug. The receptacle has threads, pins or ramps which engage the coupling nut on the plug, locking the two halves together. A receptacle may have either pin or socket contacts.

REF - Abbreviation for Reference.
Removable Contact - A contact which can be inserted and removed from the insulator by the user. An insertion tool and extraction tool are normally required to insert and remove the contact.

## Removal Tool - See EXTRACTION TOOL

Resistance - Thatproperty of a substance which impedes current and results in the dissipation of power in the form of heat. The unit of resistance is the ohm.

Return Loss - The ratio of the power reflected from a discontinuity in a transmission line to the power incident.

RFI - See EMI/RFI.
Root Mean Square - The square root, of the average of the squares, of the values of a periodic quantity (like alternating current), taken through one complete period. It is the effective quantity of a periodic quantity. Abbreviated rms.

Salt Spray Test - A test, or series of tests, in which mated and/or unmated connectors are subjected to salt water under specified conditions. Used to test the connector's resistance to corrosion and any associated degradation in electrical function.

Screw Machine Contact - A contact made from a solid bar or rod using screw machine operations. Some screw machine contacts include secondary elements which are welded, crimped, or formed around the basic screw machined part to complete the contact.

Selective Plating - The application of metal PLATING to selective areas of the contact, particularly those areas subject to wear. Precious metal platings may be applied selectively to those contact surfaces responsible for the electrical connection, reducing the contact cost without sacrificing electrical performance.

Shell - The outside case of a connector into which the insulator and contacts are situated.

Shell Size - A standard system developed for military circular connectors for indicating the diameter of the shell. The system is based upon $1 / 16^{\prime \prime}$ increments, that is, a size 16 shell is one inch in diameter.

Shield Effectiveness - The ability of a shield to screen out undesirable signals.

Shock - An abrupt impact applied to a stationary object. It is usually expressed in gravities ( g ).

Socket - A female contact. See SOCKET CONTACT.

Socket Contact - The contact which has an opening at the engagement end to accept the pin contact.

Solder Contact - A contact which is terminated to the wire with solder. Solder contacts are normally bonded into the insulator and can not be removed by the user. The alternative is crimp contacts to which a wire is attached by crimping. Crimp contacts can usually be inserted and removed by the user.

Solder Cup - The end of a SOLDER CONTACT is designed to accept a wire which will then be soldered to the contact.

Stamped and Formed Contact - Contacts made by stamping and forming a sheet of metal rather than by machining metal stock. Also see SCREW MACHINE CONTACTS.

## Glossary of Terms

Star Clip-One of several designs used for screw machine socket contacts. A tiny plated star shaped clip is captivated inside a solid barrel into which the pin contact fits. The clip creates a multi-point area of mechanical and electrical continuity between the mated contacts.

Stripper - A tool to remove insulation from a wire.

Test Voltage - The range of voltages over which the connector has been tested per the perimeters in the applicable specification.

Thermoplastic - A plastic material that can be softened by heat and rehardened into a solid state by cooling. This process can be accomplished using a variety of techniques.

Thermoset - A plastic material which hardens when heat and pressure are applied. Unlike thermoplastic, it cannot be remelted or remolded.

Through Hole - (Also known as a clearance hole) A mounting hole without threads.

Turret - An interchangeable device which is attached to a CRIMP TOOL that allows the tool to crimp a range of contacts. Each turret is made to crimp a specific style contact or a range of contacts and/or wire gauges. See LOCATOR.

UL - Abbreviation for Underwriter's Laboratories, a corporation supported by a group of underwriters for the purpose of establishing safety standards covering certain types of equipment and components in the United States.

UL 94V-0 - A flammability performance rating set by Underwriter's Laboratories for plastics.

V - Symbol for volt.
Vac - Volts, alternating current.
Vdc - Volts, direct current.
Vibration - A continuously reversing change in the magnitude of a given force.

Volt - The unit of measurement of electromotive force. It is equivalent to the force required to produce a current of 1 ampere through a resistance of one ohm.

Voltage - The forcewhich causes current to flow through an electrical conductor. Its symbol is E . The greatest effective difference in potential between and two conductors of a circuit.

Voltage Drop - The difference in voltage between two points in a circuit due to the loss of electrical pressure as a current flows through an impedance.

Voltage Rating - The maximum voltage which a connector can sustain without breaking down or varying from design specifications.

Voltage Standing Wave Ratio - If a signal is sent down a transmission line any discontinuity will send a reflection back in the opposite direction.

Wire Sealing Grommet - A resilient disc with holes in it to accommodate the individual wires entering the rear of the connector. Each cavity forms a tight seal against the wire insulation (as long as wires within the specified diameter are used). The grommet seals the back of the connector against moisture, dirt, and air. The grommet is normally held in place and compressed by a backshell and/or ferrule. It is usually a separate component, but may be part of the insulator itself. Also see GROMMET CAVITY.

Wire Size - A numerical designation for conductor diameter. This catalog uses American Wire Gauge (AWG) which is based on the approximate circular mil area of the wire. See AWG and $\mathrm{mm}^{2}$.

Wrap Post Contact - A type of contact which is terminated by wrapping wire around a post in a manner that deforms the wire and creates a gastight connection between the wire and the post. This method is slow and labor intensive. If used at all, it is used in prototype work.

## Obsolete Products

## General Application Connectors *

| D*C | Burgun D with snap-in, rear release machined or stamped crimp contacts. Refer to $\mathrm{D}^{*} \mathrm{U}$ products. | D*PF AD* | Straight and $90^{\circ}$ PCB applications, UL 94V-0 rated. Refer to D* products. <br> Part number change only. | $\begin{aligned} & D^{*} \text { *11148 } \\ & D^{*}(S M T) \end{aligned}$ | SMT - Surface Mount D, no replacement, only through holes available. Refer to $\mathbb{Z E} D^{*}$ products. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| D*P | $90^{\circ}$ connectors for $1 / 0$ <br> applications, UL 94V-0 rated. <br> Refer to $D * U$ products |  | Refer to ZD* products. | D*P1 | Machined pressfit replaced by stamped pressfit. Refer to D*NG products. |
|  |  |  |  | D*TC | Part number change only. Refer to D* products. |

## Available Products Not Listed Within This Publication



Consult factory for details


| Part Number | Page | Part Number | Page |
| :---: | :---: | :---: | :---: |
| DA15P-1ATN-K87 | 26 | DAJ K15S*-1AJN | 117 |
| DA15P-1AUN-K87 | 26 | DAJ K15S*-1APN. | 119 |
| DA15P-1AVN-K87 | 24 | DAJ K15S*-1ATN | 119 |
| DA15P-1AWN-K87 | 24 | DA) K15S*-1AUN | 119 |
| DA15P-F179A-K87 | 12 | DAJ K15S*-1AVN. | 117 |
| DA15PK87 | 32 | DAJ K15S*-1AWN | 117 |
| DA15S-0L2-A197 | 11 | DA) K155*-1U0N | 109 |
| DA15S-1A5N-A197 | 27 | DA) K155*-1U7N | 113 |
| DA15S-1A6N-A197 | 27 | DA) K15S*-1U7N-146 | 113 |
| DA15S-1A7N-A197 | 23 | DAJ K15S*-OL4 | 121 |
| DA15S-1A8N-A197 | 23 | DA) KE15P*-1A0N . | 110 |
| DA15S-1A9N-A197 | 23 | DA) KE15P*-1UON | 108 |
| DA15S-1ADN-A197 | 25 | DAJ KE15P*-OL4 | 120 |
| DA15S-1AFN-A197 | 23 | DA) KE15P*-0L4-146 | 120 |
| DA15S-1AJ N-A197 | 25 | DA) KE15S*-1AON | 111 |
| DA15S-1AON-A197 | 21 | DA) KE15S*-1UON | 109 |
| DA15S-1ATN-A197 | 27 | DAJ KE155*-OL4 | 121 |
| DA15S-1AUN-A197 | 27 | DA) KE15S*-0L4-146 | 121 |
| DA15S-1AVN-A197 | 25 | DA) KX15P*-1A0N. | 110 |
| DA15S-1AWN-A197 | 25 | DAJ KX15P*-0L4 | 120 |
| DA15S-F179A-A197 | 13 | DA) KX15P*-0L4-146 | 120 |
| DA15SA197 | 33 | DA) KX15S*-1A0N | 111 |
| DA19678-1 | 204 | DAJ KX15S*-0L4. | 121 |
| DA19678-157 | 195 | DA) KX15S*-0L4-146 | 121 |
| DA19678-167 | 3, 195 | DAJ T15P | 122 |
| DA19678-174 | 195 | DAJ T155* | 123 |
| DA19977-1 | 204 | DAJ T3W3P1. | 128 |
| DA19977-40 | 3, 195 | DAJ T3W3P1-1AON | 124 |
| DA20961 | 203 | DAJ T3W3P1-0L4 | 126 |
| DA20961-16 | 192 | DAJ T3W3P5 | 128 |
| DA22213 | 215 | DAJ T3W3P5-1AON | 124 |
| DA22214 | 214 | DAJ T3W3P5-0L4 | 126 |
| DA24658 | 203 | DAJ T3W3P6 ... | 128 |
| DA24658-15 | 2, 195 | DAJ T3W3P6-1AON | 124 |
| DA50905-1 | 218 | DAJ T3W3P6-0L4 | 126 |
| DA51210 | 206 | DAJ T3W3P9 | 128 |
| DA51211 | 206 | DAJ T3W3P9-1AON | 124 |
| DA51220-1 | 210 | DAJ T3W3P9-0L4. | 126 |
| DA53750-1 | 218 | DAJT3W3S1.... | 129 |
| DAA11W1PK87FO | 80 | DAJ T3W3S1-1AON | 125 |
| DAA11W1SA197FO | 81 | DAJ T3W3S1-0L4 | 127 |
| DAA15PK87FO. | 36 | DAJ T3W3S5 | 129 |
| DAA15SA197FO | 37 | DAJ T3W3S5-1AON | 125 |
| DAA3W3PK87FO | 80 | DAJ T3W355-0L4 | 127 |
| DAA3W3SA197F0 | 81 | DAJT3W3S6 | 129 |
| DAA7W2PK87FO | 80 | DAJ T3W3S6-1AON | 125 |
| DAA7W2SA197F0 | 81 | DAJ T3W356-0L4 | 127 |
| DABS-15 | 205 | DAJT3W3S9 ... | 129 |
| DABU111512 | 216 | DAJ T3W3S9-1AON | 125 |
| DAE15P-0L2-K87-146 | 10 | DAJ T3W3S9-0L4 | 127 |
| DAE15PK87 | 32 | DAJ T3WK3P1. | 128 |
| DAE15S-OL2-A197-146 | 11 | DAJ T3WK3P1-1AON | 124 |
| DAE15SA197 | 33 | DAJ T3WK3P1-0L4 | 126 |
| DAJ K15P*-1A0N | 110 | DAJ T3WK3P5 | 128 |
| DAJ K15P*-1A5N | 118 | DAJ T3WK3P5-1A0N | 124 |
| DAJ K15P*-1A6N | 118 | DAJ T3WK3P5-0L4. | 126 |
| DAJ K15P*-1A7N | 114 | DAJ T3WK3P6 | 128 |
| DAJ K15P*-1A8N | 114 | DAJ T3WK3P6-1AON | 124 |
| DAJ K15P*-1A9N | 114 | DAJ T3WK3P6-0L4 | 126 |
| DAJ K15P*-1ADN | 116 | DAJ T3WK3P9 .. | 128 |
| DAJ K15P*-1AFN | 114 | DAJ T3WK3P9-1A0N | 124 |
| DAJ K15P*-1AGN | 116 | DAJ T3WK3P9-0L4. | 126 |
| DAJ K15P*-1AHN | 114 | DAJ T3WK3S1.... | 129 |
| DAJ K15P*-1AJ N | 116 | DAJ T3WK3S1-1AON | 125 |
| DAJ K15P*-1APN | 118 | DAJ T3WK3S1-OL4 | 127 |
| DAJ K15P*-1ATN | 118 | DAJ T3WK3S5 | 129 |
| DAJ K15P*-1AUN | 118 | DAJ T3WK355-1AON | 125 |
| DAJ K15P*-1AVN | 116 | DAJ T3WK3S5-0L4. | 127 |
| DAJ K15P*-1AWN | 116 | DAJ T3WK3S6 | 129 |
| DAJ K15P*-1U0N | 108 | DAJ T3WK3S6-1AON | 125 |
| DAJ K15P*-1U7N | 112 | DAJ T3WK3S6-0L4. | 127 |
| DAJ K15P*-1U7N-146 | 112 | DAJ T3WK359 | 129 |
| DA) K15P*-0L4 | 120 | DAJ T3WK3Sg-1AON | 125 |
| DA K15S*-1A0N | 111 | DAJ T3WK3S9-0L4 | 127 |
| DAJ K15S*-1A5N | 119 | DAJ TE15P | 122 |
| DAJ K15S*-1A6N. | 119 | DAJ TE15S* | 123 |
| DAJ K15S*-1A7N | 115 | DAJ TE3W3P1. | 128 |
| DA K15S*-1A8N | 115 | DAJ TE3W3P1-1AON | 124 |
| DAJ K15S*-1A9N. | 115 | DA J TE3W3P1-0L4 | 126 |
| DAJ K15S*-1ADN | 117 | DAJ TE3W3P5 | 128 |
| DAJ K15S*-1AFN | 115 | DAJ TE3W3P5-1AON | 124 |
| DAJ K15S*-1AGN | 117 | DAJ TE3W3P5-0L4 | 126 |
| DAJ K155*-1AHN | 115 | DAJ TE3W3P6 | 128 |

ס

## (1)

## 0

## 0



| Part Number | Page | Part Number | Page |
| :---: | :---: | :---: | :---: |
| DAM15PF | 134 | DAM7W2PNMBK52 |  |
| DAM15PF179 | 138 | DAM7W2POL3NMBK52 | 195 |
| DAM15PF179A | 138 | DAM7W2S-NMC-77 | 195 |
| DAM15PF179ANMBK52 | 195 | DAM7W2S1AONNMBK52 | 195 |
| DAM15PG | 132 | DAM7W2S1A7NNMBK52 | 195 |
| DAM15PH | 136 | DAM7W2S1A9NNMBK52 | 195 |
| DAM15PK | 134 | DAM7W2SA197. | 79 |
| DAM15PL | 132 | DAM7W2SF179ANMBK52 | 195 |
| DAM15PLNM | 174 | DAM7W2SNM | 189 |
| DAM15PM | 136 | DAM7W2SNMBK52 | 195 |
| DAM15PNM | 180 | DAM7W2S0L3NMBK52 | 195 |
| DAM15PNM*1A7N | 178 | DAMA15PNM | 182 |
| DAM15PNM*1A9N | 178 | DAMA15PNMBK52 | 195 |
| DAM15PNM*1AON | 176 | DAMA15SNM | 183 |
| DAM15PNMB76 | 195 | DAMA15SNMBK52 | 195 |
| DAM15PNMB77 | 195 | DAMA26PNM | 184 |
| DAM15PNMBK52 | 195 | DAMA26SNM | 185 |
| DAM15PNMC76 | 195 | DAMAY15PNM | 182 |
| DAM15PNMC77 | 195 | DAMAY15SNM | 183 |
| DAM15POL3NM | 172 | DAMAY26PNM | 184 |
| DAM15POL3NMBK52 | 195 | DAMAY26SNM | 185 |
| DAM15PP. | 134 | DAMB-11W1S-NMB-77 | 195 |
| DAM15PR | 134 | DAMB-15S-NMC-77 | 195 |
| DAM15PS | 132 | DAMB-7W2S-NMB-76 | 195 |
| DAM15PW | 132 | DAMB-7W2S-NMB-77 | 195 |
| DAM15PX | 136 | DAMB15SNMB77 | 195 |
| DAM15PZ. | 136 | DAMB15SNMC76 | 195 |
| DAM15S | 141 | DAMC11C1P K87 . |  |
| DAM15S1AONNMBK52 | 195 | DAMC11C1PVK87 |  |
| DAM15S1A7NNMBK52 | 195 | DAMC11C1SJ A197 | 4 |
| DAM15S1A9NNMBK52 | 195 | DAMC11C1SVA197 |  |
| DAM15SA | 133 | DAMC11H1PJ K87 | 60 |
| DAM15SB | 137 | DAMC11H1S A197 | 6 |
| DAM15SC | 135 | DAMC11P1PVK87 |  |
| DAM15SD | 133 | DAMC11P1SVA197 |  |
| DAM15SE. | 137 | DAMC15P K87 |  |
| DAM15SF | 135 | DAMC15SJ A197 |  |
| DAM15SF179 | 139 | DAMC3C3P K87 |  |
| DAM15SF179A | 139 | DAMC3C3PVK87 |  |
| DAM15SF179ANMBK52 | 195 | DAMC3C3SJ A197 |  |
| DAM15SG | 133 | DAMC3C3SVA197 |  |
| DAM15SH | 137 | DAMC3CK3P K87TM |  |
| DAM15SK | 135 | DAMC3CK3PVK87TM |  |
| DAM15SL | 133 | DAMC3CK3SJ A197TM |  |
| DAM15SLNM | 175 | DAMC3CK3SVA197TM |  |
| DAM15SM | 137 | DAMC3H3PJ K87 | 6 |
| DAM15SNM | 181 | DAMC3H3S A197 |  |
| DAM15SNM*1A7N | 179 | DAMC3HK3PJ K87TM |  |
| DAM15SNM*1A9N | 179 | DAMC3HK3S A197TM |  |
| DAM15SNM*1AON | 177 | DAMC3P3PVK87 |  |
| DAM15SNMB77 | 195 | DAMC3P3SVA197 |  |
| DAM15SNMBK52 | 195 | DAMC3PK3PVK87TM |  |
| DAM15SOL3NM | 173 | DAMC3PK3SVA197TM |  |
| DAM15SOL3NMBK52 | 195 | DAMC7C2PJ K87 |  |
| DAM15SP | 135 | DAMC7C2PVK87 |  |
| DAM15SR | 135 | DAMC7C2SJ A197 | 4 |
| DAM15SS | 133 | DAMC7C2SVA197 |  |
| DAM15SW | 133 | DAMC7H2P) K87 |  |
| DAM15SX. | 137 | DAMC7H2SJ A197 |  |
| DAM15SZ. | 137 | DAMC7P2PVK87 |  |
| DAM3W3P-NMC-77 | 195 | DAMC7P2SVA197 |  |
| DAM3W3PK87. | 78 | DAMD11C1P K87. |  |
| DAM3W3PNM | 188 | DAMD11C1PVK87 |  |
| DAM3W3PNMBK52 | 195 | DAMD11C1S A197 |  |
| DAM3W3PNMC76 | 195 | DAMD11C1SVA197 |  |
| DAM3W3POL3NMBK52 | 195 | DAM D11H1P K87. | 6 |
| DAM3W3S-NMC-76 | 195 | DAMD11H1S A197 |  |
| DAM3W3SA197 | 79 | DAMD11P1PVK87 |  |
| DAM3W3SNM | 189 | DAMD11P1SVA197 |  |
| DAM3W3SNMB76 | 195 | DAMD15PJ K87 |  |
| DAM3W3SNMB77 | 195 | DAMD15SJA197. |  |
| DAM3W3SNMBK52 | 195 | DAM D3C3P K87 |  |
| DAM3WK3PK87 | 78 | DAMD3C3PVK87 |  |
| DAM3WK3PNM | 188 | DAMD3C3SJ A197 |  |
| DAM3WK3SA197 | 79 | DAMD3C3SVA197 |  |
| DAM3WK3SNM | 189 | DAMD3CK3PJ K87TM |  |
| DAM53512-1405 | 49 | DAMD3CK3PVK87TM |  |
| DAM7W2P1AONNMBK52 | 195 | DAMD3CK3SJ A197TM . |  |
| DAM7W2P1A7NNMBK52 | 195 | DAMD3CK3SVA197TM |  |
| DAM7W2P1A9NNMBK52 | 195 | DAMD3H3PJK87 |  |
| DAM7W2PF179ANMBK52 | 195 | DAMD3H3SJ A197 |  |
| DAM7W2PK87. | 78 | DAMD3HK3P K87TM |  |
| DAM7W2PNM . | 188 | DAMD3HK3S A197TM |  |


| Part Number | Page |
| :---: | :---: |
| DAMD3P3PVK87 |  |
| DAMD3P3SVA197 | 65 |
| DAMD3PK3PVK87TM | 64 |
| DAMD3PK3SVA197TM | 65 |
| DAMD7C2PJ K87 | 44 |
| DAMD7C2PVK87 | 50 |
| DAMD7C2SJ A197 | 45 |
| DAMDTC2SVA197 | 51 |
| DAMD7H2P K 87 | 60 |
| DAMD7H2SJ A197 | 61 |
| DAMD7P2PVK87 | 64 |
| DAMD7P2SVA197 | 65 |
| DAME11W1PK87 | 78 |
| DAME11W1SA197 | 79 |
| DAME15P | 140 |
| DAME15S | 141 |
| DAME3W3PK87 | 78 |
| DAME3W3SA197 | 79 |
| DAME3WK3PK87 | 78 |
| DAME3WK3SA197 | 79 |
| DAME7W2PK87 | 78 |
| DAME7W2SA197 | 79 |
| DAMG11C1PJ K87 | 44 |
| DAMG11C1PVK87 | 50 |
| DAMG11C1SJ A197 | 45 |
| DAMG11C1SVA197 | 51 |
| DAMG11H1PJ K87 | 60 |
| DAMG11H1SJ A197 | 61 |
| DAMG11P1PVK87 | 64 |
| DAMG11P1SVA197 | 65 |
| DAMG15P K87 | 16 |
| DAMG15SJ A197 | 17 |
| DAMG3C3P K87 | 44 |
| DAMG3C3PVK87 | 50 |
| DAMG3C3SJ A197 | 45 |
| DAMG3C3SVA197 | 51 |
| DAM G3CK3PJ K87TM | 44 |
| DAMG3CK3PVK87TM | 50 |
| DAMG3CK3SJ A197TM . | 45 |
| DAMG3CK3SVA197TM. | 51 |
| DAMG3H3P K87 | 60 |
| DAMG3H3SJ A197 | 61 |
| DAMG3HK3PJ K87TM | 60 |
| DAMG3HK3S A197TM . | 61 |
| DAMG3P3PVK87 | 64 |
| DAMG3P3SVA197 | 65 |
| DAMG3PK3PVK87TM | 64 |
| DAMG3PK3SVA197TM | 65 |
| DAMG7C2PJ K87 | 44 |
| DAMG7C2PVK87 | 50 |
| DAMG7C2S A197 | 45 |
| DAMG7C2SVA197 | 51 |
| DAMG7H2PJ K87 | 60 |
| DAMG7H2SJ A197 | 61 |
| DAMG7P2PVK87 | 64 |
| DAMG7P2SVA197 | 65 |
| DAMM11W1P | 166 |
| DAMM11W1S | 167 |
| DAMM15P | 140 |
| DAMM15PA | 132 |
| DAMM15PB | 136 |
| DAMM15PC | 134 |
| DAMM15PD | 132 |
| DAMM15PE | 136 |
| DAMM15PF | 134 |
| DAMM15PF179 | 138 |
| DAMM15PF179A | 138 |
| DAMM15PG | 132 |
| DAMM15PH | 136 |
| DAMM15PK | 134 |
| DAMM15PL | 132 |
| DAMM15PM | 136 |
| DAMM15PP | 134 |
| DAMM15PR | 134 |
| DAMM15PS | 132 |
| DAMM15PW | 132 |
| DAMM15PX | 136 |
| DAMM15PZ | 136 |
| DAMM15S | 141 |
| DAMM15SA | 133 |
| DAMM15SB | 137 |
| DAMM15SC | 135 |
| DAMM15SD | 133 |


| Part Number | Page | Part Number | Page |
| :---: | :---: | :---: | :---: |
| DAMMN11V1PN | 162 | DAMMZ3HK3SN | 159 |
| DAMMN11V1SN | 163 | DAMMZ3V3PN | 162 |
| DAMMN3C3PN | 150 | DAMMZ3V3SN | 163 |
| DAMMN3C3SN | 151 | DAMMZ3VK3PN | 162 |
| DAMMN3CK3PN | 150 | DAMMZ3VK3SN | 163 |
| DAMMN3CK3SN | 151 | DAMMZTC2PN | 150 |
| DAMMN3H3PN | 158 | DAMMZ7C2SN | 151 |
| DAMMN3H3SN | 159 | DAMMZ7H2PN | 158 |
| DAMMN3HK3PN | 158 | DAMMZ7H2SN | 159 |
| DAMMN3HK3SN | 159 | DAMMZ7V2PN | 162 |
| DAMMN3V3PN. | 162 | DAMMZ7V2SN | 163 |
| DAMMN3V3SN | 163 | DAMN11C1PNK87 | 52 |
| DAMMN3VK3PN | 162 | DAMN11C1PYK87 | 56 |
| DAMMN3VK3SN | 163 | DAMN11C1SNA197 | 53 |
| DAMMN7C2PN | 150 | DAMN11C1SYA197 | 57 |
| DAMMN7C2SN | 151 | DAMN11H1PNK87 | 66 |
| DAMMN7H2PN | 158 | DAMN11H1PYK87 | 70 |
| DAMMN7H2SN | 159 | DAMN11H1SNA197 | 67 |
| DAMMN7V2PN | 162 | DAMN11H1SYA197 |  |
| DAMMN7V2SN | 163 | DAMN15PNK87 |  |
| DAMMP11C1P | 146 | DAMN15SNA197 |  |
| DAMMP11C1S | 147 | DAMN3C3PNK87 . | 52 |
| DAMMP11H1P | 154 | DAMN3C3PYK87 | 56 |
| DAMMP11H1S | 155 | DAMN3C3SNA197 | 53 |
| DAMMP3C3P | 146 | DAMN3C3SYA197 | 57 |
| DAMMP3C3S | 147 | DAMN3CK3PNK87TM | 52 |
| DAMMPЗСКЗР | 146 | DAMN3CK3PYK87TM | 56 |
| DAMMP3CK3S | 147 | DAMN3CK3SNA197TM | 53 |
| DAMMP3Н3P | 154 | DAMN3CK3SYA197TM | 57 |
| DAMMP3H3S | 155 | DAMN3H3PNK87. | 66 |
| DAMMP3НКЗР | 154 | DAMN3H3PYK87 | 70 |
| DAMMP3HK3S | 155 | DAMN3H3SNA197 | 67 |
| DAMMP7C2PJ | 146 | DAMN3H3SYA197 | 71 |
| DAMMP7C2S | 147 | DAMN3HK3PNK87TM | 66 |
| DAMMP7H2P | 154 | DAMN3HK3PYK87TM | 70 |
| DAMMP7H2SJ | 155 | DAMN3HK3SNA197TM | 67 |
| DAMMV11C1PN | 150 | DAMN3HK3SYA197TM . | 71 |
| DAMMV11C1SN | 151 | DAMN7C2PNK87. | 52 |
| DAMMV11H1PN | 158 | DAMN7C2PYK87 |  |
| DAMMV11H1SN | 159 | DAMN7C2SNA197 | 53 |
| DAMMV11V1PN | 162 | DAMN7C2SYA197 | 57 |
| DAMMV11V1SN | 163 | DAMN7H2PNK87. | 66 |
| DAMMV3C3PN. | 150 | DAMN7H2PYK87 | 70 |
| DAMMV3C3SN | 151 | DAMN7H2SNA197 | 67 |
| DAMMV3CK3PN | 150 | DAMN7H2SYA197 | 71 |
| DAMMV3CK3SN | 151 | DAMP11C1P K87 |  |
| DAMMV3H3PN. | 158 | DAMP11C1PVK87 | 5 |
| DAMMV3H3SN | 159 | DAMP11C1SJ A197 | 45 |
| DAMMV3HK3PN | 158 | DAMP11C1SVA197 | 51 |
| DAMMV3HK3SN | 159 | DAMP11H1P K87 | 60 |
| DAMMV3V3PN. | 162 | DAMP11H1S A197 | 61 |
| DAMMV3V3SN. | 163 | DAMP11P1PVK87. | 64 |
| DAMMV3VK3PN | 162 | DAMP11P1SVA197 |  |
| DAMMV3VK3SN | 163 | DAMP15PJK87 |  |
| DAMMV7C2PN. | 150 | DAMP15SJ A197 | 1 |
| DAMMV7C2SN. | 151 | DAMP3C3P K87 | 44 |
| DAMMV7H2PN. | 158 | DAMP3C3PVK87 |  |
| DAMMV7H2SN | 159 | DAMP3C3SJ A197 | 45 |
| DAMMV7V2PN | 162 | DAMP3C3SVA197 | 5 |
| DAMMV7V2SN | 163 | DAMP3CK3PJ K87TM . | 44 |
| DAMMY11W1P | 166 | DAMP3CK3PVK87TM | 50 |
| DAMMY11W1S | 167 | DAMP3CK3S A197TM . | 45 |
| DAMMY15P | 140 | DAMP3CK3SVA197TM . | 51 |
| DAMMY15S | 141 | DAMP3H3PJ K87 | 6 |
| DAMMY3W3P | 166 | DAMP3H3SJ A197 | 6 |
| DAMMY3W3S | 167 | DAMP3HK3P K K87TM | 60 |
| DAMMY3WK3P | 166 | DAMP3HK3SJ A197TM . | 61 |
| DAMMY3WK3S | 167 | DAMP3P3PVK87 ..... | 64 |
| DAMMY7W2P | 166 | DAMP3P3SVA197 | 65 |
| DAMMY7W2S | 167 | DAMP3PK3PVK87TM | 64 |
| DAMMZ11C1PN | 150 | DAMP3PK3SVA197TM. | 65 |
| DAMMZIIC1SN. | 151 | DAMP7C2PJ K87 | 44 |
| DAMMZ1C1H1PN | 158 | DAMP7C2PVK87 | 50 |
| DAMMZ1H1SN | 159 | DAMP7C2SJ A197 | 45 |
| DAMMZ11V1PN | 162 | DAMP7C2SVA197 | 51 |
| DAMMZ11V1SN | 163 | DAMP7H2PJ K87 | 60 |
| DAMMZ3C3PN | 150 | DAMP7H2SJ A197 | 61 |
| DAMMZ3C3SN | 151 | DAMP7P2PVK87. | 64 |
| DAMMZ3CK3PN | 150 | DAMP7P2SVA197 | 65 |
| DAMMZ3CK3SN | 151 | DAMV11C1PNK87 | 52 |
| DAMMZ3H3PN | 158 | DAMV11C1PYK87. | 56 |
| DAMMZ3H3SN. | 159 | DAMV11C1SNA197. |  |
| DAMMZ3HK3PN. | 158 | DAMV11C1SYA197. |  |


| Part Number | Page |
| :---: | :---: |
| DAMV11H1PNK87 | 66 |
| DAMV11H1PYK87 | 70 |
| DAMV11H1SNA197 | 67 |
| DAMV11H1SYA197 | 71 |
| DAMV15PNK87 |  |
| DAMV15SNA197 | 7 |
| DAMV3C3PNK87 | 52 |
| DAMV3C3PYK87 | 56 |
| DAMV3C3SNA197 | 53 |
| DAMV3C3SYA197 | 57 |
| DAMV3CK3PNK87TM | 52 |
| DAMV3CK3PYK87TM | 56 |
| DAMV3CK3SNA197TM | 53 |
| DAMV3CK3SYA197TM . | 57 |
| DAMV3H3PNK87 | 66 |
| DAMV3H3PYK87 | 70 |
| DAMV3H3SNA197 | 67 |
| DAMV3H3SYA197 | 71 |
| DAMV3HK3PNK87TM | 66 |
| DAMV3HK3PYK87TM | 70 |
| DAMV3HK3SNA197TM | 67 |
| DAMV3HK3SYA197TM . | 71 |
| DAMV7C2PNK87 | 52 |
| DAMV7C2PYK87 | 56 |
| DAMV7C2SNA197 | 53 |
| DAMV7C2SYA197 | 57 |
| DAMV7H2PNK87 | 66 |
| DAMV7H2PYK87 | 70 |
| DAMV7H2SNA197 | 67 |
| DAMV7H2SYA197 | 71 |
| DAMY11W1PK87 | 78 |
| DAMY11W1PNM | 188 |
| DAMY11W1SA197 | 79 |
| DAMY11W1SNM | 189 |
| DAMY15P | 140 |
| DAMY15PNM | 180 |
| DAMY15PNM*1AON | 176 |
| DAMY15POL3NM | 172 |
| DAMY15S | 141 |
| DAMY15SNM | 181 |
| DAMY15SNM*1AON | 177 |
| DAMY15SOL3NM | 173 |
| DAMY3W3PK87 | 78 |
| DAMY3W3PNM | 188 |
| DAMY3W3SA197 | 79 |
| DAMY3W3SNM | 189 |
| DAMY3WK3PK87 | 78 |
| DAMY3WK3PNM | 188 |
| DAMY3WK3SA197 | 79 |
| DAMY3WK3SNM | 189 |
| DAMY7W2PK87 | 78 |
| DAMY7W2PNM | 188 |
| DAMY7W2SA197 | 79 |
| DAMY7W2SNM | 189 |
| DAMZIIC1PNK87. | 52 |
| DAMZIICIPYK87 | 56 |
| DAMZ11C1SNA197 | 53 |
| DAMZ11C1SYA197 | 57 |
| DAMZ11H1PNK87 | 66 |
| DAMZ11H1PYK87 | 70 |
| DAMZ11H1SNA197 | 67 |
| DAMZ11H1SYA197 | 71 |
| DAMZ15PNK87 | 6 |
| DAMZ15SNA197 | 7 |
| DAMZ3C3PNK87 | 52 |
| DAMZ3C3PYK87 | 56 |
| DAMZ3C3SNA197 | 53 |
| DAMZ3C3SYA197 | 57 |
| DAMZ3CK3PNK87TM | 52 |
| DAMZ3CK3PYK87TM | 56 |
| DAMZ3CK3SNA197TM . | 53 |
| DAMZ3CK3SYA197TM . | 57 |
| DAMZ3H3PNK87 | 66 |
| DAMZ3H3PYK87 | 70 |
| DAMZ3H3SNA197 | 67 |
| DAMZ3H3SYA197 | 71 |
| DAMZ3HK3PNK87TM | 66 |
| DAMZЗНКЗРYK87TM | 70 |
| DAMZ3HK3SNA197TM. | 67 |
| DAMZ3HK3SYA197TM . | 71 |
| DAMZ7C2PNK87 . | 52 |
| DAMZTC2PYK87 | 56 |
| DAMZ7C2SNA197 |  |


| Part Number | Page |
| :---: | :---: |
| DAMZ7C2SYA197 |  |
| DAMZ7H2PNK87 | 66 |
| DAMZ7H2PYK87 | 70 |
| DAMZ7H2SNA197 | 67 |
| DAMZ7H2SYA197 | 71 |
| DANG15P-P1 | 4 |
| DANG15S-P1 | 5 |
| DANGE15P-P1 | 4 |
| DANGE15S-P1 | 5 |
| DANGL15P-P1 | 4 |
| DANGL15S-P1 | 5 |
| DANGX15P-P1 | 4 |
| DANGX15S-P1 | 5 |
| DANGZ15P-P1 | 4 |
| DANGZ15S-P1 | 5 |
| DAW15P* | 38 |
| DAW15P*G | 38 |
| DAW155* | 39 |
| DAW15s*G | 39 |
| DAWE15P* | 38 |
| DAWE15P*G | 38 |
| DAWE15S* | 39 |
| DAWE15S*G | 39 |
| DAX15P-0L2-K87-146 | 10 |
| DAX15PK87 | 32 |
| DAX15S-OL2-A197-146 | 11 |
| DAX15SA197 | 33 |
| DB-59-20 | 195, 218 |
| DB-60-20 | 195, 218 |
| DB111807-1 | 216 |
| DB111807-5 | 216 |
| DB111811 | 216 |
| DB111811-2 | 216 |
| DB111949-43 | 48 |
| DB115339-2 | 207 |
| DB115339-22 | 205 |
| DB115386-102A | 195 |
| DB115386-3B | 207 |
| DB121073-151 | 200 |
| DB121073-51 | 200 |
| DB19678-168 | 193, 195 |
| DB19678-171 | 195 |
| DB19678-175 | 195 |
| DB19678-2 | 204 |
| DB19977-2 | 204 |
| DB19977-43 | 193, 195 |
| DB20962 | 203 |
| DB20962-18 | 192 |
| DB22254 | 214 |
| DB22255 | 215 |
| DB24659 | 203 |
| DB24659-15 | 192,195 |
| DB25P-0L2-K87 | 10 |
| DB25P-1A5N-K87 | 26 |
| DB25P-1A6N-K87 | 26 |
| DB25P-1A7N-K87 | 22 |
| DB25P-1A8N-K87 | 22 |
| DB25P-1A9N-K87 | 22 |
| DB25P-1ADN-K87 | 24 |
| DB25P-1AFN-K87 | 22 |
| DB25P-1AJ N-K87 | 24 |
| DB25P-1AON-K87 | 20 |
| DB25P-1ATN-K87 | 26 |
| DB25P-1AUN-K87 | 26 |
| DB25P-1AVN-K87 | 24 |
| DB25P-1AWN-K87 | 24 |
| DB25P-F179A-K87 | 12 |
| DB25PK87 | 32 |
| DB25S-0L2-A197 | 11 |
| DB25S-125N-A197 | 27 |
| DB25S-1A6N-A197 | 27 |
| DB25S-1A7N-A197 | 23 |
| DB25S-1A8N-A197 | 23 |
| DB25S-1A9N-A197 | 23 |
| DB25S-1ADN-A197 | 25 |
| DB25S-1AFN-A197. | 23 |
| DB25S-1AJ N-A197 | 25 |
| DB25S-1AON-A197 | 21 |
| DB25S-1ATN-A197 | 27 |
| DB25S-1AUN-A197 | 27 |
| DB25S-1AVN-A197 | 25 |
| DB25S-1AWN-A197 | 25 |
| DB25S-F179A-A197 |  |


| Part Number | Page |
| :---: | :---: |
| DB25SA197 | 33 |
| DB50906-1 | 218 |
| DB51212 | 206 |
| DB51213 | 206 |
| DB51221-1 | 210 |
| DB51226-1B | 206 |
| DB53750-2 | 218 |
| DBA13W3PK87F0 | 80 |
| DBA13W3SA197FO | 81 |
| DBA17W2PK87F0 | 80 |
| DBA17W2SA197FO | 81 |
| DBA21W1PK87F0 | 80 |
| DBA21W1SA197FO | 81 |
| DBA25PK87FO | 36 |
| DBA25SA197FO | 37 |
| DBA5W5PK87F0 | 80 |
| DBA5W5SA197F0 | 81 |
| DBA9W4PK87F0 | 80 |
| DBA9W4SA197F0 | 81 |
| DBBS-25 | 205 |
| DBBU111511 | 216 |
| DBE25P-0L2-K87-146 | 10 |
| DBE25PK87 | 32 |
| DBE25S-OL2-A197-146 | 11 |
| DBE25SA197 | 33 |
| DBJ K25P*-1AON | 110 |
| DB] K25P*-1A5N | 118 |
| DB] K25P*-1A6N | 118 |
| DB] K25P*-1A7N | 114 |
| DBJ K25P*-1A8N | 114 |
| DBJ K25P*-1A9N | 114 |
| DB K25P*-1ADN | 116 |
| DBJ K25P*-1AFN. | 114 |
| DBJ K25P*-1AGN | 116 |
| DBJ K25P*-1AHN | 114 |
| DB] K25P*-1AJ N | 116 |
| DB] K25P*-1APN | 118 |
| DB] K25P*-1ATN | 118 |
| DBJ K25P*-1AUN | 118 |
| DB] K25P*-1AVN | 116 |
| DBJ K25P*-1AWN | 116 |
| DB K25P*-1U0N | 108 |
| DB] K25P*-1U7N | 112 |
| DB) K25P*-1U7N-146 | 112 |
| DBJ K25P*-0L4 | 120 |
| DBJ K25S*-1AON | 111 |
| DB K25S*-1A5N | 119 |
| DB] K255*-1A6N | 119 |
| DBJ K255*-1A7N | 115 |
| DBJ K255*-1A8N | 115 |
| DBJ K255*-1A9N | 115 |
| DB] K25S*-1ADN | 117 |
| DBJ K25S*-1AFN. | 115 |
| DBJ K25S*-1AGN | 117 |
| DB] K255*-1AHN | 115 |
| DBJ K255*-1AJ N | 117 |
| DB K25S*-1APN | 119 |
| DB] K255*-1ATN | 119 |
| DBJ K255*-1AUN | 119 |
| DB] K25S*-1AVN | 117 |
| DBJ K25S*-1AWN | 117 |
| DB] K255*-1U0N | 109 |
| DB] K255*-1U7N | 113 |
| DB) K25S*-1U7N-146 | 113 |
| DBJ K25S*-OL4 | 121 |
| DB] KE25P*-1A0N | 110 |
| DB) KE25P*-1U0N | 108 |
| DB] KE25P*-OL4 | 120 |
| DB) KE25P*-0L4-146 | 120 |
| DB) KE25S*-1A0N | 111 |
| DB) KE25S*-1U0N | 109 |
| DB] KE25S*-OL4 | 121 |
| DB) KE25S*-0L4-146 | 121 |
| DB) KX25P*-1A0N | 110 |
| DBJ KX25P*-0L4 | 120 |
| DB) KX25P*-0L4-146 | 120 |
| DB) KX25S*-1A0N | 111 |
| DBJ KX25S*-0L4 | 121 |
| DB) KX25S*-0L4-146 | 121 |
| DB] T25P | 122 |
| DB] T255* | 123 |
| DB TE25P | 122 |
| DB) TE25S* | 23 |


| Part Number | Page |
| :---: | :---: |
| DBJ TX25P | 122 |
| DB] TX25S* | 123 |
| DBM-13W3P-1A0N-K87 | 74 |
| DBM-13W3P-1A7N-K87 | 74 |
| DBM-13W3P-NMB-76 | 195 |
| DBM-13W3P-NMC-76 | 95 |
| DBM-13W3P-OL2-K87 | 76 |
| DBM-13W3P-0L4-K87 | 76 |
| DBM-13W3S-1A0N-A197 | 75 |
| DBM-13W3S-1A7N-A197 | 75 |
| DBM-13W3S-NMB-77 | 195 |
| DBM-13W3S-NMC-76 | 195 |
| DBM-13W3S-OL2-A197 | 77 |
| DBM-13W3S-0L4-A197 | 77 |
| DBM-17W2P-1A0N-K87 | 74 |
| DBM-17W2P-1A7N-K87 | 74 |
| DBM-17W2P-NMB-76 | 195 |
| DBM-17W2P-NMC-76 | 195 |
| DBM-17W2P-0L2-K87 | 76 |
| DBM-17W2P-0L4-K87 | 76 |
| DBM-17W2S-1AON-A197 | 75 |
| DBM-17W2S-1A7N-A197 | 75 |
| DBM-17W2S-NMC-76 | 195 |
| DBM-17W2S-NMC-77 | 195 |
| DBM-17W2S-0L2-A197 | 77 |
| DBM-17W2S-0L4-A197 | 77 |
| DBM-21W1P-1A0N-K87 | 74 |
| DBM-21W1P-1A7N-K87 | 74 |
| DBM-21W1P-NMB-76. | 195 |
| DBM-21W1P-NMB-77 | 195 |
| DBM-21W1P-OL2-K87 | 76 |
| DBM-21W1P-0L4-K87 | 76 |
| DBM-21W1S-1AON-A197 | 75 |
| DBM-21W1S-1A7N-A197 | 75 |
| DBM-21W1S-NMB-76 | 195 |
| DBM-21W1S-NMB-77 | 195 |
| DBM-21W1S-NMC-76 | 195 |
| DBM-21W1S-OL2-A197 | 77 |
| DBM-21W1S-OL4-A197 | 77 |
| DBM-25S-NMB-76 | 195 |
| DBM-25S-NMC-76 | 195 |
| DBM-25S-NMC-77 | 195 |
| DBM-5W5P-1AON-K87 | 74 |
| DBM-5W5P-1A7N-K87 | 74 |
| DBM-5W5P-NMB-76 | 195 |
| DBM-5W5P-NMC-76 | 195 |
| DBM-5W5P-NMC-77 | 195 |
| DBM-5W5P-0L2-K87 | 76 |
| DBM-5W5P-0L4-K87 | 76 |
| DBM-5W5S-1A0N-A197 | 75 |
| DBM-5W5S-1A7N-A197 | 75 |
| DBM-5W5S-NMB-76 | 195 |
| DBM-5W5S-NMB-77 | 195 |
| DBM-5W5S-NMC-76 | 195 |
| DBM-5W5S-NMC-77 | 195 |
| DBM-5W5S-0L2-A197 | 77 |
| DBM-5W5S-OL4-A197 | 77 |
| DBM-9W4P-1AON-K87 | 74 |
| DBM-9W4P-1A7N-K87 | 74 |
| DBM-9W4P-NMB-77 | 195 |
| DBM-9W4P-NMC-76 | 195 |
| DBM-9W4P-0L2-K87 | 76 |
| DBM-9W4P-0L4-K87 | 76 |
| DBM-9W4S-1A0N-A197 | 75 |
| DBM-9W4S-1A7N-A197 | 75 |
| DBM-9W4S-NMB-77 | 195 |
| DBM-9W4S-NMC-76 | 195 |
| DBM-9W4S-OL2-A197 | 77 |
| DBM-9W4S-0L4-A197 | 77 |
| DBM13W3P-NMB-77 | 195 |
| DBM13W3P1AONNMBK52 | 195 |
| DBM13W3P1A7NNM ${ }^{\text {a }} 52$ | 195 |
| DBM13W3P1A9NNMBK52 | 195 |
| DBM13W3PF179ANMBK52 | 195 |
| DBM13W3PK87 | 78 |
| DBM13W3PNM | 188 |
| DBM13W3PNMBK52 | 195 |
| DBM13W3POL3NMBK52 | 195 |
| DBM13W3S-NMB-76 | 195 |
| DBM13W3S1AONNMBK52 | 195 |
| DBM13W3S1A7NNMBK52 | 195 |
| DBM13W3S1A9NNMBK52 | 195 |
| DBM13W3SA197 . . . |  |


| Part Number | Page |
| :---: | :---: |
| DBM13W3SF179ANMBK52 | 195 |
| DBM13W3SNM | 189 |
| DBM13W3SNMBK52 | 195 |
| DBM13W3SOL3NMBK52 | 195 |
| DBM17W2P-NMC-77 | 195 |
| DBM17W2P1AONNMBK52 | 195 |
| DBM17W2P1A7NNMBK52 | 195 |
| DBM17W2P1A9NNMBK52 | 195 |
| DBM17W2PF179ANMBK52 | 195 |
| DBM17W2PK87 | 78 |
| DBM17W2PNM | 188 |
| DBM17W2PNMB77 | 195 |
| DBM17W2PNMBK52 | 195 |
| DBM17W2POL3NMBK52 | 195 |
| DBM17W2S1AONNMBK52 | 195 |
| DBM17W2S1A7NNM BK52 | 195 |
| DBM17W2S1A9NNM BK52 | 195 |
| DBM17W2SA197 | 79 |
| DBM17W2SF179ANMBK52 | 195 |
| DBM17W2SNM | 189 |
| DBM17W2SNMB77 | 195 |
| DBM17W2SNMBK52 | 195 |
| DBM17W2SOL3NMBK52 | 195 |
| DBM21W1P1AONNMBK52 | 195 |
| DBM21W1P1A7NNMBK52 | 195 |
| DBM21W1P1A9NNMBK52 | 195 |
| DBM21W1PF179ANMBK52. | 195 |
| DBM21W1PK87 | 78 |
| DBM21W1PNM | 188 |
| DBM21W1PNMBK52 | 195 |
| DBM21W1POL3NMBK52 | 195 |
| DBM21W1S1AONNMBK52 | 195 |
| DBM21W1S1A7NNMBK52 | 195 |
| DBM21W1S1A9NNMBK52 | 195 |
| DBM21W1SA197 | 79 |
| DBM21W1SF179ANM BK52. | 195 |
| DBM21W1SNM | 189 |
| DBM21W1SNMBK52 | 195 |
| DBM21W1SOL3NMBK52 | 195 |
| DBM25P | 140 |
| DBM25P1AONNMBK52. | 195 |
| DBM25P1A7NNMBK52. | 195 |
| DBM25P1A9NNM BK52. | 195 |
| DBM25PA | 132 |
| DBM25PB | 136 |
| DBM25PC | 134 |
| DBM25PD | 132 |
| DBM25PE | 136 |
| DBM25PF | 134 |
| DBM25PF179 | 138 |
| DBM25PF179A | 138 |
| DBM25PF179ANMBK52 | 195 |
| DBM25PG | 132 |
| DBM25PH | 136 |
| DBM25PK | 134 |
| DBM25PL | 132 |
| DBM25PLNM | 174 |
| DBM25PM | 136 |
| DBM25PNM | 180 |
| DBM25PNM*1A7N | 178 |
| DBM25PNM*1A9N | 178 |
| DBM25PNM*1AON | 176 |
| DBM25PNMB76 | 195 |
| DBM25PNMB77 | 195 |
| DBM25PNMBK52 | 195 |
| DBM25PNMC76. | 195 |
| DBM25PNMC77 | 195 |
| DBM25POL3NM | 172 |
| DBM25POL3NMBK52 | 195 |
| DBM25PP | 134 |
| DBM25PR | 134 |
| DBM25PS | 132 |
| DBM25PW | 132 |
| DBM25PX | 136 |
| DBM25PZ. | 136 |
| DBM25S | 141 |
| DBM25S1AONNMBK52. | 195 |
| DBM25S1A7NNMBK52. | 195 |
| DBM25S1A9NNMBK52. | 195 |
| DBM25SA | 133 |
| DBM25SB | 137 |
| DBM25SC | 135 |
| DBM25SD | 133 |


| Part Number | Page | Part Number | Page |
| :---: | :---: | :---: | :---: |
| DBM25SE | 137 | DBMC21P1SVA197 | 65 |
| DBM25SF | 135 | DBMC25PJ K87 | 16 |
| DBM25SF179 | 139 | DBMC25S A197. | 17 |
| DBM25SF179A | 139 | DBMC5C5P K87 | 44 |
| DBM25SF179ANMBK52 | 195 | DBMC5C5PVK87 | 50 |
| DBM25SG | 133 | DBMC5C5S A197 | 45 |
| DBM25SH | 137 | DBMC5C5SVA197 | 51 |
| DBM25SK | 135 | DBMC5H5PJ K87 | 60 |
| DBM25SL | 133 | DBMC5H5S A197 | 61 |
| DBM25SLNM | 175 | DBMC5P5PVK87 | 64 |
| DBM25SM | 137 | DBMC5P5SVA197 | 65 |
| DBM25SNM | 181 | DBMC9C4P K87 | 44 |
| DBM25SNM*1A7N | 179 | DBMC9C4PVK87 | 50 |
| DBM25SNM*IA9N | 179 | DBMC9C4S A197 | 45 |
| DBM25SNM*1AON | 177 | DBMC9C4SVA197 | 51 |
| DBM25SNMBK52. | 195 | DBMC9H4P K87 | 60 |
| DBM25SOL3NM | 173 | DBMC9H4SJ A197 | 61 |
| DBM25SOL3NMBK52 | 195 | DBMC9P4PVK87 | 64 |
| DBM25SP | 135 | DBMC9P4SVA197 | 65 |
| DBM25SR | 135 | DBMD13C3P K87 | 44 |
| DBM25SS | 133 | DBMD13C3PVK87 | 50 |
| DBM25SW | 133 | DBMD13C3S A197 | 45 |
| DBM25SX | 137 | DBMD13C3SVA197 | 51 |
| DBM25SZ | 137 | DBMD13H3PJ K87 | 60 |
| DBM5W5PNMB77 | 195 | DBMD13H3S A197. | 61 |
| DBM5W5PNMBK52 | 195 | DBMD13P3PVK87 | 64 |
| DBM5W5SA197 | 79 | DBMD13P3SVA197 | 65 |
| DBM5W5SNM | 189 | DBMD17C2PJ K87 | 44 |
| DBM5W5SNMBK52 | 195 | DBMD17C2PVK87 | 50 |
| DBM9W4P1AONNMBK52 | 195 | DBMD17C2SJ A197 | 45 |
| DBM9W4P1A7NNMBK52 | 195 | DBMD17C2SVA197 | 51 |
| DBM9W4P1A9NNMBK52 | 195 | DBMD17H2PJ K87 | 60 |
| DBM9W4PF179ANMBK52 | 195 | DBMD17H2SJ A197. | 61 |
| DBM9W4PK87. | 78 | DBMD17P2PVK87 | 64 |
| DBM9W4PNM | 188 | DBMD17P2SVA197 | 65 |
| DBM9W4PNMBK52 | 195 | DBMD21C1PJ K87 | 44 |
| DBM9W4POL3NMBK52 | 195 | DBMD21C1PVK87 | 50 |
| DBM9W4S1AONNMBK52 | 195 | DBMD21C1SJ A197 | 45 |
| DBM9W4S1A7NNMBK52 | 195 | DBMD21C1SVA197. | 51 |
| DBM9W4S1A9NNMBK52 | 195 | DBMD21H1PJ K87 | 60 |
| DBM9W4SA197 | 79 | DBMD21H1SJ A197 | 61 |
| DBM9W4SF179ANMBK52 | 195 | DBMD21P1PVK87 | 64 |
| DBM9W4SNM | 189 | DBMD21P1SVA197 | 65 |
| DBM9W4SNMBK52 | 195 | DBMD25PJ K87 | 16 |
| DBM9W4SOL3NMBK52 | 195 | DBMD25SJ A197 | 17 |
| DBMA25PNM | 182 | DBMD5C5P K87 | 44 |
| DBMA25PNMBK52 | 195 | DBMD5C5PVK87 | 50 |
| DBMA25SNM | 183 | DBMD5C5SJ A197 | 45 |
| DBMA25SNMBK52 | 195 | DBMD5C5SVA197 | 51 |
| DBMA44PNM | 184 | DBMD5H5P K87 | 60 |
| DBMA44SNM | 185 | DBMD5H5S A197 | 61 |
| DBMAY25PNM | 182 | DBMD5P5PVK87. | 64 |
| DBMAY25SNM | 183 | DBMD5P5SVA197 | 65 |
| DBMAY44PNM | 184 | DBMD9C4P K87 | 44 |
| DBMAY44SNM | 185 | DBMD9C4PVK87 | 50 |
| DBMB-17W2S-NMB-76 | 195 | DBMD9C4S A197 | 45 |
| DBMB-25S-NMB-76 | 195 | DBMD9C4SVA197 | 51 |
| DBMB-25S-NMB-71 | 195 | DBMD9H4P K87 | 60 |
| DBMB-25S-NMC-77 | 195 | DBMD9H4S A197 | 61 |
| DBMB25SNMC76. | 195 | DBMD9P4PVK87 | 64 |
| DBMC13C3P K87 | 44 | DBMD9P4SVA197 | 65 |
| DBMC13C3PVK87 | 50 | DBME13W3PK87 | 78 |
| DBMC13C3SJ A197 | 45 | DBME13W3SA197 | 79 |
| DBMC13C3SVA197 | 51 | DBME17W2PK87. | 78 |
| DBMC13H3PJ K87 | 60 | DBME17W2SA197 | 79 |
| DBMC13H3S A197 | 61 | DBME21W1PK87 | 78 |
| DBMC13P3PVK87 | 64 | DBME21W1SA197 | 79 |
| DBMC13P3SVA197 | 65 | DBME25P | 140 |
| DBMC17C2P K87 | 44 | DBME25S | 141 |
| DBMC17C2PVK87 | 50 | DBME5W5PK87 | 78 |
| DBMC17C2SJ A197 | 45 | DBME5W5SA197 | 79 |
| DBMC17C2SVA197 | 51 | DBME9W4PK87 | 78 |
| DBMC17H2PJ K87 | 60 | DBME9W4SA197 | 79 |
| DBMC17H2SJ A197 | 61 | DBM G13C3PJ K87 | 44 |
| DBMC17P2PVK87 | 64 | DBMG13C3PVK87 | 50 |
| DBMC17P2SVA197 | 65 | DBMG13C3S A197 | 45 |
| DBMC21C1PJ K87 | 44 | DBMG13C3SVA197 | 51 |
| DBMC21C1PVK87 | 50 | DBMG13H3PJ K87 | 60 |
| DBMC21C1SJ A197 | 45 | DBMG13H3SJ A197 | 61 |
| DBMC21C1SVA197 | 51 | DBMG13P3PVK87 | 64 |
| DBMC21H1PJ K87 | 60 | DBMG13P3SVA197 | 65 |
| DBMC21H1S A197 | 61 | DBMG17C2PJ K87 | 44 |
| DBMC21P1PVK87 | . 64 | DBMG17C2PVK87 |  |


| Part Number | Page |
| :---: | :---: |
| DBMG17C2SJ A197 | 45 |
| DBMG17C2SVA197 | 51 |
| DBMG17H2PJ K87 | 60 |
| DBMG17H2SJA197 | 61 |
| DBMG17P2PVK87. | 64 |
| DBMG17P2SVA197 | 65 |
| DBMG21C1P K87 | 44 |
| DBMG21C1PVK87 | 50 |
| DBMG21C1S A197. | 45 |
| DBMG21C1SVA197. | 51 |
| DBMG21H1PJ K87 | 60 |
| DBMG21H1S A197 . | 61 |
| DBMG21P1PVK87 | 64 |
| DBMG21P1SVA197 | 65 |
| DBMG25P K87 | 16 |
| DBMG25SJ A197 | 17 |
| DBMG5C5P K87 | 44 |
| DBMG5C5PVK87 | 50 |
| DBMG5C5S A197 | 45 |
| DBMG5C5SVA197 | 51 |
| DBMG5H5PJ K87 | 60 |
| DBMG5H5S A197 | 61 |
| DBMG5P5PVK87 | 64 |
| DBMG5P5SVA197 | 65 |
| DBMG9C4P K87 | 44 |
| DBMG9C4PVK87 | 50 |
| DBMG9C4SJ A197 | 45 |
| DBMG9C4SVA197 | 51 |
| DBMG9H4P K87 | 60 |
| DBMG9H4SJ A197 | 61 |
| DBMG9P4PVK87 | 64 |
| DBMG9P4SVA197 | 65 |
| DBMM13W3P | 166 |
| DBMM13W3S | 167 |
| DBMM17W2P | 166 |
| DBMM17W2S | 167 |
| DBMM21W1P | 166 |
| DBMM21W1S | 167 |
| DBMM25P | 140 |
| DBMM25PA | 132 |
| DBMM25PB | 136 |
| DBMM25PC | 134 |
| DBMM25PD | 132 |
| DBMM25PE | 136 |
| DBMM25PF | 134 |
| DBMM25PF179 | 138 |
| DBMM25PF179A | 138 |
| DBMM25PG | 132 |
| DBMM25PH | 136 |
| DBMM25PK | 134 |
| DBMM25PL | 132 |
| DBMM25PM | 136 |
| DBMM25PP | 134 |
| DBMM25PR | 134 |
| DBMM25PS | 132 |
| DBMM25PW | 132 |
| DBMM25PX | 136 |
| DBMM25PZ | 136 |
| DBMM25S | 141 |
| DBMM25SA | 133 |
| DBMM25SB | 137 |
| DBMM25SC | 135 |
| DBMM25SD | 133 |
| DBMM25SE | . 137 |
| DBMM25SF | 135 |
| DBMM25SF179 | 139 |
| DBMM25SF179A | 139 |
| DBMM25SG | 133 |
| DBMM25SH | 137 |
| DBMM25SK | 135 |
| DBMM25SL | 133 |
| DBMM25SM | 137 |
| DBMM25SP | 135 |
| DBMM25SR | 135 |
| DBMM25SS | 133 |
| DBMM25SW | 133 |
| DBMM25SX | 137 |
| DBMM25SZ | 137 |
| DBMM5W5S | 167 |
| DBMM9W4P | 166 |
| DBMM9W4S | 167 |
| DBMMC13C3P | 146 |
| DBMMC13C3S | 147 |



| Part Number | Page |
| :---: | :---: |
| DBMY21W1SNM | 189 |
| DBMY25P | 140 |
| DBMY25PNM | 180 |
| DBMY25PNM*1AON | 176 |
| DBMY25POL3NM | 172 |
| DBMY25S | 41 |
| DBMY25SNM | 181 |
| DBMY25SNM*IAON. | 177 |
| DBMY2550L3NM | 173 |
| DBMY5W5PK87. | 78 |
| DBMY5W5PNM | 188 |
| DBMY5W5SA197 | 79 |
| DBMY5W5SNM | 189 |
| DBMY9W4PK87 | 78 |
| DBMY9W4PNM | 188 |
| DBMY9W4SA197 | 79 |
| DBMY9W4SNM | 189 |
| DBMZ3C3PNK87 | 52 |
| DBMZЗСЗРYK87 | 56 |
| DBMZ3C35NA197 | 53 |
| DBMZЗЗ35YA197 | 57 |
| DBMZЗН3PNK87 | 66 |
| DBMZ3Н3PYK87 | 70 |
| DBMZ3H3SNA197 | 67 |
| DBMZ3H35YA197. | 71 |
| DBMZITC2PNK87 |  |
| DBMZ77C2PYK87 | 56 |
| DBMZ17C2SNA197 |  |
| DBMZ17C2SYA197 | 57 |
| DBMZ7H2PNK87 | 66 |
| DBMZ7H2PYK87 |  |
| DBMZZ7-25NA197 | 67 |
| DBMZZ7H2SYA197 |  |
| DBMZ21C1PNK87 | 52 |
| DBMZ21C1PYK87 | 56 |
| DBMZ21C1SNA197. |  |
| DBMZ21C1SYA197 | 57 |
| DBMZ21H1PNK87 |  |
| DBMZ21H1PYK87 | 70 |
| DBMZ21H1SNA197 | 67 |
| DBMZ21H1SYA197 | 71 |
| DBMZ25PNK87 |  |
| DBMZ25SNA197 |  |
| DBMZ5C5PNK87 | 52 |
| DBMZ5C5PYK87 |  |
| DBMZ5C5SNA197 | 53 |
| DBMZ5C55YA197 |  |
| DBMZ5H5PNK87 | 66 |
| DBMZEH5PYK87 |  |
| DBMZ5H5SNA197 | 67 |
| DBMZ5H5SYA197 | 71 |
| DBMZ2C4PNK87 |  |
| DBMZ9C4PYK87 | 56 |
| DBMZ9CASNA197 |  |
| DBM Z9C4SYA197 | 57 |
| DBMZ9H4PNK87 |  |
| DBMZ2H4PYK87 |  |
| DBMZ9H4SNA197 | 67 |
| DBMZ9H4SYA197 |  |
| DBNG25P-P1 |  |
| DBNG255-P1. |  |
| DBNGE25P-P1 |  |
| DBNGE25S-P1 |  |
| DBNGL25P-P1 |  |
| DBNGL25S-P1 |  |
| DBNGX25P-P1 |  |
| DBNGX25S-P1 |  |
| DBNGZ25P.P1 |  |
| DBNGZ25S-P1 |  |
| DBW25P* |  |
| DBW25P*G |  |
| DBW255* | 39 |
| DBW255*G |  |
| DBWE25P* | 38 |
| DBWE25P*G |  |
| DBWE255* |  |
| DBWE25s*G |  |
| DBX25P-012-K87-146 |  |
| DBX25PK87 | 32 |
| DBX255-0L2-A197-146 |  |
| DBX25SA197 | 33 |
| DC.59-20. | 195, 218 |
| DC-60-20 |  |


| Part Number | Page | Part Number | Page | Part Number | Page |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DC111808-1 | 216 | DCJ K37P*.1AWN | 116 | DCM-21WA4S-NMB- | 195 |
| DC111808-5 | 216 | DC J K37P*-1U0N | 108 | DCM-21WA4S-OL2-A197 | 77 |
| DC115339-23 | 205 | DC K K37**-1U7N | 112 | DCM-21WA4S-OL4-A197 | 77 |
| DC115339-3 | 207 | DC, K37P*-1U7N-146 | 112 | DCM-25W36-NMB-77 | 195 |
| DC115386-100A | 195 | DCJ K37P*.OL4 | 120 | DCM-25W3P-1AON-K87 | 74 |
| DC115386-4B | 207 | DC J K37**-1AON. | 111 | DCM-25W3P-1ATN-K87 | 74 |
| DC121073-152 | 200 | DCJ K37\%*-1A5N | 119 | DCM-25W3P-NMB-77 | 195 |
| DC121073-52 | 200 | DCJ K37**-1A6N | 119 | DCM-25W3P-0L2-K87 | 76 |
| DC19678-138 | 193, 195 | DCJ K37**-1A7N | 115 | DCM-25W3P-0L4-K87 | 76 |
| DC19678-162 | 195 | DCJ K37**-1A8N | 115 | DCM-25W3S-1AON-A197 | 75 |
| DC19678-173 | 195 | DCJ K37**-1A9N | 115 | DCM-25W3S-1A7N-A197 | 75 |
| DC19678-3 | 204 | DC J K37**-1ADN | 117 | DCM-25W3S-NMC-76 | 195 |
| DC19977-3 | 204 | DCJ K37**-1AFN | 115 | DCM-25W3S-NMC-77 | 195 |
| DC19977-45 | 193, 195 | DC J K37**-1AGN | 117 | DCM-25W3S-OL2-A197 | 77 |
| DC20963 | 203 | DC J K37**-1AHN | 115 | DCM-25W35-0L4-A197 | 77 |
| DC20963-17 | 192 | DC J K37**-1A N | 117 | DCM-27W2P-1AON-K87 | 74 |
| DC22070 | 215 | DCJ K37**-1APN | 119 | DCM-27W2P-1A7N-K87 | 74 |
| DC22071 | 214 | DC J K37**-1ATN | 119 | DCM-27W2P-0L2-K87 | 76 |
| DC24660 | 203 | DC J K37**-1AUN | 119 | DCM-27W2P-0L4-K87 | 76 |
| DC24660-16 | 192, 195 | DC K K37**-1AVN | 117 | DCM-27W2S-1AON-A197 | 75 |
| DC37P-0L2-K87 | 10 | DC K $375 *$-1AWN | 117 | DCM-27W2S-1A7N-A197 | 75 |
| DC37P-1A5N-K87 | 26 | DCJ K375*-1U0N | 109 | DCM-27W2S-NMC-76 | 195 |
| DC37P-1A6N-K87 |  | DCJ K375*-1U7N | 113 | DCM-27W2S-OL2-A197 |  |
| DC37P-1ATN-K87 | 22 | DCJ K37**-1U7N-146 | 113 | DCM-27W2S-OL4-A197 | 77 |
| DC37P-1A8N-K87 | 22 | DCJ K375*-0L4 | 121 | DCM-37P-NMC-77. | 195 |
| DC37P-1A9N-K87 | 22 | DCJ KE37P*.1AON | 110 | DCM-37S-NMB-76. | 195 |
| DC37P-1ADN-K87 | 24 | DCJKE37P*.1UON | 108 | DCM-37S-NMC-76. | 195 |
| DC37P-1AFN-K87 | 22 | DCJ KE37P*.OL4 | 120 | DCM-37S-NMC-77. | 195 |
| DC37P-1A N-K87 | 24 | DCJ KE37P*-0L4-146 | 120 | DCM-8W8P-1AON-K87 | 74 |
| DC37P-1AON-K87 | 20 | DC KE375*-1AON. | 111 | DCM-8W8P-1A7N-K87 | 74 |
| DC37P-1ATN-K87 | 26 | DCJKE375*-1UON | 109 | DCM-8W8P-NMB-77 | 195 |
| DC37P-1AUN-K87 | 26 | DCJ KE375*-OL4 | 121 | DCM-8W8P-NMC-77 | 195 |
| DC37P-1AVN-K87 | 24 | DCJ KE375*-0L4-146 | 121 | DCM-8W8P-OL2-K87 | 76 |
| DC37P-1AWN-K87 | 24 | DCJKX37P*.1AON | 110 | DCM-8W8P-0L4-K87 | 76 |
| DC37P-F179A-K87 | 12 | DC, KX37P*-0L4 | 120 | DCM-8W8S-1AON-A197 | 75 |
| DC37PK87 | 32 | DCJ KX37P*-0L4-146 | 120 | DCM-8W8S-1ATN-A197 | 75 |
| DC375-0L2-A197 | 11 | DCJKX375*-1AON | 111 | DCM-8W8S-MNC-76 | 195 |
| DC37S-125N-A197 | 27 | DCJ KX375*-OL4 | 121 | DCM-8W85-NMB-77 | 195 |
| DC375-1A6N-A197 | 27 | DCJ KX375*-0L4-146 | 121 | DCM-8W8S-NMC-77 | 195 |
| DC37S-1A7N-A197 | 23 | DCj 737 P | 122 | DCM-8W8S-0L2-1997 | 77 |
| DC375-1A8N-A197 | 23 | DC J 375 * | 123 | DCM-8W8S-0L4-A197 | 77 |
| DC37S-1A9N-A197 | 23 | DC, TE37P | 122 | DCM13W6P1AONNMBK52 | 195 |
| DC37S-1ADN-A197 | 25 | DCJ TE375* | 123 | DCM13W6P1A7NNMBK52 | 195 |
| DC37S-1AFN-A197 | 23 | DC] TX37P | 122 | DCM13W6P1A9NNMBK52 | 195 |
| DC37S-1A ( N-A197 | 25 | DCj TX375* | 123 | DCM13W6PF179ANMBK52 | 195 |
| DC37S-1AON-A197 | 21 | DCM-13W6P-1AON-K87 | 74 | DCM13W6PK87 | 78 |
| DC37S-1ATN-A197 | 27 | DCM-13W6P-1A7N-K87 | 74 | DCM13W6PNM | 188 |
| DC37S-1AUN-A197 | 27 | DCM-13W6P-NMB-76 | 195 | DCM13W6PNMBK52 | 195 |
| DC375-1AVN-A197 | 25 | DCM-13W6P-NMB-77 | 195 | DCM13W6POL 3 NMBK52 | 95 |
| DC375-1AWN-A197 | 25 | DCM-13W6P-NMC-76 | 195 | DCM13W6S1AONNMBK52 | 195 |
| DC37S-F179A-A197 | 13 | DCM-13W6P-NMC-77 | 195 | DCM13W6S1A7NNMBK52 | 195 |
| DC375A197. | 33 | DCM-13W6P-0L2-K87 | 76 | DCM13W6S1A9NNMBK52 | 195 |
| DC50907-1 | 218 | DCM-13W6P-0L4-K87 | 76 | DCM13W6SA197 | 79 |
| DC51214 | 206 | DCM-13W6S-1AON-A197 | 75 | DCM13W65F179ANMBK52 | 195 |
| DC51215 | 206 | DCM-13W6S-1A7N-A197 | 75 | DCM13W6SNM | 189 |
| DC51222-1 | 210 | DCM-13W6S-NMB-77 | 195 | DCM13W6SNMBK52 | 195 |
| DC53750-3 | 218 | DCM-13W6S-NMC-77 | 195 | DCM13W6SNMC76 | 195 |
| DCA21WA4PK87F0 | 80 | DCM-13W65-0L2-A197 | 77 | DCM13W6SOL_3NMBK52 | 195 |
| DCA21WA4SA197F0 | 81 | DCM-13W65-0L4-A197 | 77 | DCM17W5P1AONNM ${ }^{\text {K } 52 ~}$ | 195 |
| DCA25W3PK87F0 | 80 | DCM-17W5P-1AON-K87 | 74 | DCM17W5P1A7NNM ${ }^{\text {K } 52 ~}$ | 195 |
| DCA37PK87F0 |  | DCM-17W5P-1A7N-K87 | 74 | DCM17W5P1A9NNM BK52 | 195 |
| DCA375A197FO. | 37 | DCM-17W5P-NMB-76 | 195 | DCM17W5PF179ANMBK52 | 195 |
| DCA8W8PK87F0 | 80 | DCM-17W5P-NMC-76 | 195 | DCM17W5PK87. | 78 |
| DCA8W8SA197FO | 81 | DCM-17W5P-NMC-77 | 195 | DCM17W5PNM | 188 |
| DCE37P-0L2-K87-146 | 10 | DCM-17W5P-0L2-K87 | 76 | DCM17W5PNMB77 | 195 |
| DCE37PK87. | 32 | DCM-17W5P-0L4-K87 | 76 | DCM17W5PNMBK52 | 195 |
| DCE37S-0L2-A197-146 | 11 | DCM-17W5S-1AON-A197 | 75 | DCM17W5POL3NMBK52 | 195 |
| DCE375A197 | 33 | DCM-17W5S-1A7N-A197 | 75 | DCM17W5S-NMB-76 | 195 |
| DCJ K37P*-IAON | 110 | DCM-17W5S-NMB-77 | 195 | DCM17W551AONNMBK52 | 195 |
| DC, K37P*-1A5N | 118 | DCM-17W5S-NMC-76 | 195 | DCM17W551A7NNMBK52 | 195 |
| DC K37P*-1A6N | 118 | DCM-17W5S-NMC-77 | 195 | DCM17W551A9NNMBK52 | 195 |
| DC J K37P*-1A7N | 114 | DCM-17W55-0L2-A197 | 77 | DCM17W5SA197 | 79 |
| DC, K37P*-1A8N | 114 | DCM-17W55-014-A197 | 77 | DCM17W55F179ANMBK52 | 195 |
| DC J K37P*-1A9N | 114 | DCM-21W4P-NMB-77 | 195 | DCM17W5SNM | 189 |
| DC J K37P*-IADN | 116 | DCM-21W4S-NMB-77 | 195 | DCM17W5SNMBK52 | 195 |
| DC K K37**-1AFN. | 114 | DCM-21WA4P-1AON-K87. | 74 | DCM17W5SOL3NMBK52 | 195 |
| DCJ K37P*-1AGN | 116 | DCM-21WA4P-1ATN-K87 | 74 | DCM21W4S-NMC-76 |  |
| DC) K37P*-1AHN | 114 | DCM-21WAAP-NMB-77 | 195 | DCM21WAAP-NMB.76 | 195 |
| DC K K37P*-1A N | 116 | DCM-21WAAP-NMC-76 | 195 | DCM21WA4P1AONNMBK52 | 195 |
| DCJ K37P*-1APN | 118 | DCM-21WA4P-0L2-K87 | 76 | DCM21WA4P1A7NMMK52 | 195 |
| DCJ K37P*-1ATN | 118 | DCM-21WA4P-0L4-K87 |  | DCM21WA4P1A9NNMBK52 | 195 |
| DCJ K37P*-1AUN | 118 | DCM-21WA4S-1AON-A197 | 75 | DCM21WA4PF179ANMBK52 | 195 |
| DC) K37P*-1AVN | 116 | DCM-21WA4S-1A7N-A197 |  | DCM21WA4PK87.. |  |


| Part Number | Page | Part Number | Page | Part Number | Page | Part Number | Page |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DCM21WA4PNM | 188 | DCM37S1A7NNMBK52 | 195 | DCMC25C3SVA197 | 51 | DCME37P | 140 |
| DCM21WA4PNMBK52 | 195 | DCM37S1A9NNMBK52 | 195 | DCMC25H3PJ K87 | 60 | DCME375. | 141 |
| DCM21WA4POL3NMBK52 | 195 | DCM37SA | 133 | DCMC25H3S A197 | 61 | DCME8W8PK87 | 78 |
| DCM21WA4S-NMB-76 | 195 | DCM37SB | 137 | DCMC25P3PVK87 | 64 | DCME8W8SA197 | 79 |
| DCM21WA4S1AONNMBK52 | 195 | DCM37SC | 135 | DCMC25P3SVA197 | 65 | DCMG13C6P K87 | 44 |
| DCM21WA4S1A7NNMBK52 | 195 | DCM37SD | 133 | DCMC27C2PJ K87 . | 44 | DCMG13C6PVK87 | 50 |
| DCM21WA4S1A9NNMBK52 | 195 | DCM37SE | 137 | DCMC27C2PVK87 | 50 | DCMG13C6SJ A197 | 45 |
| DCM21WA4SA197 | 79 | DCM37SF | 135 | DCMC27C2SJ A197 | 45 | DCMG13C6SVA197 | 51 |
| DCM21WA4SF179ANMBK52 | 195 | DCM37SF179 | 139 | DCMC27C2SVA197 | 51 | DCMG13H6PJ K87 | 60 |
| DCM21WA4SNM | 189 | DCM37SF179A | 139 | DCMC27H2PJ K87 | 60 | DCMG13H6S A197 | 61 |
| DCM21WA4SNMK K52 | 195 | DCM37SF179ANMBK52 | 195 | DCMC27H2SJ A197 | . 61 | DCM G13P6PVK 87 | 64 |
| DCM21WA4SOL3NMBK52 | 195 | DCM37SG ....... | 133 | DCMC27P2PVK87 | 64 | DCMG13P6SVA197 | 65 |
| DCM25W3P-NMB-76 | 195 | DCM37SH | 137 | DCMC27P2SVA197 | 65 | DCMG17C5PJ K87 | 44 |
| DCM25W3P1AONNMBK52 | 195 | DCM37SK | 135 | DCMC37PJ K87 | 16 | DCMG17C5PVK87 | 50 |
| DCM25W3P1A7NNMBK52 | 195 | DCM37SL | 133 | DCMC37SJ A197 | 17 | DCMG17C5SJ A197 | 45 |
| DCM25W3P1A9NNMBK52 | 195 | DCM37SLNM | 175 | DCMC8C8PJ K87 | 44 | DCMG17C5SVA197 | 51 |
| DCM25W3PF179ANMBK52 | 195 | DCM37SM | 137 | DCMC8C8PVK87 | 50 | DCMG17H5PJ K87 . | 60 |
| DCM25W3PK87 | 78 | DCM37SNM | 181 | DCMC8C8SJ A197 | 45 | DCMG17H5S A197 | 61 |
| DCM25W3PNM | 188 | DCM37SNM*1A7N | 179 | DCMC8C8SVA197 | 51 | DCMG17P5PVK87 | 64 |
| DCM25W3PNMBK52 | 195 | DCM37SNM*IA9N | 179 | DCMC8H8PJ K87 | 60 | DCMG17P5SVA197 | 65 |
| DCM25W3POL3NMBK52 | 195 | DCM37SNM*1AON | 177 | DCMC8H8SJ A197 | . 61 | DCMG21CA4P K87 | 44 |
| DCM25W3S1AONNMBK52 | 195 | DCM37SNMB77. . | 195 | DCMC8P8PVK87 | 64 | DCMG21CA4PVK87. | 50 |
| DCM25W3S1A7NNMBK52 | 195 | DCM37SNMBK52 | 195 | DCMC8P8SVA197 | 65 | DCMG21CA4SJ A197 | 45 |
| DCM25W3S1A9NNMBK52 | 195 | DCM3750L3NM | 173 | DCMD13C6PJ K87 | 44 | DCMG21CA4SVA197 | 51 |
| DCM25W3SA197. | 79 | DCM37SOL3NMBK52 | 195 | DCMD13C6PVK87 | 50 | DCMG21HA4PJ K87 . | 60 |
| DCM25W3SF179ANMBK52 | 195 | DCM37SP | 135 | DCMD13C6SJ A197 | 45 | DCMG21HA4S A197 | 61 |
| DCM25W3SNM | 189 | DCM37SR | 135 | DCMD13C6SVA197 | 51 | DCMG21PA4PVK87 | 64 |
| DCM25W3SNMBK52 | 195 | DCM37SS | 133 | DCMD13H6PJ K87 | 60 | DCMG21PA4SVA197 | 65 |
| DCM25W3SOL3NMBK52 | 195 | DCM375W | 133 | DCMD13H6SJ A197 | 61 | DCMG25C3P K87 . | 44 |
| DCM27W20L3NMBK52 | 195 | DCM37SX | 137 | DCMD13P6PVK87 | 64 | DCMG25C3PVK87. | 50 |
| DCM27W2P-NMC-76. | 195 | DCM37SZ | 137 | DCMD13P6SVA197 | 65 | DCM G25C3S A197 | 45 |
| DCM27W2P1AONNMBK52 | 195 | DCM50PC | 134 | DCMD17C5P K87 . | 44 | DCMG25C3SVA197 | 51 |
| DCM27W2P1A7NNMBK52 | 195 | DCM8W8PK87 | 78 | DCMD17C5PVK87 | 50 | DCMG25H3PJ K87 | 60 |
| DCM27W2P1A9NNMBK52 | 195 | DCM8W8PNM | 188 | DCMD17C5S A197 | 45 | DCMG25H3S A197 | 61 |
| DCM27W2PF179ANMBK52 | 195 | DCM8W8PNMB76 | 195 | DCMD17C5SVA197 | 51 | DCM G25P3PVK87 | 64 |
| DCM27W2PK87 | . 78 | DCM8W8PNMBK52 | 195 | DCMD17H5PJ K87 . | 60 | DCMG25P3SVA197 | 65 |
| DCM27W2PNM | 188 | DCM8W8PNMC76 | 195 | DCMD17H5S A197 | . 61 | DCMG27C2PJ K87 | 44 |
| DCM27W2PNMBK52 | 195 | DCM8W8SA197. | 79 | DCMD17P5PVK87 | 64 | DCMG27C2PVK87 | 50 |
| DCM27W2POL3NMBK52 | 195 | DCM8W8SNM | 189 | DCMD17P5SVA197 | 65 | DCMG27C2SJ A197 | 45 |
| DCM27W2S1AONNMBK52 | 195 | DCM8W8SNMB76 | 195 | DCMD21CA4PJ K87 | 44 | DCMG27C2SVA197 | 51 |
| DCM27W2S1A7NNMBK52 | 195 | DCM8W8SNMBK52 | 195 | DCMD21CA4PVK87 | 50 | DCM G27H2P K87 | 60 |
| DCM27W2S1A9NNMBK52 | 195 | DCMA37PNM . | 182 | DCMD21CA4SJ A197 | 45 | DCMG27H2SJ A197 | 61 |
| DCM27W2SA197. | 79 | DCMA37PNMBK52 | 195 | DCMD21CA4SVA197 | 51 | DCMG27P2PVK87 | 64 |
| DCM27W2SF179ANMBK52 | 195 | DCMA37SNM | 183 | DCMD21HA4PJ K87 | 60 | DCMG27P2SVA197 | 65 |
| DCM27W2SNM | 189 | DCMA375NM ${ }^{\text {K } 52 ~}$ | 195 | DCMD21HA4S A197 | . 61 | $\text { DCM G37P K } 87 \text {.. }$ | 16 |
| DCM27W2SNMBK52 | 195 | DCMA62PNM . | 184 | DCMD21PA4PVK87 | 64 | DCMG37SJ A197 |  |
| DCM37P . . . . . . . | 140 | DCMA62SNM | 185 | DCMD21PA4SVA197 | 65 | DCMG8C8P K 87 | 44 |
| DCM37P1AONNMBK52 | 195 | DCMAY37PNM. | 182 | DCMD25C3P K87 | 44 | DCMG8C8PVK87 | 50 |
| DCM37P1A7NNMBK52 | 195 | DCMAY37SNM | 183 | DCMD25C3PVK87 | 50 | DCMG8C8SJ A197 | 45 |
| DCM37P1A9NNMBK52 | 195 | DCMAY62PNM. | 184 | DCMD25C3S A197 |  | DCMG8C8SVA197 |  |
| DCM37PA | 132 | DCMAY62SNM | 185 | DCMD25C3SVA197 | . 51 | DCM G8H8PJ K87 | 60 |
| DCM37PB | 136 | DCMB-17W5S-NMB-76 | 195 | DCMD25H3PJ K87 | 60 | DCMG8H8SJ A197 | 61 |
| DCM37PC | 134 | DCMB-37S-NMB-77. | 195 | DCMD25H3S A197 | 61 | DCMG8P8PVK87 | 64 |
| DCM37PD | 132 | DCMB-375-NMC-77 | 195 | DCMD25P3PVK87 | 64 | DCMG8P8SVA197 | 65 |
| DCM37PE | 136 | DCMB37S-NMB-76 | 195 | DCMD25P3SVA197 |  | DCMM13W6P . | 166 |
| DCM37PF | 134 | DCMB37S-NMC-76 | 195 | DCMD27C2PJ K87 . | 44 | DCMM13W6S | 167 |
| DCM37PF179 | 138 | DCMC13C6P K87 . | 44 | DCMD27C2PVK87 | 50 | DCMM17W5P | 166 |
| DCM37PF179A | 138 | DCMC13C6PVK87 | 50 | DCMD27C2SJ A197 | 45 | DCMM17W5S | 167 |
| DCM37PF179ANMBK52 | 195 | DCMC13C6S A197 | 45 | DCMD27C2SVA197 | 51 | DCMM21WA4P | 166 |
| DCM37PG | 132 | DCMC13C6SVA197 | 51 | DCMD27H2PJ K87 | 60 | DCMM21WA4S | 167 |
| DCM37PH | 136 | DCMC13H6PJ K87 | 60 | DCMD27H2SJ A197 | 61 | DCMM24W7S | 167 |
| DCM37PK | 134 | DCMC13H6S) A197 | . 61 | DCMD27P2PVK87 | 64 | DCMM25W3P | 166 |
| DCM37PL | 132 | DCMC13P6PVK87. | 64 | DCMD27P2SVA197 | 65 | DCMM25W3S | 167 |
| DCM37PLNM | 174 | DCMC13P6SVA197 | 65 | DCMD37P K87 . . | 16 | DCMM27W2P | 166 |
| DCM37PM.. | 136 | DCMC17C5P K87. | 44 | DCMD37S A197 | 17 | DCMM27W2S | 167 |
| DCM37PNM | 180 | DCMC17C5PVK87 | 50 | DCMD8C8PJ K87 | 44 | DCMM36W4S | 167 |
| DCM37PNM*1A7N | 178 | DCMC17C5SJ A197 | 45 | DCMD8C8PVK87 | 50 | DCMM37P. | 140 |
| DCM37PNM*1A9N | 178 | DCMC17C5SVA197 | 51 | DCMD8C8SJ A197 | 45 | DCMM37PA. | 132 |
| DCM37PNM*1AON | 176 | DCMC17H5P K87. | 60 | DCMD8C8SVA197 | . 51 | DCMM37PB. | 136 |
| DCM37PNMB76 | 195 | DCMC17H5S A197 | 61 | DCMD8H8PJ K87. | . 60 | DCMM37PC. | 134 |
| DCM37PNMB77. | 195 | DCMC17P5PVK87 | 64 | DCMD8H8SJ A197 | . 61 | DCMM37PD | 132 |
| DCM37PNMBK52. | 195 | DCMC17P5SVA197 | 65 | DCMD8P8PVK87. | 64 | DCMM37PE | 136 |
| DCM37PNMC76. | 195 | DCMC21CA4PJ K87 | 44 | DCMD8P8SVA197 | 65 | DCMM37PF | 134 |
| DCM37P0L3NM | 172 | DCMC21CA4PVK87 | 50 | DCME13W6PK87 | 78 | DCMM37PF179 | 138 |
| DCM37POL3NMBK52 | 195 | DCMC21CA4SJ A197 | 45 | DCME13W6SA197 | . 79 | DCMM37PF179A | 138 |
| DCM37PP | 134 | DCMC21CA4SVA197 | 51 | DCME17W5PK87 | 78 | DCMM37PG. | 132 |
| DCM37PR | 134 | DCMC21HA4PJ K87. | 60 | DCME17W5SA197 | . 79 | DCMM37PH. | 136 |
| DCM37PS | 132 | DCMC21HA4SJ A197 | . 61 | DCME21WA4PK87 | 78 | DCMM37PK | 134 |
| DCM37PW | 132 | DCMC21PA4PVK87 | 64 | DCME21WA4SA197 | 79 | DCMM37PL | 132 |
| DCM37PX | 136 | DCMC21PA4SVA197 | 65 | DCME25W3PK87. . | . 78 | DCMM37PM | 136 |
| DCM37PZ | 136 | DCMC25C3P K87 | 44 | DCME25W3SA197 | 79 | DCMM37PP | 134 |
| DCM375. | 141 | DCMC25C3PVK87 | 50 | DCME27W2PK87. | 78 | DCMM37PR | 134 |
| DCM37S1AONNMBK52 | 195 | DCMC25C3SJ A197 | 45 | DCME27W2SA197 | 79 | DCMM37PS | 132 |

Dimensions are shown in mm (inch) Dimensions subject to change


| Numbe | Page | Part Number | Page |
| :---: | :---: | :---: | :---: |
| DCMMP25C3S | 147 | DCMMZ25C3PN | 150 |
| DCMMP25H3P) | 154 | DCMMZ25C3SN | 151 |
| DCMMP25H3S | 155 | DCMMZ25H3PN. | 158 |
| DCMMP27C2P) | 146 | DCMMZ25H3SN. | 159 |
| DCMMP27C2S | 147 | DCMMZ25V3PN. | 162 |
| DCMMP27H2P) | 154 | DCMMZ25V3SN. | 163 |
| DCMMP27H2S | 155 | DCMMZ27C2PN. | 150 |
| DCMMP8C8P | 146 | DCMMZ27C2SN | 151 |
| DCMMP8C8S | 147 | DCMMZ27H2PN. | 158 |
| DCMMP8H8PJ | 154 | DCMMZ27H2SN. | 159 |
| DCMMP8H8S | 155 | DCMMZ27V2PN | 162 |
| DCMMV13C6PN | 150 | DCMMZ27V2SN | 163 |
| DCMMV13C6SN | 151 | DCMMZ8C8PN | 150 |
| DCMMV13H6PN | 158 | DCMMZ8C8SN | 151 |
| DCMMV13H6SN | 159 | DCMMZ8H8PN | 158 |
| DCMMV13V6PN | 162 | DCMMZ8H8SN | 159 |
| DCMMV13V6SN | 163 | DCMMZ8V8PN | 162 |
| DCMMV17C5PN | 150 | DCMMZ8V8SN | 163 |
| DCMMV17C5SN | 151 | DCMN13C6PNK87 | 52 |
| DCMMV17H5PN | 158 | DCMN13C6PYK87 | 56 |
| DCMMV17H5SN | 159 | DCMN13C6SNA197 | 53 |
| DCMMV17V5PN | 162 | DCMN13C6SYA197 | 57 |
| DCMMV17V5SN | 163 | DCMN13H6PNK87 . | 66 |
| DCMMV21CA4PN . | 150 | DCMN13H6PYK87 | 70 |
| DCMMV21CA4SN | 151 | DCMN13H6SNA197 | 67 |
| DCMMV21HA4PN. | 158 | DCMN13H6SYA197 | 71 |
| DCMMV21HA4SN. | 159 | DCMN17C5PNK87 | 52 |
| DCMMV21VA4PN. | 162 | DCMN17C5PYK87 | 56 |
| DCMMV21VA4SN . | 163 | DCMN17C5SNA197 | 53 |
| DCMMV25C3PN. | 150 | DCMN17C5SYA197 | 57 |
| DCMMV25C3SN | 151 | DCMN17H5PNK87 . | 66 |
| DCMMV25H3PN | 158 | DCMN17H5PYK87 | 70 |
| DCMMV25H3SN | 159 | DCMN17H5SNA197 | 67 |
| DCMMV25V3PN. | 162 | DCMN17H5SYA197 | 71 |
| DCMMV25V3SN. | 163 | DCMN21CA4PNK87 | 52 |
| DCMMV27C2PN | 150 | DCMN21CA4PYK87 | 56 |
| DCMMV27C2SN | 151 | DCMN21CA4SNA197 | 53 |
| DCMMV27H2PN | 158 | DCMN21CA4SYA197 | 57 |
| DCMMV27H2SN | 159 | DCMN21HA4PNK87 | 66 |
| DCMMV27V2PN | 162 | DCMN21HA4PYK87 | 70 |
| DCMMV27V2SN | 163 | DCMN21HA4SNA197 | 67 |
| DCMMV8C8PN. | 150 | DCMN21HA4SYA197 | 71 |
| DCMMV8C8SN | 151 | DCMN25C3PNK87. | 52 |
| DCMMV8H8PN | 158 | DCMN25C3PYK87 | 56 |
| DCMMV8H8SN | 159 | DCMN25C3SNA197 | 53 |
| DCMMV8V8PN | 162 | DCMN25C3SYA197 | 57 |
| DCMMV8V8SN. | 163 | DCMN25H3PNK87. | 66 |
| DCMMY13W6P | 166 | DCMN25H3PYK87 | 70 |
| DCMMY13W6S | 167 | DCMN25H3SNA197 | 67 |
| DCMMY17W5P | 166 | DCMN25H3SYA197 | 71 |
| DCMMY17W5S | 167 | DCMN27C2PNK87. | 52 |
| DCMMY21WA4P | 166 | DCMN27C2PYK87 . | 56 |
| DCMMY21WA4S | 167 | DCMN27C2SNA197 | 53 |
| DCMMY24W7S | 167 | DCMN27C2SYA197 | 57 |
| DCMMY25W3P | 166 | DCMN27H2PNK87. | 66 |
| DCMMY25W3S | 167 | DCMN27H2PYK87 | 70 |
| DCMMY27W2P | 166 | DCMN27H2SNA197 | 67 |
| DCMMY27W2S | 167 | DCMN27H2SYA197 | 71 |
| DCMMY36W4S | 167 | DCMN37PNK87 | 6 |
| DCMMY37P | 140 | DCMN37SNA197 | 7 |
| DCMMY37S | 141 | DCMN8C8PNK87 | 52 |
| DCMMY43W2S | 167 | DCMN8C8PYK87 | 56 |
| DCMMY47W1S | 167 | DCMN8C8SNA197 | 53 |
| DCMMY8W8P | 166 | DCMN8C8SYA197 | 57 |
| DCMMY8W8S | 167 | DCMN8H8PNK87. | 66 |
| DCMMZ3C6PN | 150 | DCMN8H8PYK87 | 70 |
| DCMMZ33C6SN | 151 | DCMN8H8SNA197 | 67 |
| DCMMZZ3H6PN | 158 | DCMN8H8SYA197 | 71 |
| DCMMZ13H6SN | 159 | DCMP13C6PJ K87 | 44 |
| DCMMZ13V6PN | 162 | DCMP13C6PVK87 | 50 |
| DCMMZ33V6SN | 163 | DCMP13C6SJ A197 | 45 |
| DCMMZ77C5PN | 150 | DCMP13C6SVA197 | 51 |
| DCMMZ17C5SN | 151 | DCMP13H6PJ K87 | 60 |
| DCMMZ17H5PN | 158 | DCMP13H6SJ A197. | 61 |
| DCMMZI7H5SN | 159 | DCMP13P6PVK87. | 64 |
| DCMMZ17V5PN | 162 | DCMP13P6SVA197 | 65 |
| DCMMZ17V5SN | 163 | DCMP17C5P K87 | 44 |
| DCMMZ21CA4PN. | 150 | DCMP17C5PVK87 | 50 |
| DCMMZ21CA4SN. | 151 | DCMP17C5SJ A197 | 45 |
| DCMMZ21HA4PN. | 158 | DCMP17C5SVA197 | 51 |
| DCMMZ21HA4SN. | 159 | DCMP17H5PJ K87 | 60 |
| DCMMZ21VA4PN. | 162 | DCMP17H5SJ A197. | 61 |
| DCMMZ21VA4SN. | 163 | DCMP17P5PVK87 |  |



| Part Number | Page |
| :---: | :---: |
| DCMZ8H8SYA197 | 71 |
| DCNG37P-P1. |  |
| DCNG37S-P1 |  |
| DCNGE37P-P1 |  |
| DCNGE37S-P1 |  |
| DCNGL37P-P1 |  |
| DCNGL37S-P1 |  |
| DCNGX37P-P1 |  |
| DCNGX37S-P1 | 5 |
| DCNGZ37P-P1 | 4 |
| DCNGZ375-P1 | 5 |
| DCW37P* | 38 |
| DCW37P*G | 38 |
| DCW375* | 39 |
| DCW37S*G | 39 |
| DCWE37P* | , 38 |
| DCWE37P*G | 38 |
| DCWE37S* | 39 |
| DCWE375*G | 39 |
| DCX37P-0L2-K87-146 | 10 |
| DCX37PK87 | 32 |
| DCX37S-0L2-A197-146 | 11 |
| DCX37SA197 | 33 |
| DD-59-20 | 195, 218 |
| DD-60-20 | 195, 218 |
| DD115339-24 | 205 |
| DD115339-4 | 207 |
| DD115386-103A | 195 |
| DD121073-153 | 200 |
| DD121073-53 | 200 |
| DD19678-161 | 193, 195 |
| DD19678-172 | 195 |
| DD19678-176 | 195 |
| DD19678-4 | 204 |
| DD19977-4 | 204 |
| DD19977-44 | 193, 195 |
| DD20964 | 203 |
| DD20964-19 | 192 |
| DD21961 | 214 |
| DD21962 | 215 |
| DD24661 | 203 |
| DD24661-13 | 192,195 |
| DD50908-1 | 218 |
| DD50P-0L2-K87 | 10 |
| DD50P-1A5N-K87 | 26 |
| DD50P-1A6N-K87 | 26 |
| DD50P-1A7N-K87 | 22 |
| DD50P-1A8N-K87 | 22 |
| DD50P-1A9N-K87 | 22 |
| DD50P-1ADN-K87 | 24 |
| DD50P-1AFN-K87 | 22 |
| DD50P-1AJ N-K87 | 24 |
| DD50P-1AON-K87 | 20 |
| DD50P-1ATN-K87 | 26 |
| DD50P-1AUN-K87 | 26 |
| DD50P-1AVN-K87 | 24 |
| DD50P-1AWN-K87 | 24 |
| DD50P-F179A-K87 | 12 |
| DD50PK87 | 32 |
| DD50S-0L2-A197 | 11 |
| DD50S-125N-A197 | 27 |
| DD50S-1A6N-A197 | 27 |
| DD50S-1A7N-A197 | 23 |
| DD50S-1A8N-A197 | 23 |
| DD50S-1A9N-A197 | 23 |
| DD50S-1ADN-A197 | 25 |
| DD50S-1AFN-A197 | 23 |
| DD50S-1AJ N-A197 | 25 |
| DD50S-1AON-A197 | 21 |
| DD50S-1ATN-A197 | 27 |
| DD50S-1AUN-A197 | 27 |
| DD50S-1AVN-A197 | 25 |
| DD50S-1AWN-A197 | 25 |
| DD50S-F179A-A197 | 13 |
| DD50SA197 | 33 |
| DD51216 | 206 |
| DD51217 | 206 |
| DD51223-1. | 210 |
| DD53750-4 | 218 |
| DDA24W7PK87F0 | 80 |
| DDA24W7SA197F0 | 81 |
| DDA36W4PK87F0 | 80 |
| DDA36W4SA197F0 |  |


| Part Number | Page |
| :---: | :---: |
| DDE50P-OL2-K87-146 | 10 |
| DDE50PK87 | 32 |
| DDE50S-0L2-A197-146 | 11 |
| DDE50SA197 | 33 |
| DD K50P*-0L4 | . 20 |
| DDJ KE5OP*-OL4 | 120 |
| DDJ KE50P*-0L4-146 | 120 |
| DDJ KX50P*-OL4 | 120 |
| DDJ KX50P*-0L4-146 | 120 |
| DDM-24W7P-1AON-K87 | 74 |
| DDM-24W7P-1A7N-K87 | 74 |
| DDM-24W7P-NMB-77 | 195 |
| DDM-24W7P-NMC-76 | 95 |
| DDM-24W7P-0L2-K87 | 76 |
| DDM-24W7P-0L4-K87 | 76 |
| DDM-24W7S-1AON-A197 | 75 |
| DDM-24W7S-1A7N-A197 | 75 |
| DDM-24W7S-NMB-76 | 95 |
| DDM-24W7S-NMC-76 | 95 |
| DDM-24W7S-0L2-A197 | 77 |
| DDM-24W7S-0L4-A197 | 77 |
| DDM-36W4P-1A0N-K87 | 74 |
| DDM-36W4P-1A7N-K87 | 74 |
| DDM-36W4P-NMB-77 | 195 |
| DDM-36W4P-OL2-K87 | 76 |
| DDM-36W4P-0L4-K87 | 76 |
| DDM-36W4S-1AON-A197 | 75 |
| DDM-36W4S-1A7N-A197 | 75 |
| DDM-36W4S-NMB-77 | 195 |
| DDM-36W4S-NMC-76 | 195 |
| DDM-36W4S-OL2-A197 | 77 |
| DDM-36W4S-0L4-A197. | 77 |
| DDM-43W2P-1A0N-K87 | 74 |
| DDM-43W2P-1A7N-K87 | 74 |
| DDM-43W2P-0L2-K87 | . 76 |
| DDM-43W2P-0L4-K87 | 76 |
| DDM-43W2S-1AON-A197 | 75 |
| DDM-43W2S-1A7N-A197 | 75 |
| DDM-43W2S-NMB-77 | 195 |
| DDM-43W2S-NMC-76 | 195 |
| DDM-43W2S-0L2-A197 | 77 |
| DDM-43W2S-0L4-A197. | 77 |
| DDM-47W1P-1A0N-K87 | 74 |
| DDM-47W1P-1A7N-K87 | 74 |
| DDM-47W1P-0L2-K87 | 76 |
| DDM-47W1P-0L4-K87 | 76 |
| DDM-47W1S-1A0N-A197 | 75 |
| DDM-47W1S-1A7N-A197 | 75 |
| DDM-47W1S-NMC-76 | 195 |
| DDM-47W1S-0L2-A197 | 77 |
| DDM-47W1S-OL4-A197 | 77 |
| DDM-50P-NMC-77 | 195 |
| DDM-50S-NMC-76 | 195 |
| DDM-50S-NMC-77 | 195 |
| DDM24W7P1A0NNMBK52 | 195 |
| DDM24W7P1A7NNMBK52 | 195 |
| DDM24W7P1A9NNMBK52 | 195 |
| DDM24W7PF179ANMBK52 | 195 |
| DDM24W7PK87 | 78 |
| DDM24W7PNM | 188 |
| DDM24W7PNMB76 | 195 |
| DDM24W7PNMBK52 | 195 |
| DDM24W7POL3NMBK52 | 195 |
| DDM24W7S1AONNMBK52 | 195 |
| DDM24W7S1A7NNMBK52 | 195 |
| DDM24W7S1A9NNMBK52 | 195 |
| DDM24W7SA197 | 79 |
| DDM24W7SF179ANMBK52 | 195 |
| DDM24W7SNM | 189 |
| DDM24W7SNMB77 | 195 |
| DDM24W7SNMBK52 | 195 |
| DDM24W7SOL3NMBK52 | 195 |
| DDM36W4P1AONNMBK52 | 195 |
| DDM36W4P1A7NNMBK52 | 195 |
| DDM36W4P1A9NNMBK52. | 195 |
| DDM36W4PF179ANMBK52 | 195 |
| DDM36W4PK87 | 78 |
| DDM36W4PNM | 188 |
| DDM36W4PNMBK52 | 195 |
| DDM36W4POL3NMBK52 | 195 |
| DDM36W4S1AONNMBK52. | 195 |
| DDM36W4S1A7NNMBK52. | 195 |
| DDM36W4S1A9NNMBK52. |  |


| Part Number | Page |
| :---: | :---: |
| DDM36W4SA197 | 79 |
| DDM36W4SF179ANMBK52 | 195 |
| DDM36W4SNM | 189 |
| DDM36W4SNMB76 | 195 |
| DDM36W4SNMBK52 | 195 |
| DDM36W4SOL3NMBK52 | 195 |
| DDM43W2P-NMB-77 | 195 |
| DDM43W2P1AONNMBK52 | 195 |
| DDM43W2P1A7NNMBK52 | 195 |
| DDM43W2P1A9NNMBK52 | 195 |
| DDM43W2PF179ANMBK52 | 195 |
| DDM43W2PK87 | 78 |
| DDM43W2PNM | 188 |
| DDM43W2PNMBK52 | 195 |
| DDM43W2POL3NMBK52 | 195 |
| DDM43W2S1AONNMBK52 | 195 |
| DDM43W2S1A7NNMBK52 | 195 |
| DDM43W2S1A9NNMBK52 | 195 |
| DDM43W2SA197 | 79 |
| DDM43W2SF179ANMBK52 . | 195 |
| DDM43W2SNM | 189 |
| DDM43W2SNMBK52 | 195 |
| DDM43W2SOL3NMBK52 | 195 |
| DDM47W1P-NMC-76 | 195 |
| DDM47W1P1AONNMBK52 | 195 |
| DDM47W1P1A7NNMBK52 | 195 |
| DDM47W1P1A9NNMBK52 | 195 |
| DDM47W1PF179ANMBK52 | 195 |
| DDM47W1PK87 | 78 |
| DDM47W1PNM | 188 |
| DDM47W1PNMBK52 | 195 |
| DDM47W1POL3NMBK52 | 195 |
| DDM47W1S1AONNMBK52 | 195 |
| DDM47W1S1A7NNM ${ }^{\text {a }} 52$ | 195 |
| DDM47W1S1A9NNMBK52 | 195 |
| DDM47W1SA197 | 79 |
| DDM47W1SF179ANMBK52 | 195 |
| DDM47W1SNM | 189 |
| DDM47W1SNMBK52 | 195 |
| DDM47W1SOL3NMBK52 | 195 |
| DDM50P | 140 |
| DDM50P1AONNMBK52 | 195 |
| DDM50P1A7NNMBK52 | 195 |
| DDM50P1A9NNMBK52 | 195 |
| DDM50PA | 132 |
| DDM50PB | 136 |
| DDM50PD | 132 |
| DDM50PE | 136 |
| DDM50PF | 134 |
| DDM50PF179 | 138 |
| DDM50PF179A | 138 |
| DDM50PF179ANMBK52 | 195 |
| DDM50PG | 132 |
| DDM50PH | 136 |
| DDM50PK | 134 |
| DDM50PL | 132 |
| DDM50PLNM | 174 |
| DDM50PM | 136 |
| DDM50PNM | 180 |
| DDM50PNM*1A7N | 178 |
| DDM50PNM*1A9N. | 178 |
| DDM50PNM*1AON | 176 |
| DDM50PNMB76. | 195 |
| DDM50PNMB77 | 195 |
| DDM50PNMBK52 | 195 |
| DDM50PNMC76. | 195 |
| DDM50POL3NM | 172 |
| DDM50POL3NMBK52 | 195 |
| DDM50PP | 134 |
| DDM50PR | 134 |
| DDM50PS | 132 |
| DDM50PW | 132 |
| DDM50PX | 136 |
| DDM50PZ | 136 |
| DDM50S | 141 |
| DDM50S1AONNMBK52 | 195 |
| DDM50S1A7NNMBK52 | 195 |
| DDM50S1A9NNMBK52 | 195 |
| DDM50SA | 133 |
| DDM50SB | 137 |
| DDM50SC | 135 |
| DDM50SD | 133 |
| DDM50SE | 137 |


| Part Number | Page |
| :---: | :---: |
| DDM50SF | 135 |
| DDM50SF179 | 139 |
| DDM50SF179A | 139 |
| DDM50SF179ANMBK52 | 195 |
| DDM50SG | 133 |
| DDM50SH | 137 |
| DDM50SK | 135 |
| DDM50SL | 133 |
| DDM50SLNM | 175 |
| DDM50SM | 137 |
| DDM50SNM | 181 |
| DDM50SNM*1A7N | 179 |
| DDM50SNM*1A9N. | 179 |
| DDM50SNM*1AON | 177 |
| DDM50SNMB76 | 195 |
| DDM50SNMB77 | 195 |
| DDM50SNMBK52 | 195 |
| DDM50S0L3NM | 173 |
| DDM50SOL3NMBK52 | 195 |
| DDM50SP | 135 |
| DDM50SR | 135 |
| DDM50SS | 133 |
| DDM50SW | 133 |
| DDM50SX | 137 |
| DDM50SZ | 137 |
| DDMA50PNM | 182 |
| DDMA50PNMBK52 | 195 |
| DDMA50SNM | 183 |
| DDMA50SNMBK52 | 195 |
| DDMA78PNM | 184 |
| DDMA78SNM | 185 |
| DDMAY50PNM | 182 |
| DDMAY50SNM | 183 |
| DDMAY78PNM | 184 |
| DDMAY78SNM | 185 |
| DDMB-247S-NMB-76 | 195 |
| DDMB-50S-NMB-77. | 195 |
| DDMB-50S-NMC-77 | 195 |
| DDMB50S-NMB-76 | 195 |
| DDMB50S-NMC-76 | 195 |
| DDMC24C7P K87 | 46 |
| DDMC24C7S A197 | 47 |
| DDMC24H7P K 87 | 62 |
| DDMC24H7S A197 | 63 |
| DDMC36C4P K87 | 46 |
| DDMC36C4S A197 | 47 |
| DDMC36H4P) K87 | 62 |
| DDMC36H4SJ A197 | 63 |
| DDMC43C2PJ K87 | 46 |
| DDMC43C2SJ A197 | 47 |
| DDMC43H2P K87 | 62 |
| DDMC43H2SJ A197 | 63 |
| DDMC47C1P K87 | 46 |
| DDMC47C1S A197 | 47 |
| DDMC47H1PJ K87 | 62 |
| DDMC47H1SJ A197 | 63 |
| DDMC50PJ K87 | 16 |
| DDMC50SJ A197 | 17 |
| DDMD24C7PJ K87 | 46 |
| DDMD24C7SJ A197 | 47 |
| DDMD24H7P K87 | 62 |
| DDMD24H7SJ A197 | 63 |
| DDMD36C4P K87 | 46 |
| DDMD36C4SJ A197 | 47 |
| DDMD36H4PJ K87 | 62 |
| DDMD36H4S A197 | 63 |
| DDMD43C2PJ K87 | 46 |
| DDMD43C2SJ A197 | 47 |
| DDMD43H2PJ K87 | 62 |
| DDMD43H2SJ A197 | 63 |
| DDMD47C1P 187 | 46 |
| DDMD47C1S A197 | 47 |
| DDMD47H1P K87 | 62 |
| DDMD47H1SJ A197 | 63 |
| DDMD50P K87 | 16 |
| DDMD50SJ A197 | 17 |
| DDME24W7PK87 | 78 |
| DDME24W7SA197 | 79 |
| DDME36W4PK87 | 78 |
| DDME36W4SA197 | 79 |
| DDME43W2PK87 | 78 |
| DDME43W2SA197 | 79 |
| DDME47W1PK87. |  |


| Part Number | Page | Part Number | Page |
| :---: | :---: | :---: | :---: |
| DDME47W1SA197 | 79 | DDMMD24H7P | 156 |
| DDME50P | 140 | DDMMD24H7S | 157 |
| DDME50S. | 141 | DDMMD36C4P | 148 |
| DDMG24C7P K87 | 46 | DDMMD36C4S | 149 |
| DDMG24C7S A197 | 47 | DDMMD36H4P | 156 |
| DDMG24H7P K87 | 62 | DDMMD36H4S | 157 |
| DDMG24H7S A197 | 63 | DDMMD43C2P | 148 |
| DDMG36C4P K87 | 46 | DDMMD43C2S | 149 |
| DDMG36C4S A197 | 47 | DDMMD43H2PJ | 156 |
| DDMG36H4P K87 . | 62 | DDMMD43H2S | 157 |
| DDMG36H4S A197 | 63 | DDMMD47C1P) | 148 |
| DDMG43C2PJ K87 | 46 | DDMMD47C1S | 149 |
| DDMG43C2SJ A197 | 47 | DDMMD47H1P | 156 |
| DDMG43H2PJ K87 | 62 | DDMMD47H1S | 157 |
| DDMG43H2SJ A197 | 63 | DDMME24W7P | 166 |
| DDMG47C1P J 87 | 46 | DDMME36W4P | 166 |
| DDMG47C1S A197 | 47 | DDMME43W2P | 166 |
| DDMG47H1PJ K87 | 62 | DDMME47W1P | 166 |
| DDMG47H1SJ A197 | 63 | DDMME50P | 140 |
| DDM G50P K87 | 16 | DDMME50S | 141 |
| DDMG50SJ A197 | 17 | DDMMG24C7P | 148 |
| DDMM24W7P | 166 | DDMMG24C7S | 149 |
| DDMM36W4P | 166 | DDMMG24H7P | 156 |
| DDMM43W2P | 166 | DDMMG24H7S | 157 |
| DDMM47W1P | 166 | DDMMG36C4P | 148 |
| DDMM50P | 140 | DDMMG36C4S | 149 |
| DDMM50PA | 132 | DDMMG36H4PJ | 156 |
| DDMM50PB | 136 | DDMMG36H4S | 157 |
| DDMM50PC | 134 | DDMMG43C2P | 148 |
| DDMM50PD | 132 | DDMMG43C2S | 149 |
| DDMM50PE | 136 | DDMMG43H2PJ | 156 |
| DDMM50PF | 134 | DDMMG43H2SJ | 157 |
| DDMM50PF179 | 138 | DDMMG47C1P | 148 |
| DDMM50PF179A | 138 | DDMMG47C1S | 149 |
| DDMM50PG | 132 | DDMM 647 HIP ) | 156 |
| DDMM50PH | 136 | DDMMG47H1S | 157 |
| DDMM50PK | 134 | DDMMN24C7PN | 152 |
| DDMM50PL | 132 | DDMMN24C7SN | 153 |
| DDMM50PM | 136 | DDMMN24H7PN | 160 |
| DDMM50PP | 134 | DDMMN24H7SN | 161 |
| DDMM50PR | 134 | DDMMN24V7PN | 164 |
| DDMM50PS | 132 | DDMMN24V7SN | 165 |
| DDMM50PW | 132 | DDMMN36C4PN | 152 |
| DDMM50PX | 136 | DDMMN36C4SN | 153 |
| DDMM50PZ | 136 | DDMMN36H4PN | 160 |
| DDMM50S | 141 | DDMMN36H4SN | 161 |
| DDMM50SA | 133 | DDMMN36V4PN | 164 |
| DDMM50SB | 137 | DDMMN36V4SN | 165 |
| DDMM50SC | 135 | DDMMN43C2PN | 152 |
| DDMM50SD | 133 | DDMMN43C2SN | 153 |
| DDMM50SE | 137 | DDMMN43H2PN | 160 |
| DDMM50SF | 135 | DDMMN43H2SN | 161 |
| DDMM50SF179 | 139 | DDMMN43V2PN | 164 |
| DDMM50SF179A | 139 | DDMMN43V2SN | 165 |
| DDMM50SG. | 133 | DDMMN47C1PN | 152 |
| DDMM50SH. | 137 | DDMMN47C1SN | 153 |
| DDMM50SK | 135 | DDMMN4THIPN | 160 |
| DDMM50SL | 133 | DDMMN47H1SN | 161 |
| DDMM50SM | 137 | DDMMN47V1PN | 164 |
| DDMM50SP | 135 | DDMMN47V1SN | 165 |
| DDMM50SR | 135 | DDMMP24C7PJ | 148 |
| DDMM50SS | 133 | DDMMP24C7S | 149 |
| DDMM50SW | 133 | DDMMP24H7P | 156 |
| DDMM50SX | 137 | DDMMP24H7S | 157 |
| DDMM50SZ | 137 | DDMMP36C4P | 148 |
| DDMMC24C7P | 148 | DDMMP36C4S | 149 |
| DDMMC24C75 | 149 | DDMMP36H4P | 156 |
| DDMMC24H7P | 156 | DDMMP36H4S | 157 |
| DDMMC24H7S | 157 | DDMMP43C2P | 148 |
| DDMMC36C4P | 148 | DDMMP43C2S | 149 |
| DDMMC36C4S | 149 | DDMMP43H2PJ | 156 |
| DDMMC36H4P | 156 | DDMMP43H2S | 157 |
| DDMMC36H4S | 157 | DDMMP47C1P | 148 |
| DDMMC43C2P | 148 | DDMMP47C1S | 149 |
| DDMMC43C2S | 149 | DDMMP47H1PJ | 156 |
| DDMMC43H2P | 156 | DDMMP47H1S | 157 |
| DDMMC43H2S | 157 | DDMMV24C7PN | 152 |
| DDMMC47C1P | 148 | DDMMV24C7SN | 153 |
| DDMMC47C1S | 149 | DDMMV24H7PN | 160 |
| DDMMC47H1P | 156 | DDMMV24H7SN | 161 |
| DDMMC47H1S | 157 | DDMMV24V7PN | 164 |
| DDMMD24C7P | 148 | DDMMV24V7SN | 165 |
| DDMMD24C7S | 149 | DDMMV36C4PN | 152 |

Page | 156 |
| :--- |

148 149

| Part Number | Page | Part Number | Page | Part Number | Page | Part Number | Page |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DDMMV36C4SN | 153 | DDMP24H7PJ K87 | 62 | DDMZ36C4PYK87 | 58 | DE9S-1A7N-A197 |  |
| DDMMV36H4PN | 160 | DDMP24H7S A197 | 63 | DDMZ36C4SNA197 | 55 | DE9S-1A8N-A197 | 23 |
| DDMMV36H4SN | 161 | DDMP36C4PJ K87 | 46 | DDMZ36C4SYA197 | 59 | DE9S-1A9N-A197 | 23 |
| DDMMV36V4PN | 164 | DDMP36C4S A197 | 47 | DDMZ36H4PNK87 | 68 | DE9S-1ADN-A197 | 25 |
| DDMMV36V4SN. | 165 | DDMP36H4PJ K87 | 62 | DDMZ36H4PYK87 | 72 | DE9S-1AFN-A197 | 23 |
| DDMMV43C2PN | 152 | DDMP36H4S A197 | 63 | DDMZ36H4SNA197 | 69 | DE9S-1A N-A197 | 25 |
| DDMMV43C2SN | 153 | DDMP43C2P K87 | 46 | DDMZ36H4SYA197 | 73 | DE9S-1AON-A197 | 21 |
| DDMMV43H2PN | 160 | DDMP43C2SJ A197 | 47 | DDMZ43C2PNK87 | 54 | DE9S-1ATN-A197. | 27 |
| DDMMV43H2SN | 161 | DDMP43H2PJ K87 | 62 | DDMZ43C2PYK87 | 58 | DE9S-1AUN-A197 | 27 |
| DDMMV43V2PN | 164 | DDMP43H2SJ A197 | 63 | DDMZ43C2SNA197 | 55 | DE9S-1AVN-A197 | 25 |
| DDMMV43V2SN. | 165 | DDMP47CIP K87 | 46 | DDMZ43C2SYA197 | 59 | DE9S-1AWN-A197 | 25 |
| DDMMV47CIPN. | 152 | DDMP47C1S A197 | 47 | DDMZ43H2PNK87 . | 68 | DE9S-F179A-A197 | 13 |
| DDMMV47C1SN | 153 | DDMP47H1PJ K87 | 62 | DDMZ43H2PYK87 | 72 | DE9SA197 ...... | 33 |
| DDMMV47H1PN | 160 | DDMP47H1S A197 | 63 | DDMZ43H2SNA197 | 69 | DEA9PK87FO | 36 |
| DDMMV47H1SN | 161 | DDMP50P K87 | 16 | DDMZ43H2SYA197 | 73 | DEA9SA197FO | 37 |
| DDMMV47V1PN | 164 | DDMP50SJ A197 | 17 | DDMZ47C1PNK87. | 54 | DEBS-9 | 205 |
| DDMMV47V1SN | 165 | DDMV24C7PNK87 | 54 | DDMZ47C1PYK87 | 58 | DEBU111515 | 216 |
| DDMMY24W7P | 166 | DDMV24C7PYK87 | 58 | DDMZ47C1SNA197 | 55 | DEE9P-0L2-K87-146 | 10 |
| DDMMY36W4P | 166 | DDMV24C7SNA197 | 55 | DDMZ47C1SYA197 | 59 | DEE9PK87 | 32 |
| DDMMY43W2P | 166 | DDMV24C7SYA197 | 59 | DDMZ47H1PNK87 | 68 | DEE9S-0L2-A197-146. | 11 |
| DDMMY47W1P | 166 | DDMV24H7PNK87 | 68 | DDMZ47H1PYK87 | 72 | DEE9SA197 . . . . . . | 33 |
| DDMMY50P | 140 | DDMV24H7PYK87 | 72 | DDMZ47H1SNA197 | 69 | DE KgP*-1AON. | 110 |
| DDMMY50S | 141 | DDMV24H7SNA197 | 69 | DDMZ47H1SYA197 | 73 | DE K9P*-1A5N. | 118 |
| DDMMZ24C7PN | 152 | DDM V24H7SYA197 | 73 | DDMZ50PNK87 | . 6 | DEJ K9P*-1A6N. | 118 |
| DDMMZ24C7SN. | 153 | DDMV36C4PNK87. | 54 | DDMZ50SNA197 | . 7 | DE K9P*-1A7N. | 114 |
| DDMMZ24H7PN. | 160 | DDMV36C4PYK87 | 58 | DDNG50P-P1. | 4 | DEJ K9P*-1A8N. | 114 |
| DDMMZ24H7SN | 161 | DDMV36C4SNA197 | 55 | DDNG50S-P1 | 5 | DEj K9P*-1A9N. | 114 |
| DDMMZ24V7PN | 164 | DDMV36C4SYA197 | 59 | DDNGE50P-P1 | 4 | DE KgP*-1ADN | 116 |
| DDMMZ24V7SN | 165 | DDMV36H4PNK87. | 68 | DDNGE50S-P1 | 5 | DE KgP*-1AFN | 114 |
| DDMMZ36C4PN | 152 | DDMV36H4PYK87 | 72 | DDNGL50P-P1 | 4 | DEJ KgP*-1AGN | 116 |
| DDMMZ36C4SN. | 153 | DDMV36H4SNA197 | 69 | DDNGL50S-P1 | 5 | DEJ KgP*-1AHN | 114 |
| DDMMZ36H4PN | 160 | DDMV36H4SYA197 | 73 | DDNGX50P-P1 | 4 | DE Kg ${ }^{\text {* }}$-1AJ N | 116 |
| DDMMZ36H4SN | 161 | DDMV43C2PNK87 | 54 | DDNGX50S-P1 | 5 | DE KgP*-1APN | 118 |
| DDMMZ36V4PN | 164 | DDMV43C2PYK87 | 58 | DDNGZ50P-P1 | 4 | DE KgP*-1ATN. | 118 |
| DDMMZ36V4SN | 165 | DDM V43C2SNA197 | 55 | DDNGZ50S-P1 | 5 | DE Kgp*-1AUN | 118 |
| DDMMZ43C2PN | 152 | DDMV43C2SYA197 | 59 | DDX50P-0L2-K87-146 | 10 | DEJ Kgp*-1AVN | 116 |
| DDMMZ43C2SN | 153 | DDMV43H2PNK87. | 68 | DDX50PK87....... | 32 | DEJ K9p*-1AWN | 116 |
| DDMMZ43H2PN | 160 | DDMV43H2PYK87 | 72 | DDX50S-0L2-A197-146 | 11 | DEJ KgP*-1UON | 108 |
| DDMMZ43H2SN | 161 | DDMV43H2SNA197 | 69 | DDX50SA197 | 33 | DEJ K9P*-1U7N | 112 |
| DDMMZ43V2PN | 164 | DDM V43H2SYA197 | 73 | DE-59-20 | 95, 218 | DE) K9P*-1U7N-146 | 112 |
| DDMMZ43V2SN | 165 | DDMV47C1PNK87. | 54 | DE-60-20 | 95, 218 | DEJ K9P*-0L4 . . . | 120 |
| DDMMZ47C1PN | 152 | DDMV47CIPYK87 | 58 | DE111805-1 | . 216 | DE K9S*-IAON | 111 |
| DDMMZ47C1SN | 153 | DDMV47C1SNA197 | 55 | DE111805-5 | 216 | DEJK9S*-1A5N. | 119 |
| DDMMZ47H1PN | 160 | DDMV47C1SYA197 | 59 | DE111813 | 216 | DEJ K9S*-1A6N. | 119 |
| DDMMZ47H1SN | 161 | DDMV47H1PNK87. | 68 | DE111813-3 | 216 | DE K9S*-1A7N. | 115 |
| DDMMZ47V1PN | 164 | DDMV47H1PYK87 | 72 | DE111919. | 215 | DEJ K9S*-1A8N. | 115 |
| DDMMZ47V1SN | 165 | DDMV47H1SNA197 | 69 | DE111920 | 214 | DEJ K9S*-1A9N. | 115 |
| DDMN24C7PNK87 | 54 | DDMV47H1SYA197 | 73 | DE115339 | 207 | DEJK9S*-1ADN | 117 |
| DDMN24C7PYK87 | 58 | DDMV50PNK87.. | . 6 | DE115339-20 | 205 | DE KgS*-1AFN | 115 |
| DDMN24C7SNA197 | 55 | DDMV50SNA197 | . 7 | DE115386-101A | 195 | DEJ K9S*-IAGN | 117 |
| DDMN24C7SYA197 | 59 | DDMY24W7PK87 | 78 | DE115386-1B | 207 | DEJ K9S*-1AHN | 115 |
| DDMN24H7PNK87. | 68 | DDMY24W7PNM | 188 | DE121073-154 | 200 | DEJ K9S*-1AJN. | 117 |
| DDMN24H7PYK87 | 72 | DDMY24W7SA197 | 79 | DE121073-54. | 200 | DE K9S*-1APN | 119 |
| DDMN24H7SNA197 | 69 | DDMY24W7SNM | 189 | DE19977-47 | 93, 195 | DE K9S*-1ATN. | 119 |
| DDMN24H7SYA197 | 73 | DDMY36W4PK87 | . 78 | DE19977-5 | . 204 | DEJ K9S*-1AUN | 119 |
| DDMN36C4PNK87. | 54 | DDMY36W4PNM | 188 | DE24657 | 203 | DE K9S*-1AVN | 117 |
| DDMN36C4PYK87 | 58 | DDMY36W4SA197 | 79 | DE24657-16 | 2, 195 | DEJK9S*-1AWN | 117 |
| DDMN36C4SNA197 | 55 | DDMY36W4SNM | 189 | DE44994 | 203 | DE K9S*-1UON | 109 |
| DDMN36C4SYA197 | 59 | DDMY43W2PK87 | 78 | DE44994-2 | 192 | DE K9S*-1U7N | 113 |
| DDMN36H4PNK87. | 68 | DDMY43W2PNM | 188 | DE50904-1. | 218 | DE] K9S*-1U7N-146 | 113 |
| DDMN36H4PYK87 | 72 | DDMY43W2SA197 | 79 | DE51218 | 206 | DEJ K9S*-0L4 | 121 |
| DDMN36H4SNA197 | 69 | DDMY43W2SNM. | 189 | DE51219 | 206 | DEj KE9P*-IAON. | 110 |
| DDMN36H4SYA197 | 73 | DDMY47W1PK87 | . 78 | DE51224-1 | 210 | DEj KE9P*-1UON | 108 |
| DDMN43C2PNK87. | 54 | DDMY47W1PNM | 188 | DE53750. | 218 | DEJ KE9P*-0L4 | 120 |
| DDMN43C2PYK87 | 58 | DDMY47W1SA197 | . 79 | DE9P-0L2-K87 | . 10 | DEJ KE9P*-0L4-146 | 120 |
| DDMN43C2SNA197. | 55 | DDMY47W1SNM. | 189 | DE9P-1A5N-K87 | . 26 | DE) KE9S*-1AON . | 111 |
| DDMN43C2SYA197 | 59 | DDMY50P | 140 | DE9P-1A6N-K87 | . 26 | DEj KE9S*-1UON | 109 |
| DDMN43H2PNK87. | 68 | DDMY50PNM | 180 | DE9P-1A7N-K87 | . 22 | DEJKE9S*-OL4 | 121 |
| DDMN43H2PYK87. | 72 | DDMY50PNM*1AON | 176 | DE9P-1A8N-K87 | . 22 | DEJ KE9S*-OL4-146 | 121 |
| DDMN43H2SNA197 | 69 | DDMY50POL3NM. | 172 | DE9P-1A9N-K87 | . 22 | DEj KX9P*-1AON. | 110 |
| DDMN43H2SYA197 | 73 | DDMY50S . | 141 | DE9P-1ADN-K87 | . 24 | DEJ KX9P*-0L4 | 120 |
| DDMN47C1PNK87 | 54 | DDMY50SNM | 181 | DE9P-1AFN-K87 | 22 | DE) KX9P*-0L4-146 | 120 |
| DDMN47C1PYK87 | 58 | DDMY50SNM*1AON | 177 | DE9P-1AJ N-K87 | 24 | DEj KX9S*-1AON | 111 |
| DDMN47C1SNA197 | 55 | DDMY50SOL3NM... | 173 | DE9P-1AON-K87 | 20 | DEJKX9S*-0L4 | 121 |
| DDMN47C1SYA197 | 59 | DDMZ24C7PNK87 | 54 | DE9P-1ATN-K87 | . 26 | DE] KX9S*-OL4-146 | 121 |
| DDMN47H1PNK87 | 68 | DDMZ24C7PYK87 | 58 | DE9P-1AUN-K87 | 26 | DEJ T9P ..... | 122 |
| DDMN47H1PYK87 | 72 | DDMZ24C7SNA197 | 55 | DE9P-1AVN-K87 | . 24 | DE] T9S* | 123 |
| DDMN47H1SNA197 | 69 | DDMZ24C7SYA197 | 59 | DE9P-1AWN-K87 | . 24 | DEJ TE9P | 122 |
| DDMN47H1SYA197 | 73 | DDMZ24H7PNK87 | 68 | DE9P-F179A-K87 | . 12 | DEJ TE9S* | 123 |
| DDMN50PNK87 |  | DDMZ24H7PYK87 | 72 | DE9PK87. | . 32 | DEJ TX9P | 122 |
| DDMN50SNA197 | . 7 | DDMZ24H7SNA197 | 69 | DE9S-0L2-A197 | 11 | DEJ TX9S* | 123 |
| DDMP24C7P K87 | 46 | DDMZ24H7SYA197 | 73 | DE9S-1A5N-A197 | . 27 | DEM-5W1P-1AON-K87 | 74 |
| DDMP24C7SJ A197 | . 47 | DDMZ36C4PNK87 | 54 | DE9S-1A6N-A197 | . 27 | DEM-5W1P-1A7N-K87 |  |

## D Subminiature

| Part Number | Page |
| :---: | :---: |
| DEM-5W1P-NMB-76 | 195 |
| DEM-5W1P-NMB-77 | 195 |
| DEM-5W1P-NMC-76 | 195 |
| DEM-5W1P-OL2-K87 | 76 |
| DEM-5W1P-0L4-K87 | 76 |
| DEM-5W1S-1A0N-A197 | 75 |
| DEM-5W1S-1A7N-A197 | 75 |
| DEM-5W1S-NMB-77 | 195 |
| DEM-5W1S-NMC-76 | 195 |
| DEM-5W1S-0L2-A197 | 77 |
| DEM-5W1S-0L4-A197 | 77 |
| DEM-9P-NMB-76 | 195 |
| DEM-9S-NMB-76 | 195 |
| DEM-9S-NMC-77 | 195 |
| DEM5W1P1AONNMBK52 | 195 |
| DEM5W1P1A7NNMBK52 | 195 |
| DEM5W1P1A9NNMBK52 | 195 |
| DEM5W1PF179ANMBK52. | 195 |
| DEM5W1PK87 | 78 |
| DEM5W1PNM | 188 |
| DEM5W1PNMBK52 | 195 |
| DEM5W1POL3NMBK52 | 195 |
| DEM5W1S1A0NNMBK52 | 195 |
| DEM5W1S1A7NNMBK52 | 195 |
| DEM5W1S1A9NNMBK52 | 195 |
| DEM5W1SA197 | 79 |
| DEM5W1SF179ANMBK52. | 195 |
| DEM5W1SNM | 189 |
| DEM5W1SNMBK52 | 195 |
| DEM5W1SOL3NMBK52 | 195 |
| DEM9P | 140 |
| DEM9P1A0NNMBK52. | 195 |
| DEM9P1A7NNMBK52 | 195 |
| DEM9P1A9NNMBK52 | 195 |
| DEM9PA | 132 |
| DEM9PB | 136 |
| DEM9PC | 134 |
| DEM9PD | 132 |
| DEM9PE | 136 |
| DEM9PF | 134 |
| DEM9PF179 | 138 |
| DEM9PF179A | 138 |
| DEM9PF179ANMBK52 | 195 |
| DEM9PG | 132 |
| DEM9PH | 136 |
| DEM9PK | 134 |
| DEM9PL | 132 |
| DEM9PLNM | 174 |
| DEM9PM | 136 |
| DEM9PNM | 180 |
| DEM9PNM*1A7N | 178 |
| DEM9PNM*1A9N | 178 |
| DEM9PNM*1AON | 176 |
| DEM9PNMBK52 | 195 |
| DEM9PNMC76 | 195 |
| DEM9PNMC77 | 195 |
| DEM9POL3NM | 172 |
| DEM9POL3NMBK52 | 195 |
| DEM9PP | 134 |
| DEM9PR | 134 |
| DEM9PS | 132 |
| DEM9PW | 132 |
| DEM9PX | 136 |
| DEM9PZ. | 136 |
| DEM9S | 141 |
| DEM9S1AONNMBK52 | 195 |
| DEM9S1A7NNMBK52. | 195 |
| DEM9S1A9NNMBK52. | 195 |
| DEM9SA | 133 |
| DEM9SB | 137 |
| DEM9SC | 135 |
| DEM9SD | 133 |
| DEM9SE | 137 |
| DEM9SF | 135 |
| DEM9SF179 | 139 |
| DEM9SF179A | 139 |
| DEM9SF179ANMBK52 | 195 |
| DEM9SG | 133 |
| DEM9SH | 137 |
| DEM9SK | 135 |
| DEM9SL | 133 |
| DEM9SLNM | 175 |
| DEM9SM | 137 |


| Part Number | Page |
| :---: | :---: |
| DEM9SNM | 181 |
| DEM9SNM*1A7N | 179 |
| DEM9SNM*1A9N | 179 |
| DEM9SNM*1AON | 177 |
| DEM9SNMB77 | 195 |
| DEM9SNMBK52 | 195 |
| DEM9SNMC76 | 195 |
| DEM9SOL3NM | 173 |
| DEM9SOL3NMBK52 | 195 |
| DEM9SP | 135 |
| DEM9SR | 135 |
| DEM9SS | 133 |
| DEM9SW | 133 |
| DEM9SX | 137 |
| DEM9SZ. | 137 |
| DEMA15PNM | 184 |
| DEMA15PNMBK47FO | 195 |
| DEMA15SNM | 185 |
| DEMA15SNMBK47FO | 195 |
| DEMA25PNMBK47FO | 195 |
| DEMA25SNMBK47FO. | 195 |
| DEMA37PNMBK47FO. | 195 |
| DEMA37SNMBK47FO. | 195 |
| DEMA50PNMBK47FO. | 195 |
| DEMA50SNMBK47FO. | 195 |
| DEMA9PNM | 182 |
| DEMA9PNMBK47FO. | 195 |
| DEMA9PNMBK52 | 195 |
| DEMA9SNM | 183 |
| DEMA9SNMBK47FO | 195 |
| DEMA9SNMBK52 | 195 |
| DEMAK15PNMBK47FO | 195 |
| DEMAK15SNMBK47FO | 195 |
| DEMAK25PNMBK47FO | 195 |
| DEMAK25SNMBK47FO | 195 |
| DEMAK37PNMBK47FO | 195 |
| DEMAK37SNMBK47FO | 195 |
| DEMAK50PNMBK47FO | 195 |
| DEMAK9PNMBK47FO | 195 |
| DEMAK9SNMBK47FO | 195 |
| DEMAY15PNM | 184 |
| DEMAY15SNM | 185 |
| DEMAY9PNM | 182 |
| DEMAYgSNM | 183 |
| DEMB-5W1S-NMB-76 | 195 |
| DEMB-9S-NMC-77 | 195 |
| DEMB9S-NMB-76 | 195 |
| DEMB9S-NMC-76 | 195 |
| DEMB9SNMB77 | 195 |
| DEMC5C1P K87 | 44 |
| DEMC5C1PVK87 | 50 |
| DEMC5C1SJA197 | 45 |
| DEMC5C1SVA197 | 51 |
| DEMC5H1PJ K87 | 60 |
| DEMC5H1S A197 | 61 |
| DEMC5P1PVK87 | 64 |
| DEMC5P1SVA197 | 65 |
| DEMC9SJA197 | 17 |
| DEMCP9PJK87 | 16 |
| DEMD5C1P K87 | 44 |
| DEMD5C1PVK87 | 50 |
| DEMD5C1S A197 | 45 |
| DEMD5C1SVA197 | 51 |
| DEMD5H1P K87 | 60 |
| DEMD5H1S A197 | 61 |
| DEMD5P1PVK87 | 64 |
| DEMD5P1SVA197 | 65 |
| DEMD9P K87 | 16 |
| DEMD9SJ A197 | 17 |
| DEME5W1PK87 | 78 |
| DEME5W1SA197 | 79 |
| DEME9P | 140 |
| DEME9S | 141 |
| DEMG5C1P K87 | 44 |
| DEMG5C1PVK87 | 50 |
| DEMG5C1S A197 | 45 |
| DEMG5C1SVA197 | 51 |
| DEMG5H1PJ K87 | 60 |
| DEMG5H1S A197 | 61 |
| DEMG5P1PVK87 | 64 |
| DEMG5P1SVA197 | 65 |
| DEMG9P K87 | 16 |
| DEMG9SJ A197. |  |


| art Numbe | Page | Part Number | Page |
| :---: | :---: | :---: | :---: |
| DEMM5W1P | 166 | DEMMZ5V1SN |  |
| DEMM5W1S | 167 | DEMN5C1PNK87 | 52 |
| DEMM9P | 140 | DEMN5C1PYK87 | 56 |
| DEMM9PA | 132 | DEMN5C1SNA197 | , |
| DEMM9PB | 136 | DEM N5C1SYA197 | 57 |
| DEMM9PC | 134 | DEMN5H1PNK87. | 66 |
| DEMM9PD | 132 | DEMN5H1PYK87 | 70 |
| DEMM9PE | 136 | DEMN5H1SNA197 | 67 |
| DEMM9PF | 134 | DEMN5H1SYA197 | 71 |
| DEMM9PF179 | 138 | DEMN9PNK87 |  |
| DEMM9PF179A | 138 | DEMN9SNA197 |  |
| DEMM9PG | 132 | DEMP5C1PJ K87 | 44 |
| DEMM9PH | 136 | DEMP5C1PVK87 | 50 |
| DEMM9PK | 134 | DEMP5C1S A197. | 45 |
| DEMM9PL | 132 | DEMP5C1SVA197. | 51 |
| DEMM9PM | 136 | DEMP5H1PJ K87 | 60 |
| DEMM9PP | 134 | DEMP5H1SJ A197 | 61 |
| DEMM9PR | 134 | DEMP5P1PVK87 | 64 |
| DEMM9PS | 132 | DEMP5P1SVA197 | 65 |
| DEMM9PW | 132 | DEMP9PJ K87. |  |
| DEMM9PX | 136 | DEMP9SJ A197 |  |
| DEMM9PZ | 136 | DEMPPNMB77 | 195 |
| DEMM9S | 141 | DEMV5C1PNK87 | 52 |
| DEMM9SA | 133 | DEMV5C1PYK87 | 56 |
| DEMM9SB | 137 | DEMV5C1SNA197 | 53 |
| DEMM9SC | 135 | DEMV5C1SYA197 | 57 |
| DEMM9SD | 133 | DEMV5H1PNK87 | 66 |
| DEMM9SE | 137 | DEMV5H1PYK87 | 70 |
| DEMM9SF | 135 | DEMV5H1SNA197 | 67 |
| DEMM $95 F 179$ | 139 | DEMV5H1SYA197. | 71 |
| DEMM 9 FF179A | 139 | DEMV9PNK87 |  |
| DEMM9SG | 133 | DEMV9SNA197 |  |
| DEMM9SH | 137 | DEMY5W1PK87 | 78 |
| DEMM9SK | 135 | DEMY5W1PNM | 188 |
| DEMM9SL | 133 | DEMY5W1SA197 | 79 |
| DEMM 9 SM | 137 | DEMY5W1SNM | 189 |
| DEMM9SP | 135 | DEMY9P | 140 |
| DEMM9SR | 135 | DEMY9PNM | 180 |
| DEMM9SS | 133 | DEMY9PNM*1AON. | 176 |
| DEMM9SW | 133 | DEMY9POL3NM . | 172 |
| DEMM9SX | 137 | DEMY9S | 141 |
| DEMM9SZ | 137 | DEMY9SNM | 181 |
| DEMMC5C1P | 146 | DEMY9SNM*1AON. | 177 |
| DEMMC5C1S | 147 | DEMY9SOL3NM | 173 |
| DEMMC5H1PJ | 154 | DEMZ5C1PNK87 | 52 |
| DEMMC5H1S | 155 | DEMZ5C1PYK87 | 56 |
| DEMMD5C1P | 146 | DEMZ5C1SNA197 | 53 |
| DEMMD5C1S | 147 | DEMZ5C1SYA197. | 57 |
| DEMMD5H1P | 154 | DEMZ5H1PNK87 | 66 |
| DEMMD5H1S | 155 | DEMZ5H1PYK87 | 70 |
| DEMME5W1P | 166 | DEMZ5H1SNA197 | 67 |
| DEMME5W1S | 167 | DEMZ5H1SYA197. |  |
| DEMME9P | 140 | DEMZ9PNK87 |  |
| DEMME9S | 141 | DEMZ9SNA197 |  |
| DEMMG5C1P | 146 | DENG9P-P1... |  |
| DEMMG5C1S | 147 | DENG9S-P1 |  |
| DEMMG5H1PJ | 154 | DENGE9P-P1 |  |
| DEMMG5H1S | 155 | DENGE9S-P1 |  |
| DEMMN5C1PN | 150 | DENGL9P-P1 |  |
| DEMMN5C1SN | 151 | DENGL9S-P1 |  |
| DEMMN5H1PN | 158 | DENGX9P-P1 |  |
| DEMMN5H1SN | 159 | DENGX9S-P1 |  |
| DEMMN5V1PN | 162 | DENGZ9P-P1 |  |
| DEMMN5V1SN | 163 | DENGZ9S-P1 |  |
| DEMMP5C1P | 146 | DEW9P* | 38 |
| DEMMP5C1S | 147 | DEW9P*G | 38 |
| DEMMP5H1PJ | 154 | DEW9S*. | 39 |
| DEMMP5H1S | 155 | DEW9S*G | 39 |
| DEMMV5C1PN | 150 | DEWE9P* |  |
| DEMMV5C1SN | 151 | DEWE9P*G | 析 |
| DEMMV5H1PN | 158 | DEWE9S* | 39 |
| DEMMV5H1SN | 159 | DEWE9S*G | 39 |
| DEMMV5V1PN | 162 | DEX9P-0L2-K87-146 | 10 |
| DEMMV5V1SN | 163 | DEX9PK87 | 32 |
| DEMMY5W1P. | 166 | DEXXS-0L2-A197-14 |  |
| DEMMY5W1S | 167 | DEX9SA197 | 33 |
| DEMMY9P | 140 | DM115224-1010A | 191, 195 |
| DEMMY9S | 141 | DM115224-1020A | 191,195 |
| DEMMZ5C1PN | 150 | DM115224-1040A | 191, 195 |
| DEMMZ5C1SN | 151 | DM115224-2010A | 191, 195 |
| DEMMZ5H1PN | 158 | DM115224-2020A. | 191, 195 |
| DEMMZ5H1SN | 159 | DM115224-2040A. | 191, 195 |
| DEMMZ5V1PN | 162 | DM115224-3010 | 191,195 |



THIS NOTE MUST BE READ IN CONJ UNCTION

## WITH THE PRODUCT DATA SHEET/CATALOG.

FAILURE TO OBSERVE THE ADVICE IN THIS INFORMATION SHEET AND THE OPERATING CONDITIONS SPECIFIED IN THE PRODUCT DATA SHEET/CATALOG COULD RESULT IN HAZARDOUS SITUATIONS.

## 1 MATERIAL CONTENT AND PHYSICAL FORM

Electrical connectors do not usually contain hazardous materials. They contain conducting and non-conducting materials and can be divided into two groups.
a) Printed circuittypes and low cost audio types which employ all plastic insulators and casings. b) Rugged, Fire Barrier and High Reliability types with metal casings and either natural rubber, synthetic rubber, plastic or glass insulating materials. Contact materials vary with type of connector and also application and are usually manufactured from either: Copper, copper alloys, nickel, alumel, chromel or steel. In special applications, other alloys may be specified.

## 2 FIRE CHARACTERISTICS AND ELECTRIC SHOCK HAZARD

There is no fire hazard when the connector is correctly wired and used within the specified parameters. Incorrect wiring or assembly of the connector or careless use of metal tools or conductive fluids, or transit damage to any of the component parts may cause electric shock or burns. Live circuits must not be broken by separating mated connectors as this may cause arcing, ionisation and burning. Heat dissipation is greater at maximum resistance in a circuit. Hot spots may occur when resistance is raised locally by damage, e.g. cracked or deformed contacts, broken strands of wire. Local overheating may also result from the use of the incorrect application tools or from poor quality soldering or slack screw terminals. Overheating may occur if the ratings in the product Data Sheet/Catalog are exceeded and can cause breakdown of insulation and hence electric shock.
If heating is allowed to continue it intensifies by further increasing the local resistance through loss of temper of spring contacts, formation of oxide film on contacts and wires and leakage currents through carbonisation of insulation and tracking paths. Fire can then result in the presence of combustible materials and this may release noxious fumes. Overheating may not be visually apparent. Burns may result from touching overheated components.

## 3 HANDLING

Care must be taken to avoid damage to any component parts of electrical connectors during installation and use. Although there are normally no sharp edges, care must be taken when handling certain components to avoid injury to fingers.
Electrical connectors may be damaged in transit to the customers, and damage may result in creation of hazards. Products should therefore be examined prior to installation/use and rejected if found to be damaged.

## 4 DISPOSAL

Incineration of certain materials may release noxious or even toxic fumes.

## 5 APPLICATION

Connectors with exposed contacts should not be selected for use on the current supply side of an electrical circuit, because an electric shock could result from touching exposed contacts on an unmated connector. Voltages in excess of 30 V ac or 42.5 V dc are potentially hazardous and care should be taken to ensure that such voltages cannot be transmitted in any way to exposed metal parts of the connector body. The connector and wiring should be checked, before making live, to have no damage to metal parts or insulators, no solder blobs, loose strands, conducting lubricants, swarf, or any other undesired conducting particles. Circuit resistance and continuity check should be made to make certain that there are no high resistance joints or spurious conducting paths. Always use the correct application tools as specified in the Data Sheet/Catalog.
Do not permit untrained personnel to wire, assemble or tamper with connectors. For operation voltage please see appropriate national regulations.

## IMPORTANT GENERAL INFORMATION

## (i) Air and creepage paths/Operating voltage

The admissible operating voltages depend on the individual applications and the valid national and other applicable safety regulations.
For this reason the air and creepage path data are only reference values. Observe reduction of air and creepage paths due to PC board and/or harnessing.

## (ii) Temperature

All information given are temperature limits. The operation temperature depends on the individual application.

## (iii) Other important information

ITT Cannon continuously endeavours to improve their products. Therefore, ITT Cannon products may deviate from the description, technical data and shape as shown in this catalog and data sheets.

ITT Cannon manufactures the highest quality products available in the marketplace; however these products are intended to be used in accordance with the specifications in this publication. Any use or application that deviates from the stated operating specifications is not recommended and may be unsafe. No information and data contained in this publication shall be construed to create any liability on the part of ITT Cannon. Any new issue of this publication shall automatically invalidate and supersede any and all previous issues. A limited warranty applies to ITT Cannon products. Except for obligations assumed by ITT Cannon under this warranty, ITT Cannon shall not be liable for any loss, damage, cost of repairs, incidental or consequential damages of any kind, whether or not based on express or implied warranty, contract, negligence or strict liability arising in connection with the design, manufacture, sale, use or repair of the products. Product availability, prices and delivery dates are exclusively subject to our respective order confirmation form; the same applies to orders based on development samples delivered. This publication is not to be construed as an offer. It is intended merely as an invitation to make an offer. By this publication, ITT Cannon does not assume responsibility or any liability for any patent infringements or other rights of third parties which may result from its use. Reprinting this publication is generally permitted, indicating the source. However, ITT Cannon's prior consent must be obtained in all cases.


We are focused on your world with Innovation, Experience, Reliability \& Responsiveness.

Don't blink.

No industry in the world moves
faster than electronics. Takea
snapshot of it today, and it all
changes by tomorrow.

When you need to bring your
products to market more quickly, you most likely seek a partner who moves just as fast as you do. A company at the forefront with the latest in products and service.

AtITT C annon, we have made it our business to understand your world. Or should we say, the many parts of your world:

The places in the world where you do business.

The products you bring to the world.
The service you require from suppliers to compete in the world.

At ITT Cannon, we are proud of a heritage that helped pioneer the electronics industry from its infancy in the early part of this century, to the highly advanced technologies of the present.

T
oday, we serve nearly every industry in which the increased demand for reliable and innovative interconnect systems is critical:

Computers (Personal computers, portables and peripherals)

Telecommunications ( N etwork systems and services/LAN ; mobile)

Transportation (Automobiles, heavyduty vehicles, rail and mass transit)

Military/Aerospace (Commercial and military aircraft, defense and space)

Industrial (Factory automation and instrumentation)

Medical (Diagnostic equipment)
Broadcasting
Consumer Products

AsITT C annon begins our ninth decade in business, we are proud to provide our global and regional customers with the most reliable electronic products and services available:

Interconnects and cable assemblies
RF connectors
Switches and conductive rubber switchpads

Test accessories
I/O card, memory card and smart card interconnects

Local area network components (copper and fiber optic)

T urn-key network systems and services

Customer use tooling

I N N O V A T I O N

A commitment to concurrent engineering helps you reach your markets faster

Let us bring our spirit of innovation to your world. Experienced engineering teams located throughout the globe work hand-in-hand with our customers. And since these teams are thoroughly networked together, you benefit from 24 hour-a-day concurrent engineering capability. These teams advance your project from initial product concepts to final design and into production.

O ur teams are experts in computerbased design, modeling and analysis to assure robust product designs. We are also well-versed in performance simulation, as well as verification of mechanical and electrical properties. ITT C annon utilizes Pro/ENGINEER* software which allows us to develop products and manufacturing processes concurrently, and to easily evaluate multiple design alternatives. This means better designed products, produced faster and at a lower cost.

ITT C annon's Integrated Product Development process (IPD) allows us to minimize cycle time for first article and volume production.

[^20]$\begin{array}{llllllllll}\text { E } & \mathbf{X} & \mathbf{P} & \mathbf{E} & \mathrm{R} & \mathbf{I} & \mathbf{E} & \mathbf{N} & \mathbf{C} & \mathbf{E}\end{array}$

Worldwide capacity to meet all of your delivery requirements

0 ur decades of manufacturing experience, help us bring the latest products to your world. With automated manufacturing capacity strategically located in North America, Europe and Asia, we can produce products in either large or small quantities to quickly meet your exact requirements.

ITT C annon is able to modify existing products to suit special customer requirements. With global manufacturing capacity in every continent, we are also able to source product from the location that best suits your needs. This means we have the flexibility to select the most advantageous shipping methods and other logistical options.

ITT C annon has established Centers of Excellence for world class capabilities such as: Machining, stamping, surface plating, molding, cable assembly and network systems technology - all utilizing the most advanced CAM equipment.
$\begin{array}{lllllllllll}R & E & L & I & A & B & I & L & I & T & Y\end{array}$

We don't stop at "world class quality" Continuous improvement is our standard

O ur goal is to bring world class electronics to your world. This commitment to perfection has helped ITT C annon's global facilities earn ISO 9000 certification. We have invested in world class process controls for both assembly and component manufacturing.

ITT C annon has also met or exceeded the quality system requirements from all customers who have conducted audits. We participate in ship-to-stock programs with many of these customers worldwide and have received numerous quality and preferred supplier awards from customers throughout the world in each of the industries we serve.

RESPONSIVENESS

A singular focus on responding to your needs

We know that to be responsive, we must know your world inside and out: your particular company, your industry and your challenges. Each of ITT C annon's thousands of employees worldwide is focused on responding to you with timely and dependable information and on ensuring that we keep the commitments we make. For instance, our globally linked computer system tracks the status of your order anywhere in the world.

You also benefit from our field applications and sales network, which provides industry-specific knowledge to help you design in the best product for your application.

Our distribution network is one of the most extensive in the industry, and can provide you off-the-shelf product to meet the most challenging delivery requirements.

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A N I N V I T A T I O N
    T O S H A R E
    Y O U R W O R L D
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Innovation. Experience. Reliability. Responsiveness.

AtITT Cannon, these are the strengths that we bring to our customers each and every day. Just as we have for nearly nine decades. We pride ourselves on a level of service and manufacturing know-how that has enabled us to lead our industry. Exceeding your expectations - not just meeting them - is how we approach every project.
With the world moving faster all the time, ITT C annon is a partner who can help you get your products to market not just on time, but ahead of the competition.

AtITT C annon, we realize that each customer we serve has their own special needs and expectations. That is why we would welcome the opportunity to discuss your project, your company, your industry - yes, your world.


[^0]:    - Connector footprint measured from the front shell.

[^1]:    - Connector footprint measured from the front shell.

[^2]:    - Connector footprint measured from the front shell.

[^3]:    - Connector footprint measured from the front shell.

[^4]:    - Connector footprint measured from the front shell.

[^5]:    - Connector footprint measured from the front shell.

[^6]:    - Connector footprint measured from front shell.

[^7]:    - Connector footprint measured from the front shell.

[^8]:    - Connector footprint measured from the front shell.

[^9]:    - Connector footprint measured from the front shell.

[^10]:    - Connector footprint measured from the front shell.

[^11]:    - Connector footprint measured from the front shell.

[^12]:    *For use with SSA applications

[^13]:    Attenuation per MIL-STD-220 at $25^{\circ} \mathrm{C}$ with no applied voltage or current

[^14]:    - Connector footprint measured from the front shell.

[^15]:    - Connector footprint measured from the front shell.

[^16]:    - Connector footprint measured from the front shell.
    - Connector footprint measured from the rear shell.

[^17]:    * Pending qualification

[^18]:    保

[^19]:    Products: D*MA

[^20]:    *A trademark of Parametric Technology Corp.

