

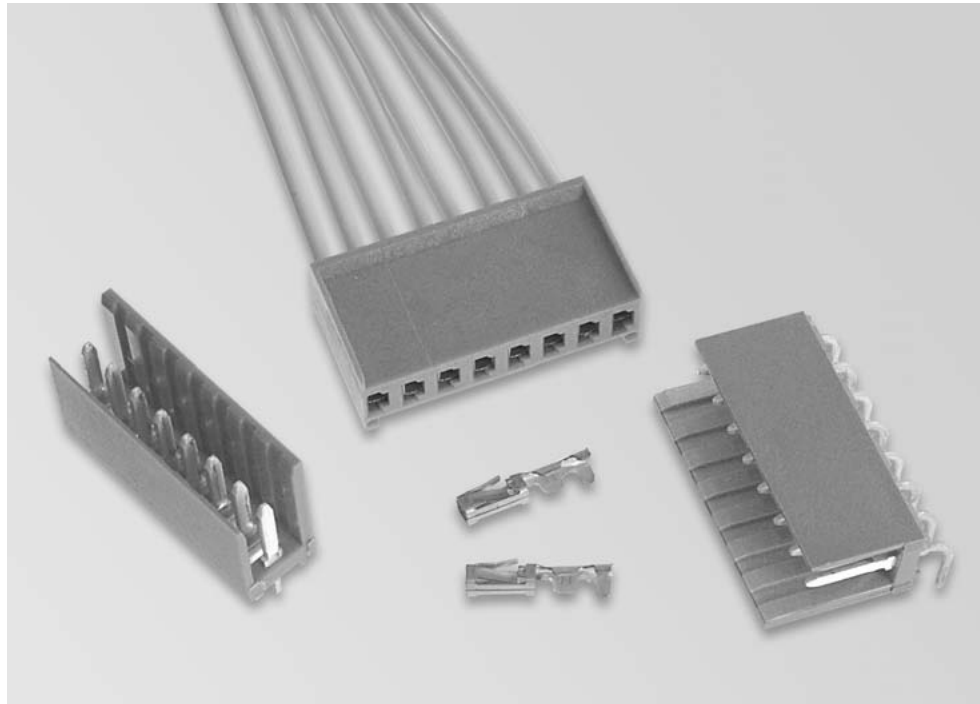


1-215299-2

# Products for Industrial Applications

**Product Facts**

- Rugged connector system featuring 0.79 x 1.57mm (.031" x .062") posts with mating receptacles
- Current rating 5 amps max per contact. Varies due to ambient temperature, wire size and duty cycles
- Available for board-to-board and wire-to-board applications
- Contacts available in both tin and gold plating
- Flame retardant thermoplastic housings UL 94V-1 rated
- Shrouded pin headers are polarised and detented



**Performance Specifications:**

**Contact Current Rating**—5 A max

**Operating temperature**—  
-40°C to +105°C

**Engaging Force**  
2.5 N per contact max  
(standard pressure contacts)

**Separating Force**  
0.5 N per contact min  
(standard pressure contacts)

**Durability  
(Standard Pressure Contacts)**  
0.4 µm gold— 100 cycles  
0.8 µm tin— 10 cycles

**Contact Resistance**—15 mΩ max

**Insulation Resistance**—  
5000 MΩ min

The 0.79 x 1.57mm (.031" x .062") interconnection system has been an industry standard for modular packaging for over 30 years. It is a rugged large scale system for board to board and wire to board connection in applications such as power supplies, industrial control and switchgear.

**MOD I Receptacles**

Cable mounted receptacle housings accept crimp contacts with a wire size range from 17-22AWG (0.32-1.00mm<sup>2</sup>) and with a variety of plating options. Contacts are available in both reeled and loose piece format to suit different manufacturing requirements and volumes. Unhoused pcb receptacle contacts provide a simple board to board solution with MOD I unshrouded headers.

**MOD I Headers**

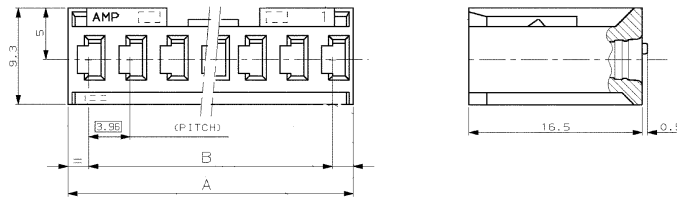
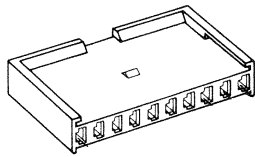
Pcb mount headers are provided in both shrouded and unshrouded versions. Shrouded headers are available in both straight and right angle variants with in-built polarisation when used with MOD I cable mount receptacles. Unshrouded pcb headers are offered for straight pcb mounting. Tin or gold plated contacts are available for both styles.

**MOD I Shunt Connectors**

The shunt connector is the easiest form of programming, allowing simple and flexible electrical connection. Supplied in strips they can be broken off as required. The open top design allows the use of a test probe while located in-circuit.

**MOD I Receptacle Housings**

**Single Row**



No. of Positions	Dimensions		Part Numbers
	A	B	
2	7.8	3.96	280590
4	15.7	11.89	280591
6	23.7	19.81	280592
8	31.6	27.74	280593
10	39.5	35.66	280594
12	47.4	43.59	280595

**Material and Finish:**

**Housing**—Green glass fibre filled polycarbonate, UL 94V-1 rated

**Technical Documents:**

**Product Specification**  
108-20026

**Application Specification**  
114-20040

**Keying Plug**  
**Part Number 87116-2**

(Plugs directly into Housing)



**Material and Finish:**

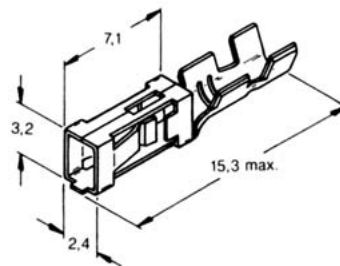
Phosphor bronze, plated as follows:

**Plating A**—Selectively plated 0.8 µm gold on contact area, with gold flash over 1.27 µm nickel on entire contact

**Plating B**—Selectively plated 0.4 µm gold on contact area with gold flash over 1.27 µm nickel on entire contact

**Plating C**—Pre-tin plated 0.8 µm

**MOD I Crimp Snap-In Receptacle Contacts, with Insulation Support**



**Related Product Data:**

**Application Tooling**

Extraction Tool: 843473-1

**Hand Tooling**

Commercial - SDE Die-set 1285002-2 (options)

Premium - CERTI-CRIMP (SAHT) 90274-2

**Technical Documents:**

**Product Specification**

108-20026

**Application Specification**

114-20040

Wire Size Range mm <sup>2</sup>	AWG	Insulation Diameter mm	Plating	Part Numbers	
				Strip Form	Loose Piece
0.32-0.80	22-18	1.80-2.30	Plating B	280621-2	181299-2
			Plating C	280621-1	181299-1
			Plating A	280621-6	181299-6
0.5 -1.0	20-17	2.20-2.80	Plating C	280702-1*	182198-1*
			Plating C	281423-1*	-

\* With high contact pressure

**Loose Piece Contacts:**

**SDE Options**

For SDE options please visit the hand tool page of our tooling web site (address below) and use the search function and the online hand tool catalogue.  
Or alternatively call your local contact for personal assistance.

**Strip Contacts:**

**HD-I Applicator**

To help you to establish the correct PN for your application (options), please visit the Applicator page on our Tooling website (address below) and enter your Terminal PN in the search function.  
Or alternatively call your local contact for personal assistance

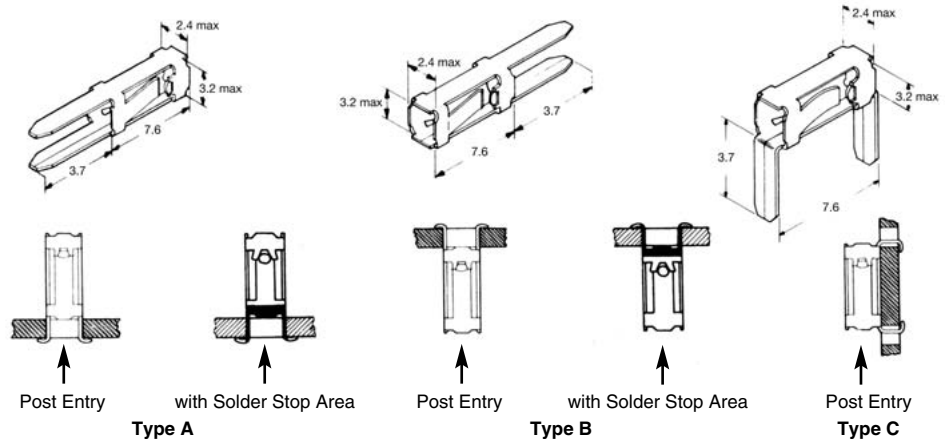


(Images are representative only.)

**To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)**

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

**MOD I PCB Mount Receptacle Contacts**



2  
PCB and Wire Connectors

**Material and Finish:**

Phosphor Bronze  
For Plating, see table

**Technical Documents:**

**Application Specification**  
114-25004

Part Numbers							Finish (Contact Zone)
Type A		Type B		Type C			
On Reel	Loose Piece	On Reel	Loose Piece	On Reel	Loose Piece		
141002-1	141007-2	141003-2	141008-2	141004-2	141009-2	Galvanised tin plated	
142165-1	—	142166-1	142166-2	—	—	Tin plated with Solder Stop Area	
141002-4	141007-4	141003-4	141008-4	141004-4	141009-4	0.8µm Au over 1.3µm Ni	
141584-2	141588-2	141585-2	141589-2	141586-2	141590-2	Duplex 0.8µm Au over 1.3µm Ni*	

\* In the duplex gold plated version, the rest of the receptacle is nickel plated, the solder tabs are tin plated

**Keying Plug  
Part Number 86181-2**

(Plugs directly into Housing)



**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

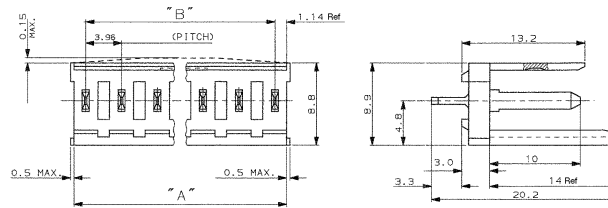
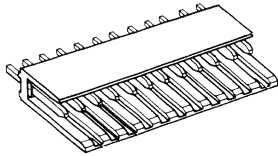
Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

**MOD I Shrouded Headers**

**Straight Shrouded Header**



**Material and Finish:**

**Housing**—Green glass fibre filled polycarbonate, UL 94V-1 rated

**Posts**—Brass (gold plating) or phosphor bronze (tin plating). Plating details as follows:

**Plating A**—Gold 0.4 µm on contact area, tin on solder area, with entire post underplated 1.3 µm nickel

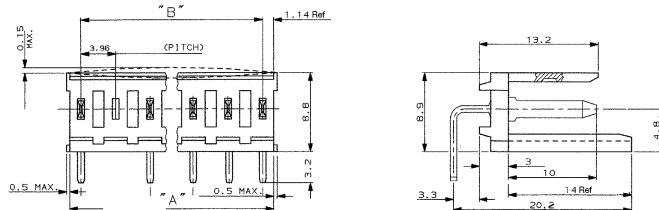
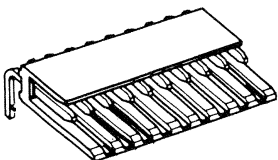
**Plating B**—Tin 3.8 µm min

No. of Positions	Dimensions		Part Numbers	
	A	B	Plating B	Plating A
2	6.2	3.96	280609-1	280609-2
4	14.2	11.89	280610-1	280610-2
6	22.1	19.81	280611-1	280611-2
8	30.0	27.74	280612-1	280612-2
10	37.9	35.66	280613-1	280613-2
12	45.9	43.59	280614-1	280614-2

**Technical Documents:**

**Product Specification**  
108-20026

**Right-Angle Shrouded Header**



**Material and Finish:**

**Housing**—Green glass fibre filled polycarbonate, UL 94V-1 rated

**Posts**—Brass (gold plating) or phosphor bronze (tin plating). Plating details as follows:

**Plating A**—Gold 0.4 µm on contact area, tin on solder area, with entire post underplated 1.3 µm nickel

**Plating B**—Tin 3.8 µm min

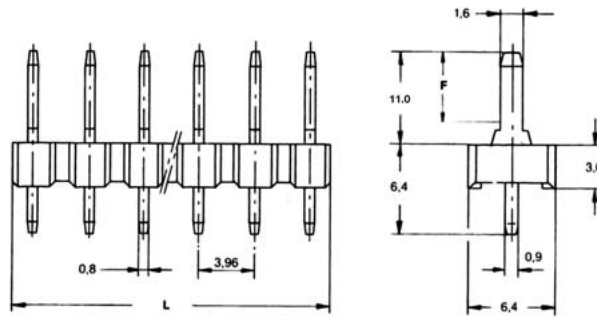
No. of Positions	Dimensions		Part Numbers	
	A	B	Plating B	Plating A
2	6.2	3.96	280615-1	280615-2
4	14.2	11.89	280616-1	280616-2
6	22.1	19.81	280617-1	280617-2
8	30.0	27.74	280618-1	280618-2
10	37.9	35.66	280619-1	280619-2
12	45.9	43.59	280620-1	280620-2

**Technical Documents:**

**Product Specification**  
108-20026

**MOD I Unshrouded Headers**

**Straight Unshrouded Header**



**Material and Finish:**

**Housing**—Thermoplastic polyester, green UL94V-0 rated

**Posts**—Brass

**Plating A**—0.8 µm gold on contact area (F), tin on solder area, with entire post underplated 1.3µm nickel

**Plating B**—Tin plated 2.5 µm min tin over 1.3 µm nickel

**Technical Documents:**

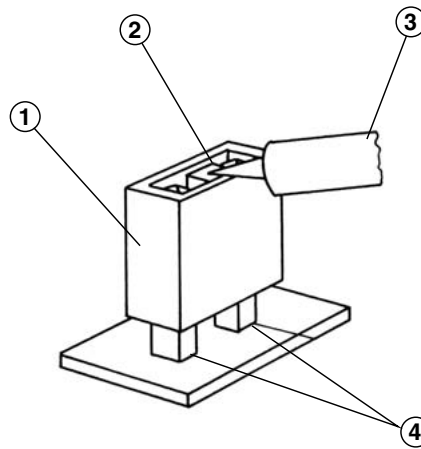
**Product Specification**  
108-20026

No. of Positions	Dimension L	Part Numbers	
		Plating B	Plating A (F=7.0)
2	7.3	826576-2	826539-2
3	11.3	826576-3	826539-3
4	15.2	826576-4	826539-4
5	19.2	826576-5	826539-5
6	23.1	826576-6	826539-6
7	27.1	826576-7	826539-7
8	31.1	826576-8	826539-8
9	35.1	826576-9	826539-9
10	39.0	1-826576-0	1-826539-0
20	78.6	2-826576-0	2-826539-0
36	141.6	3-826576-6	3-826539-6

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**MOD I Shunt Connector**

**Shunt Connectors**



- 1 Housing
- 2 Contact
- 3 Testing Probe
- 4 Posts

**Material and Finish:**

**Housing**—Polyamide 6.6, green UL94-HB rated

**Contact Material**—Phosphor Bronze

**Plating**—Tin 2.0µm min

No. of Positions	Part Numbers
1	826853-1
2	826853-2
3	826853-3

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

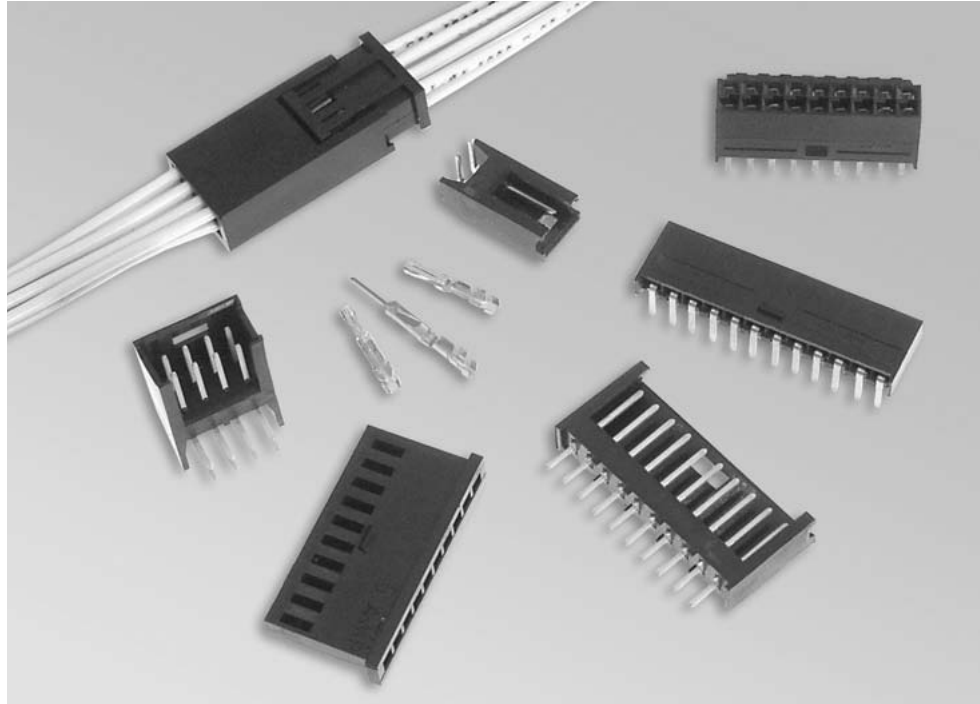
Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

**Product Facts**

- **Single and double row connector system featuring 0.63mm square posts with mating receptacles**
- **Current rating 3 amps max per contact. Varies due to ambient temperature, wire size and duty cycles**
- **Available for wire-to-board, board-to-board and wire-to-wire applications**
- **Contacts available in both tin and gold plating**
- **Flame retardant thermoplastic housings UL 94V-1 and UL 94V-0 rated**
- **Shrouded pin headers are polarised and detented**



**Performance Specifications:**

**Contact Current Rating**—3 A max  
**Operating temperature**—  
-40°C to +80°C

**Engaging Force**  
1.8 N per contact max  
(standard pressure contacts)

**Separating Force**  
0.4 N per contact min  
(standard pressure contacts)

**Durability  
(Standard Pressure Contacts)**  
**0.4 µm gold**— 100 cycles  
**0.8 µm gold**— 200 cycles

**Contact Resistance**—15 mΩ max  
**Insulation Resistance**—  
5000 MΩ min

A range of fully intermateable products on a 2.54mm (0.1") centreline for board to board, wire to board and wire to wire applications. A very flexible range, ideal where a number of system connection methods are required, the MOD II Italian range provides reliable and dependable connection for a wide range of applications.

**MOD II Receptacles**

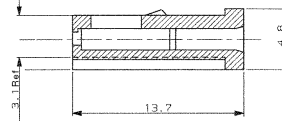
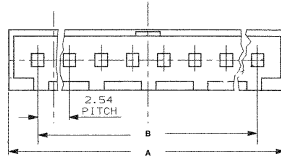
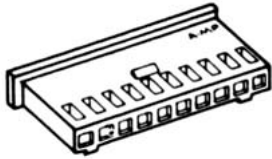
Receptacle products are offered in vertical and horizontal pcb mounting and as cable mount housings for crimp snap-in contacts with insulation support. Both pcb and cable mount receptacles feature polarisation and detent latching giving a positive click when used with the corresponding header variants. Crimp contacts for receptacle housings accommodate a wire size range of 20-30AWG (0.04mm<sup>2</sup> to 0.5mm<sup>2</sup>) and are available with a number of different plating options.

**MOD II Headers and Pin Housings**

Available as both shrouded pcb headers with 0.63mm posts or as cable mount housings to accept crimp snap-in pin contacts with insulation support. Shrouded headers feature gold or tin plating in straight or right angle and will mate with both pcb and cable mount receptacles. Cable mount pin housings also mate with both pcb and cable mount receptacles. Crimp contacts for pin housings allow termination to wire size ranges 22-30AWG (0.04mm<sup>2</sup> to 0.32mm<sup>2</sup>) with a choice of plating finishes.

**MOD II Receptacle Housings**

**Single Row**



**Material and Finish:**

**Housing**—Black thermoplastic, UL 94V-1 rated

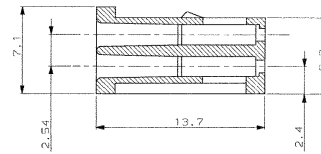
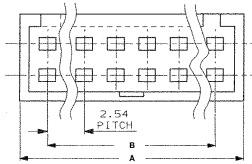
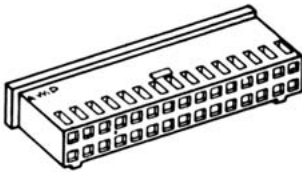
**Technical Documents:**

**Product Specification**  
108-20025

**Application Specification**  
114-20004

No. of Positions	Dimensions		Part Numbers
	A	B	
2	7.1	2.54	280358
4	12.2	7.62	280359
6	17.3	12.70	280360
8	22.3	17.78	280361
9	24.9	20.32	280512
10	27.4	22.86	280362
12	32.5	27.94	280514
15	40.1	35.56	280363
22	57.9	53.34	280364

**Double Row**



**Material and Finish:**

**Housing**—Black thermoplastic, UL 94V-1 rated

**Technical Documents:**

**Product Specification**  
108-20025

**Application Specification**  
114-20004

No. of Positions	Dimensions		Part Numbers
	A	B	
2x4	12.2	7.62	280365
2x5	14.7	10.16	284123-1
2x6	17.2	12.70	282792-1
2x8	22.3	17.78	280366
2x9	24.9	20.32	280513
2x12	32.5	27.94	280515
2x15	40.1	35.56	280368
2x18	47.8	43.18	281018
2x22	57.9	53.34	280369

**Keying Plug  
Part Number 87077-2**

(Plugs directly into Housing)



**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

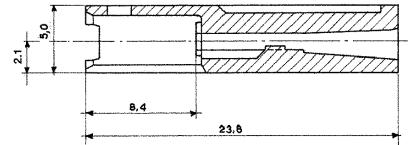
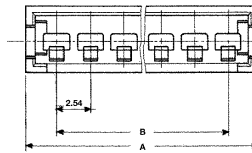
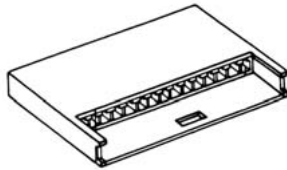
All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com



**MOD II Pin Housings**

**Single Row**



**Material and Finish:**

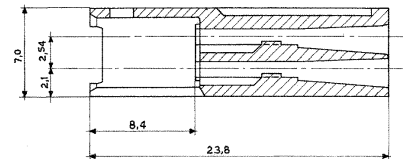
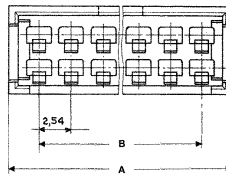
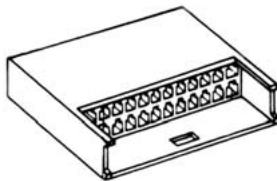
**Housing**—Black thermoplastic, UL 94V-1 rated

**Technical Documents:**

**Product Specification**  
108-20025

No. of Positions	Dimensions		Part Numbers
	A	B	
2	7.4	2.54	280628
4	12.5	7.62	280629
6	17.5	12.70	280630
8	22.6	17.78	280631
9	25.1	20.32	280632
10	27.7	22.86	280633
12	32.8	27.94	280634
15	40.4	35.56	280635

**Double Row**



**Material and Finish:**

**Housing**—Black thermoplastic, UL 94V-1 rated

**Technical Documents:**

**Product Specification**  
108-20025

No. of Positions	Dimensions		Part Numbers
	A	B	
2x4	12.5	7.62	280637
2x8	22.6	17.78	280638
2x12	32.8	27.94	280640

**MOD II Crimp Snap-In Receptacle Contacts, with Insulation Support**

**Material and Finish:**

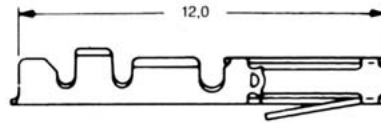
Phosphor bronze, plated as follows:

**Plating A**—Pre-tin plated 0.8 µm

**Plating B**—Selectively plated 0.4 µm gold on contact area, with gold flash over 1.3 µm nickel on entire contact

**Plating C**—Selectively plated 0.4 µm gold on contact area, over 1.3 µm nickel on entire contact

**Plating D**—Selectively plated 0.8 µm gold on contact area, with gold flash over 1.3 µm nickel on entire contact



**Technical Documents:**

**Product Specification**

108-20025

**Application Specification**

114-20004

AWG	Strip Form	Loose Piece	Hand Tool	
			commercial*	premium
24-20	281999-1	-	-	-
	281556-2*	-	-	-
26-22	280530-1	181270-1	58535-2	91537-1
	280530-3	181270-3		
	280530-4	181270-4		
	280708-2*	182206-2*		
30-28	280422-1	181271-1	58654-2	782116
	280709-2*	182207-2*		

\* SDE die-set (options)

2  
PCB and Wire Connectors

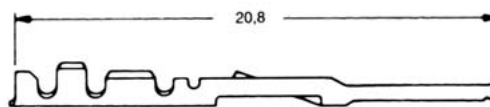
**MOD II Crimp Snap-In Pin Contacts, with Insulation Support**

**Material and Finish:**

Phosphor bronze, plated as follows:

**Plating A**—2.5 µm tin over 1.3µm nickel on entire contact

**Plating B**—Selectively plated 0.4 µm gold on contact area, with gold flash over 1.3 µm nickel on entire contact



**Technical Documents:**

**Application Specification**

114-16003

AWG	Strip Form	Loose Piece	Hand Tool	
			commercial*	premium
26-22	86557-6	86561-6	58535-2	91537-1
	1-86557-9	1-86561-0		
30-28	88048-4	-	58654-2	782116
	88048-2	-		

\* SDE die-set (options)

**Loose Piece Contacts:**

**SDE Options**

For SDE options please visit the hand tool page of our tooling web site (address below) and use the search function and the online hand tool catalogue. Or alternatively call your local contact for personal assistance.

**Strip Contacts:**

**HD-I Applicator**

To help you to establish the correct PN for your application (options), please visit the Applicator page on our Tooling website (address below) and enter your Terminal PN in the search function. Or alternatively call your local contact for personal assistance.



(Images are representative only.)

**To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)**

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

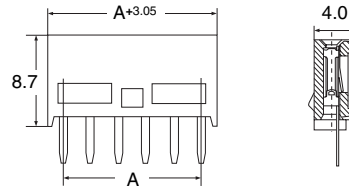
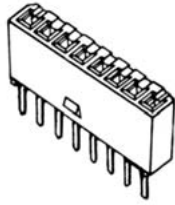
Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

[www.tycoelectronics.com](http://www.tycoelectronics.com)

**MOD II Receptacles, Vertical PCB Mount**

**Single Row**



**Material and Finish:**

**Housing**—Black glass fibre filled polyester, UL 94V-0 rated

**Contacts**—Phosphor bronze, plated as follows:

**Plating A**—Selectively plated 0.4 µm gold on contact area with gold flash over nickel on entire contact

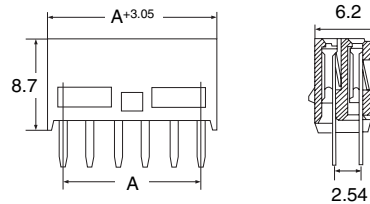
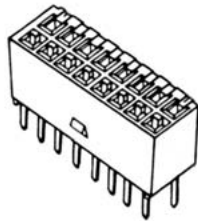
**Plating B**—Tin 0.8 µm

No. of Positions	Plating / Part Numbers		Dimension A
	Plating A	Plating B	
4	-	281327-1	7.62
8	281349-2	-	17.78
9	280851-2	-	20.32
12	281350-2	281331-1	27.94
15	281351-2	281328-1	35.56
22	-	281332-1	53.34

**Technical Documents:**

**Product Specification**  
108-20025

**Double Row**



**Material and Finish:**

**Housing**—Black glass fibre filled polyester, UL 94V-0 rated

**Contacts**—Phosphor bronze, plated as follows:

**Plating A**—Selectively plated 0.4 µm gold on contact area with gold flash over nickel on entire contact

**Plating B**—Tin 0.8 µm

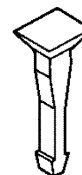
No. of Positions	Plating / Part Numbers		Dimension A
	Plating A	Plating B	
2x8	281352-2	281215-1	17.78
2x9	281353-2	281339-1	20.32
2x12	281216-2	281340-1	27.94
2x15	280922-2	-	35.56
2x22	280836-2	281342-1	53.34

**Technical Documents:**

**Product Specification**  
108-20025

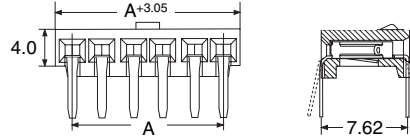
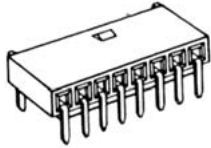
**Keying Plug  
Part Number 86286-1**

(Plugs into receptacle contact)



**MOD II Receptacles, Horizontal PCB Mount**

**Single Row**



**Material and Finish:**

**Housing**—Black glass fibre filled polyester, UL 94V-0 rated

**Contacts**—Phosphor bronze, plated as follows:

**Plating A**—Selectively plated 0.4 µm gold on contact area with gold flash over nickel on entire contact

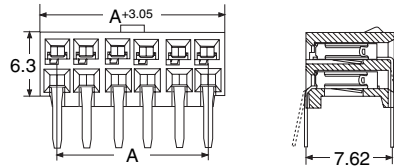
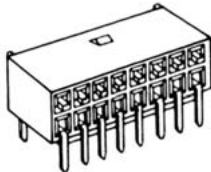
**Plating B**—Tin 0.8 µm

No. of Positions	Plating / Part Numbers		Dimension A
	Plating A	Plating B	
4	281218-2	281333-1	7.62
8	280578-2	281334-1	17.78
9	280579-2	-	20.32
12	280580-2	281336-1	27.94
15	280581-2	-	35.56
22	280582-2	-	53.34

**Technical Documents:**

**Product Specification**  
108-20025

**Double Row**



**Material and Finish:**

**Housing**—Black glass fibre filled polyester, UL 94V-0 rated

**Contacts**—Phosphor bronze, plated as follows:

**Plating A**—Selectively plated 0.4 µm gold on contact area with gold flash over nickel on entire contact

**Plating B**—Tin 0.8 µm

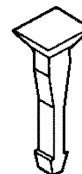
No. of Positions	Plating / Part Numbers		Dimension A
	Plating A	Plating B	
2x8	280583-2	-	17.78
2x12	280585-2	-	27.94
2x15	280586-2	-	35.56

**Technical Documents:**

**Product Specification**  
108-20025

**Keying Plug  
Part Number 86286-1**

(Plugs into receptacle contact)



**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

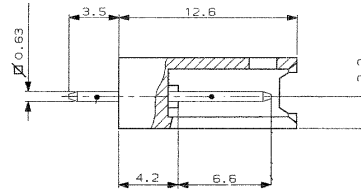
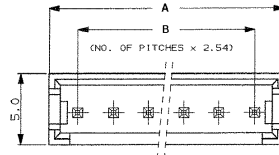
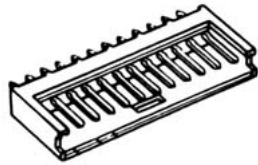
Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

**MOD II Shrouded Headers, Straight**

**Single Row Header**



**Material and Finish:**

**Housing**—Black thermoplastic, UL 94V-0 rated

**Posts**—Brass (gold plating) or phosphor bronze (tin plating). Plating details as follows:

**Plating A**—Gold 0.8 µm on contact area and 2.5 µm tin on solder area, with entire post underplated 1.3 µm nickel

**Plating B**—Gold 0.4 µm on contact area and 2.5 µm tin on solder area, with entire post underplated 1.3 µm nickel

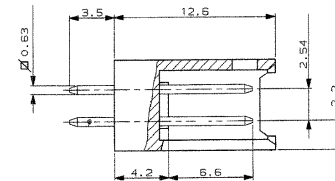
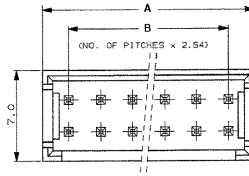
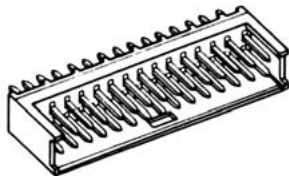
**Plating C**—Tin 3.5 µm

No. of Positions	Dimensions		Part Numbers		
	A	B	Plating C	Plating B	Plating A
2	7.7	2.54	280370-1	280370-2	280370-3
4	12.7	7.62	280371-1	280371-2	280371-3
6	17.8	12.70	280372-1	280372-2	280372-3
8	22.9	17.78	280373-1	280373-2	280373-3
9	25.4	20.32	280508-1	280508-2	-
10	28.0	22.86	280374-1	280374-2	280374-3
12	33.1	27.94	280520-1	280520-2	280520-3
15	40.7	35.56	280375-1	280375-2	280375-3
22	58.5	53.34	280376-1	280376-2	280376-3

**Technical Documents:**

**Product Specification**  
108-20025

**Double Row Header**



**Material and Finish:**

**Housing**—Black thermoplastic, UL 94V-0 rated

**Posts**—Brass (gold plating) or phosphor bronze (tin plating). Plating details as follows:

**Plating A**—Gold 0.8 µm on contact area and 2.5 µm tin on solder area, with entire post underplated 1.3 µm nickel

**Plating B**—Gold 0.4 µm on contact area and 2.5 µm tin on solder area, with entire post underplated 1.3 µm nickel

**Plating C**—Tin 3.5 µm

No. of Positions	Dimensions		Part Numbers		
	A	B	Plating C	Plating B	Plating A
2x4	12.7	7.62	280384-1	280384-2	280384-3
2x8	22.9	17.78	280385-1	280385-2	280385-3
2x9	25.4	20.32	280509-1	280509-2	280509-3
2x12	33.1	27.94	280521-1	280521-2	280521-3
2x15	40.7	35.56	280387-1	280387-2	280387-3
2x18	48.3	43.18	-	281019-2	-
2x22	58.5	53.34	280388-1	280388-2	-

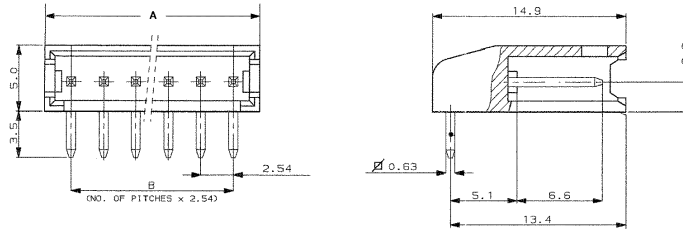
**Technical Documents:**

**Product Specification**  
108-20025

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

**MOD II Shrouded Headers, Right-Angle**

**Single Row Header**



**Material and Finish:**

**Housing**—Black thermoplastic, UL 94V-0 rated

**Posts**—Brass (gold plating) or phosphor bronze (tin plating). Plating details as follows:

**Plating A**—Gold 0.8 µm on contact area and 2.5 µm tin on solder area, with entire post underplated 1.3 µm nickel

**Plating B**—Gold 0.4 µm on contact area and 2.5 µm tin on solder area, with entire post underplated 1.3 µm nickel

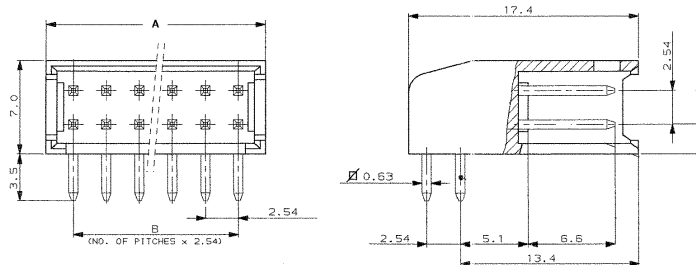
**Plating C**—Tin 3.5 µm

No. of Positions	Dimensions		Part Numbers		
	A	B	Plating C	Plating B	Plating A
2	7.7	2.54	280377-1	280377-2	280377-3
4	12.7	7.62	280378-1	280378-2	280378-3
6	17.8	12.70	280379-1	280379-2	280379-3
8	22.9	17.78	280380-1	280380-2	280380-3
9	25.4	20.32	280511-1	-	-
10	28.0	22.86	280381-1	280381-2	280381-3
12	33.1	27.94	280523-1	280523-2	280523-3
15	40.7	35.56	280382-1	280382-2	-
22	58.5	53.34	280383-1	280383-2	-

**Technical Documents:**

**Product Specification**  
108-20025

**Double Row Header**



**Material and Finish:**

**Housing**—Black thermoplastic, UL 94V-0 rated

**Posts**—Brass (gold plating) or phosphor bronze (tin plating). Plating details as follows:

**Plating A**—Gold 0.8 µm on contact area and 2.5 µm tin on solder area, with entire post underplated 1.3 µm nickel

**Plating B**—Gold 0.4 µm on contact area and 2.5 µm tin on solder area, with entire post underplated 1.3 µm nickel

**Plating C**—Tin 3.5 µm

No. of Positions	Dimensions		Part Numbers		
	A	B	Plating C	Plating B	Plating A
2x4	12.7	7.62	280389-1	280389-2	280389-3
2x5	15.2	10.16	—	284124-1	—
2x6	17.8	12.70	—	282790-1	—
2x8	22.9	17.78	280390-1	280390-2	280390-3
2x9	25.4	20.32	280510-1	280510-2	280510-3
2x12	33.1	27.94	280522-1	280522-2	280522-3
2x15	40.7	35.56	280392-1	280392-2	280392-3
2x18	48.3	43.18	-	281021-2	-
2x22	58.5	53.34	280393-1	280393-2	-

**Technical Documents:**

**Product Specification**  
108-20025

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

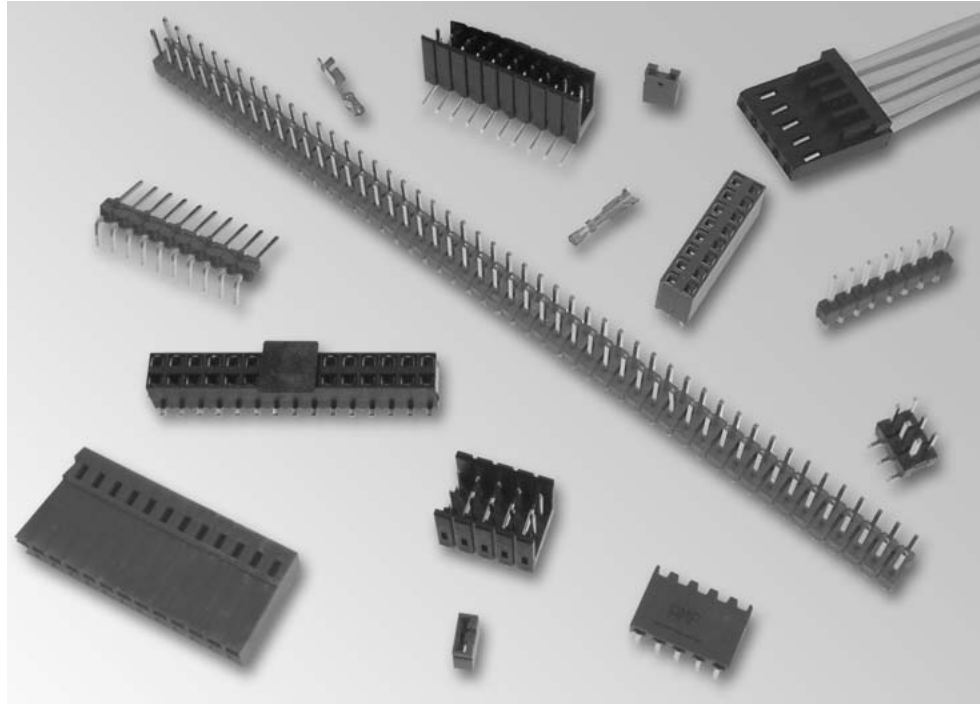
Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

**Product Facts**

- Comprehensive single and double row connector system featuring 0.63mm posts with mating receptacles
- Current rating 3A max per contact. Varies due to ambient temperature, wire size and duty cycles
- Available for wire-to-board and board-to-board applications
- Contacts available in both tin and gold plating
- Flame retardant thermoplastic housings are UL 94V-0 rated



**Performance Specifications:**

- Contact Current Rating**—3 A max
- Operating temperature**—  
-55°C to +105°C min
- Contact Resistance**—20 mΩ max
- Insulation Resistance**—  
1000 MΩ max

A wide range of modular interconnects on the industry standard 2.54mm (0.1") grid addressing applications across all industry sectors. Designed for wire to board or board to board connection, including stacking, the AMPMODU 2.54mm system provides a comprehensive solution for this ever popular connection style.

**MOD II Breakaway Pin Headers**

Supplied in a breakaway form, headers can be conveniently broken to any size needed ensuring maximum versatility. Available in straight and right angle, compatibility with mating receptacles is assured through a range of pin lengths and plating options. Pin headers are offered for surface mount, press fit action pin and standard through hole solder.

**HV100/190 PCB Receptacles**

HV100/190 receptacles are available in vertical and horizontal mounting and offer the benefit of a short contact point design. Options for sealing, top or bottom entry and surface mounting ensure a suitable connector is available for each application. Three mounting heights for the HV100 vertical receptacle allow the connector to be used for versatile stacking applications. All HV100/190 receptacles feature a choice of gold or tin contact plating.

**MOD II Shrouded Headers**

With a range of dedicated cable mount receptacle products, the MOD II shrouded headers allow wire to board connection with the added security of shrouded pin contacts. MOD II headers also offer the benefit of compatibility with high temperature surface mount processes.

**MOD IV Cable Mount Receptacles**

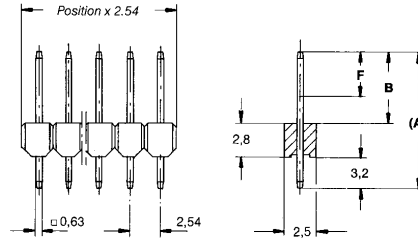
Available in two styles, MOD IV cable mount receptacle housings accept MOD IV/V crimp snap-in contacts, providing connection to the MOD II shrouded headers and the MOD II breakaway pin header family. Complete with a range of accessories including keying and retention plugs, this range of receptacles offer reliable and cost effective wire to board connection. Contacts suitable for wire sizes 20-32AWG (0.032mm<sup>2</sup> to 0.56mm<sup>2</sup>) are available with a range of plating finishes in standard or high pressure variants.

**MOD IV Shunt Connectors**

The shunt connector provides quick and easy programming of electrical circuits. Supplied in strips they can be broken off as required, or may be supplied in loose piece form. The open top design allows the use of a test probe while in-circuit.

**MOD II Low Cost Line Breakaway Pin Headers—Unshrouded, Straight**

**Single Row 0.63mm Square Post**



**Material and Finish:**

**Housing**—Green polyester, glass filled, UL 94V-0 rated

**Posts**—Phosphor bronze, plated as follows:

**Plating A**

**Contact Zone (Area F)**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—3 µm min. tin over 1.3 µm nickel

**Plating B**—2 µm min. tin over 1.3 µm nickel

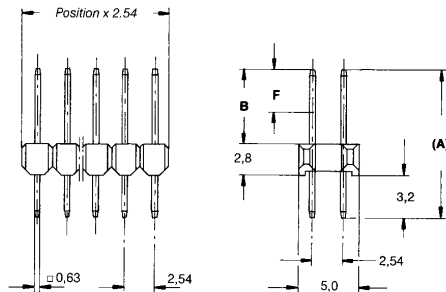
**Technical Documents:**

**Product Specification**  
108-18012

No. of Positions	A=11.8 B=5.8 F=4.4		A=12.7 B=6.7 F=4.4		A=14.0 B=8.0 F=4.4	
	Part Numbers		Part Numbers		Part Numbers	
	Plating A	Plating B	Plating A	Plating B	Plating A	Plating B
2	826646-2	826936-2	826629-2	826926-2	826648-2	826938-2
3	826646-3	826936-3	826629-3	826926-3	826648-3	826938-3
4	826646-4	826936-4	826629-4	826926-4	826648-4	826938-4
5	826646-5	826936-5	826629-5	826926-5	826648-5	826938-5
6	826646-6	826936-6	826629-6	826926-6	826648-6	826938-6
7	826646-7	826936-7	826629-7	826926-7	826648-7	826938-7
8	826646-8	826936-8	826629-8	826926-8	826648-8	826938-8
9	826646-9	826936-9	826629-9	826926-9	826648-9	826938-9
10	1-826646-0	1-826936-0	1-826629-0	1-826926-0	1-826648-0	1-826938-0
20	2-826646-0	2-826936-0	2-826629-0	2-826926-0	2-826648-0	2-826938-0
50	5-826646-0	5-826936-0	5-826629-0	5-826926-0	5-826648-0	5-826938-0

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Double Row 0.63mm Square Post**



**Material and Finish:**

**Housing**—Green polyester, glass filled, UL 94V-0 rated

**Posts**—Phosphor bronze, plated as follows:

**Plating A**

**Contact Zone (Area F)**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—3 µm min. tin over 1.3 µm nickel

**Plating B**—2 µm min. tin over 1.3 µm nickel

**Technical Documents:**

**Product Specification**  
108-18012

No. of Positions	A=11.8 B=5.8 F=4.4		A=12.7 B=6.7 F=5.5		A=14.0 B=8.0 F=4.4	
	Part Numbers		Part Numbers		Part Numbers	
	Plating A	Plating B	Plating A	Plating B	Plating A	Plating B
2x2	826656-2	826942-2	826632-2	826925-2	826658-2	826944-2
2x3	826656-3	826942-3	826632-3	826925-3	826658-3	826944-3
2x4	826656-4	826942-4	826632-4	826925-4	826658-4	826944-4
2x5	826656-5	826942-5	826632-5	826925-5	826658-5	826944-5
2x6	826656-6	826942-6	826632-6	826925-6	826658-6	826944-6
2x7	826656-7	826942-7	826632-7	826925-7	826658-7	826944-7
2x8	826656-8	826942-8	826632-8	826925-8	826658-8	826944-8
2x9	826656-9	826942-9	826632-9	826925-9	826658-9	826944-9
2x10	1-826656-0	1-826942-0	1-826632-0	1-826925-0	1-826658-0	1-826944-0
2x20	2-826656-0	2-826942-0	2-826632-0	2-826925-0	2-826658-0	2-826944-0
2x50	5-826656-0	5-826942-0	5-826632-0	5-826925-0	5-826658-0	5-826944-0

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

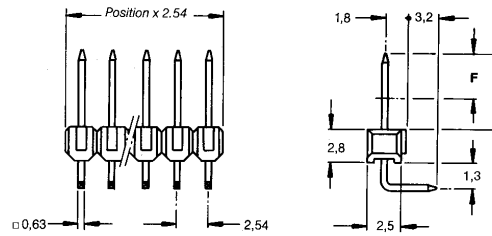
All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com



**MOD II Low Cost Line Breakaway Pin Headers—Unshrouded, Right Angle**

**Single Row 0.63mm Square Post**



**Material and Finish:**

**Housing**—Green polyester, glass filled, UL 94V-0 rated

**Posts**—Phosphor bronze, plated as follows:

**Plating A**

**Contact Zone (Area F)**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—3 µm min. tin over 1.3 µm nickel

**Plating B**—2 µm min. tin over 1.3 µm nickel

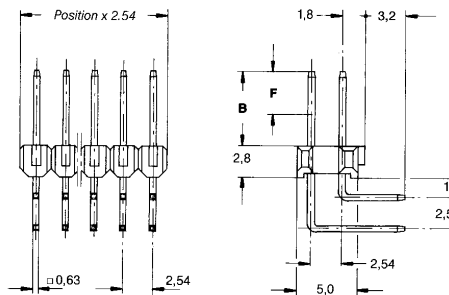
**Technical Documents:**

**Product Specification**  
108-18012

No. of Positions	B=5.8 F=4.4		B=6.7 F=4.4		B=8.0 F=4.4	
	Part Numbers		Part Numbers		Part Numbers	
	Plating A	Plating B	Plating A	Plating B	Plating A	Plating B
2	826652-2	826949-2	826631-2	826947-2	826654-2	826951-2
3	826652-3	826949-3	826631-3	826947-3	826654-3	826951-3
4	826652-4	826949-4	826631-4	826947-4	826654-4	826951-4
5	826652-5	826949-5	826631-5	826947-5	826654-5	826951-5
6	826652-6	826949-6	826631-6	826947-6	826654-6	826951-6
7	826652-7	826949-7	826631-7	826947-7	826654-7	826951-7
8	826652-8	826949-8	826631-8	826947-8	826654-8	826951-8
9	826652-9	826949-9	826631-9	826947-9	826654-9	826951-9
10	1-826652-0	1-826949-0	1-826631-0	1-826947-0	1-826654-0	1-826951-0
20	2-826652-0	2-826949-0	2-826631-0	2-826947-0	2-826654-0	2-826951-0
50	5-826652-0	5-826949-0	5-826631-0	5-826947-0	5-826654-0	5-826951-0

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Double Row 0.63mm Square Post**



**Material and Finish:**

**Housing**—Green polyester, glass filled, UL 94V-0 rated

**Posts**—Phosphor bronze, plated as follows:

**Plating A**

**Contact Zone (Area F)**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—3 µm min. tin over 1.3 µm nickel

**Plating B**—2 µm min. tin over 1.3 µm nickel

**Technical Documents:**

**Product Specification**  
108-18012

No. of Positions	B=5.8 F=4.4		B=6.7 F=5.5		B=8.0 F=4.4	
	Part Numbers		Part Numbers		Part Numbers	
	Plating A	Plating B	Plating A	Plating B	Plating A	Plating B
2x2	826662-2	826955-2	826634-2	826953-2	826664-2	826957-2
2x3	826662-3	826955-3	826634-3	826953-3	826664-3	826957-3
2x4	826662-4	826955-4	826634-4	826953-4	826664-4	826957-4
2x5	826662-5	826955-5	826634-5	826953-5	826664-5	826957-5
2x6	826662-6	826955-6	826634-6	826953-6	826664-6	826957-6
2x7	826662-7	826955-7	826634-7	826953-7	826664-7	826957-7
2x8	826662-8	826955-8	826634-8	826953-8	826664-8	826957-8
2x9	826662-9	826955-9	826634-9	826953-9	826664-9	826957-9
2x10	1-826662-0	1-826955-0	1-826634-0	1-826953-0	1-826664-0	1-826957-0
2x20	2-826662-0	2-826955-0	2-826634-0	2-826953-0	2-826664-0	2-826957-0
2x50	5-826662-0	5-826955-0	5-826634-0	5-826953-0	5-826664-0	5-826957-0

**Ordering Information:** For intermediate number of positions, please combine dash numbers

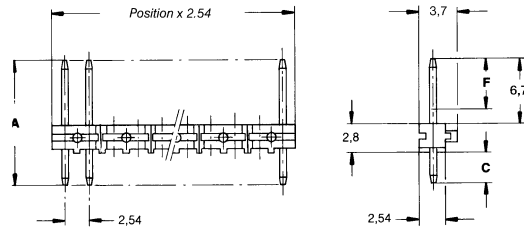
**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

**MOD II Economy Line Breakaway Pin Headers—Unshrouded, Straight**

**Single Row 0.63mm Square Post**



With retention feature when used with 925369 MOD IV receptacle housing



**Material and Finish:**

**Housing**—Green polyester, glass filled, UL 94V-0 rated

**Posts**—Phosphor bronze, plated as follows:

**Plating A**

**Contact Zone (Area F)**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—2.5 µm min. tin over 1.3 µm nickel

**Plating B**—2 µm min. tin over 1.3 µm nickel

**Technical Documents:**

**Product Specification**  
108-18012

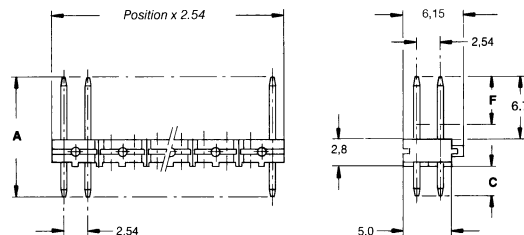
No. of Positions	A = 12.7 C = 3.2 F=4.4		A = 15.2 C = 5.7 F= 4.4		A = 20.3 C = 10.8 F= 4.4	
	Part Numbers	Part Numbers	Part Numbers	Part Numbers	Part Numbers	Part Numbers
2	825433-2	828214-2	825434-2	827312-2	825435-2	827313-2
3	825433-3	828214-3	825434-3	827312-3	825435-3	827313-3
4	825433-4	828214-4	825434-4	827312-4	825435-4	827313-4
5	825433-5	828214-5	825434-5	827312-5	825435-5	827313-5
6	825433-6	828214-6	825434-6	827312-6	825435-6	827313-6
7	825433-7	828214-7	825434-7	827312-7	825435-7	827313-7
8	825433-8	828214-8	825434-8	827312-8	825435-8	827313-8
9	825433-9	828214-9	825434-9	827312-9	825435-9	827313-9
10	1-825433-0	1-828214-0	1-825434-0	1-827312-0	1-825435-0	1-827313-0
20	2-825433-0	2-828214-0	2-825434-0	2-827312-0	2-825435-0	2-827313-0
50	5-825433-0	5-828214-0	5-825434-0	5-827312-0	5-825435-0	5-827313-0

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Double Row 0.63mm Square Post**



With retention feature when used with 925370 MOD IV receptacle housing



**Material and Finish:**

**Housing**—Green polyester, glass filled, UL 94V-0 rated

**Posts**—Phosphor bronze, plated as follows:

**Plating A**

**Contact Zone (Area F)**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—2.5 µm min. tin over 1.3 µm nickel

**Plating B**—2 µm min. tin over 1.3 µm nickel

**Technical Documents:**

**Product Specification**  
108-18012

No. of Positions	A= 12.7 C= 3.2 F=4.4	
	Part Numbers	Part Numbers
2x2	825440-2	828213-2
2x3	825440-3	828213-3
2x4	825440-4	828213-4
2x5	825440-5	828213-5
2x6	825440-6	828213-6
2x7	825440-7	828213-7
2x8	825440-8	828213-8
2x9	825440-9	828213-9
2x10	1-825440-0	1-828213-0
2x20	2-825440-0	2-828213-0
2x50	5-825440-0	5-828213-0

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

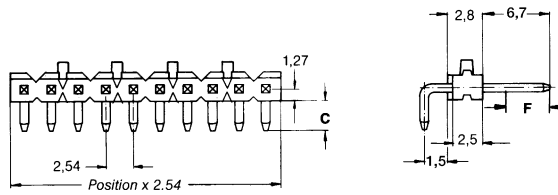
Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

**MOD II Economy Line Breakaway Pin Headers—Unshrouded, Right Angle**

**Single Row 0.63mm Square Post**



With retention feature when used with 925369 MOD IV receptacle housing

**Material and Finish:**

**Housing**—Green polyester, glass filled, UL 94V-0 rated

**Posts**—Phosphor bronze, plated as follows:

**Plating**

**Contact Zone (Area F)**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—2 µm min. tin over 1.3 µm nickel

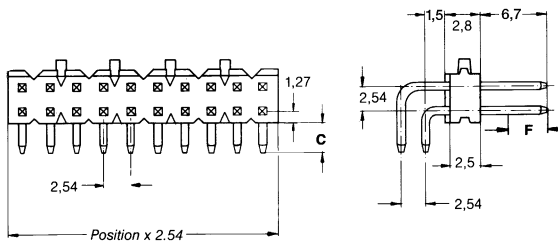
**Technical Documents:**

**Product Specification**  
108-18012

No. of Positions	C= 3.2 F= 4.4
	Part Numbers
2	825437-2
3	825437-3
4	825437-4
5	825437-5
6	825437-6
7	825437-7
8	825437-8
9	825437-9
10	1-825437-0
20	2-825437-0
50	5-825437-0

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Double Row 0.63mm Square Post**



With retention feature when used with 925370 MOD IV receptacle housing

**Material and Finish:**

**Housing**—Green polyester, glass filled, UL 94V-0 rated

**Posts**—Phosphor bronze, plated as follows:

**Plating**

**Contact Zone (Area F)**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—2 µm min. tin over 1.3 µm nickel

**Technical Documents:**

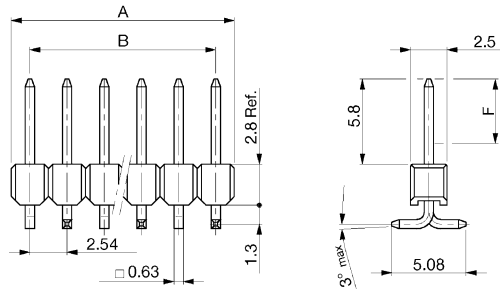
**Product Specification**  
108-18012

No. of Positions	C= 3.2 F= 4.4
	Part Numbers
2x2	825457-2
2x3	825457-3
2x4	825457-4
2x5	825457-5
2x6	825457-6
2x7	825457-7
2x8	825457-8
2x9	825457-9
2x10	1-825457-0
2x20	2-825457-0
2x50	5-825457-0

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**MOD II Surface Mount Breakaway Pin Headers—Unshrouded, Straight, End Stackable**

**Single Row 0.63mm Square Post**



**Material and Finish:**  
**Housing and pick & place adapter**  
—PCT GV Black

**Posts**—Phosphor bronze, plated as follows:

**Contact Zone (Area F)**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—min 2.5 µm tin over 1.3 µm nickel

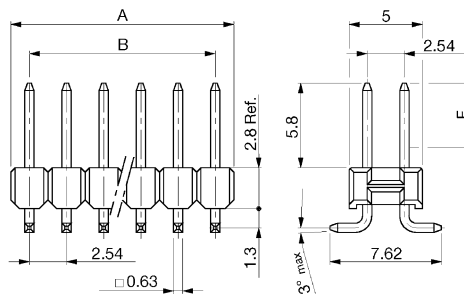
**Technical Documents:**

**Product Specification**  
108-18012

No. of Positions	Dimensions		F=4.4
	A	B	Part Numbers Blister Packaging
3	7.62	5.08	1241150-3
4	10.16	7.62	1241150-4
5	12.70	10.16	1241150-5
6	15.24	12.70	1241150-6
7	17.78	15.24	1241150-7
8	20.32	17.78	1241150-8
9	22.86	20.32	1241150-9
10	25.40	22.86	1-1241150-0
17	43.18	40.64	1-1241150-7

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Double Row 0.63mm Square Post**



**Material and Finish:**  
**Housing and pick & place adapter**  
—PCT GV Black

**Posts**—Phosphor bronze, plated as follows:

**Contact Zone (Area F)**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—min 2.5 µm tin over 1.3 µm nickel

**Technical Documents:**

**Product Specification**  
108-18012

No. of Positions	Dimensions		F=4.4
	A	B	Part Numbers Blister Packaging
2x2	5.08	2.54	1241050-2
2x3	7.62	5.08	1241050-3
2x4	10.16	7.62	1241050-4
2x5	12.70	10.16	1241050-5
2x6	15.24	12.70	1241050-6
2x7	17.78	15.24	1241050-7
2x8	20.32	17.78	1241050-8
2x9	22.86	20.32	1241050-9
2x10	25.40	22.86	1-1241050-0
2x17	43.18	40.64	1-1241050-7

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Note:** Other pin lengths available on request

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

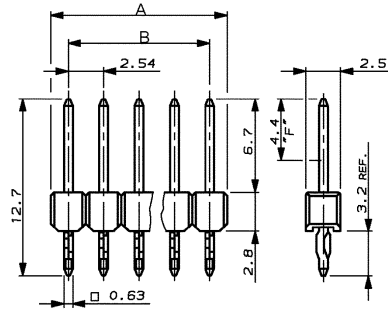
Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

**MOD II ACTION PIN Breakaway Pin Headers—Unshrouded, Straight**

**Single Row 0.63mm Square Post**



**Material and Finish:**

**Housing**—Polyester, glass filled, green UL 94V-0 rated

**Posts**—Phosphor bronze, plated as follows:

**Plating A**

**Contact Zone (Area F)**—0.1 µm gold, over 0.7 µm palladium alloy, over 1.27 µm nickel

**Action Pin Zone**—2.0 µm min. tin over 1.27 µm nickel

**Plating B**—Tin over 1.27 µm nickel

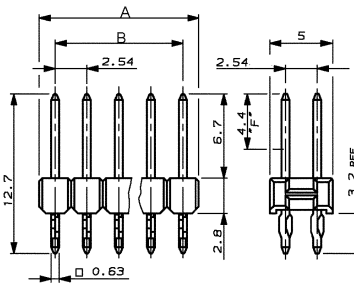
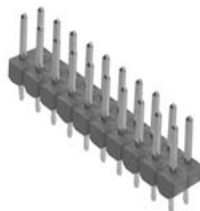
No. of Positions	Dimensions		Part Numbers	
	A	B	Plating A	Plating B
2	5.08	2.54	966575-2	966573-2
3	7.62	5.08	966575-3	966573-3
4	10.16	7.62	966575-4	966573-4
5	12.70	10.16	966575-5	966573-5
6	15.24	12.70	966575-6	966573-6
7	17.78	15.24	966575-7	966573-7
8	20.32	17.78	966575-8	966573-8
9	22.86	20.32	966575-9	966573-9
10	25.40	22.86	1-966575-0	1-966573-0
20	50.80	48.26	2-966575-0	2-966573-0
50	127.00	124.46	5-966575-0	5-966573-0

**Technical Documents:**

**Product Specification**  
108-18012

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Double Row 0.63mm Square Post**



**Material and Finish:**

**Housing**—Polyester, glass filled, green UL 94V-0 rated

**Posts**—Phosphor bronze, plated as follows:

**Plating A**

**Contact Zone (Area F)**—0.1 µm gold, over 0.7 µm palladium alloy, over 1.27 µm nickel

**Action Pin Zone**—2.0 µm min. tin over 1.27 µm nickel

**Plating B**—Tin over 1.27 µm nickel

No. of Positions	Dimensions		Part Numbers	
	A	B	Plating A	Plating B
2x2	5.08	2.54	966574-2	966572-2
2x3	7.62	5.08	966574-3	966572-3
2x4	10.16	7.62	966574-4	966572-4
2x5	12.70	10.16	966574-5	966572-5
2x6	15.24	12.70	966574-6	966572-6
2x7	17.78	15.24	966574-7	966572-7
2x8	20.32	17.78	966574-8	966572-8
2x9	22.86	20.32	966574-9	966572-9
2x10	25.40	22.86	1-966574-0	1-966572-0
2x20	50.80	48.26	2-966574-0	2-966572-0
2x50	127.00	124.46	5-966574-0	5-966572-0

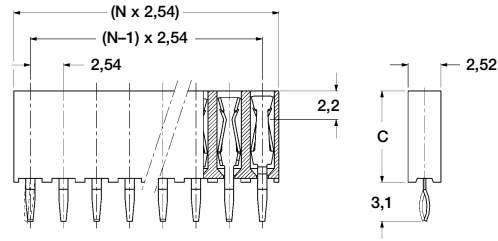
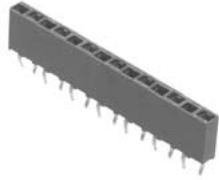
**Technical Documents:**

**Product Specification**  
108-18012

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**HV-100 Receptacles, Vertical PCB Mount, Top Entry**

**Single Row Kinked Legs with Retention Feature Anti-Tilt**



**Material and Finish:**

**Housing**—Polyester, glass filled, green UL 94V-0 rated

**Contact Material**—Phosphor bronze, plated as follows:

**Plating A**

**Contact Zone**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—2.5 µm tin over 1.3 µm nickel

**Plating B**—2.5 µm tin

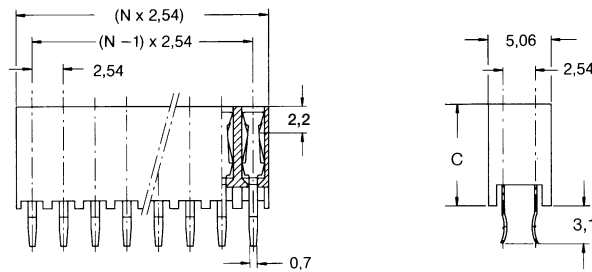
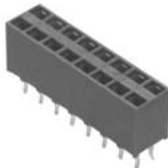
**Technical Documents:**

**Product Specification**  
108-19056

No. of Positions	C=6.2		C=7.0		C=8.5	
	Part Numbers	Part Numbers	Part Numbers	Part Numbers	Part Numbers	Part Numbers
2	829094-2	829411-2	215297-2	215298-2	215299-2	215300-2
3	829094-3	829411-3	215297-3	215298-3	215299-3	215300-3
4	829094-4	829411-4	215297-4	215298-4	215299-4	215300-4
5	829094-5	829411-5	215297-5	215298-5	215299-5	215300-5
6	829094-6	829411-6	215297-6	215298-6	215299-6	215300-6
7	829094-7	829411-7	215297-7	215298-7	215299-7	215300-7
8	829094-8	829411-8	215297-8	215298-8	215299-8	215300-8
9	829094-9	829411-9	215297-9	215298-9	215299-9	215300-9
10	1-829094-0	1-829411-0	1-215297-0	1-215298-0	1-215299-0	1-215300-0
20	2-829094-0	2-829411-0	2-215297-0	2-215298-0	2-215299-0	2-215300-0
36	3-829094-6	3-829411-6	3-215297-6	3-215298-6	3-215299-6	3-215300-6

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Double Row Kinked Legs with Retention Feature Anti-Tilt**



**Material and Finish:**

**Housing**—Polyester, glass filled, green UL 94V-0 rated

**Contact Material**—Phosphor bronze, plated as follows:

**Plating A**

**Contact Zone**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—2.5 µm tin over 1.3 µm nickel

**Plating B**—2.5 µm tin

**Technical Documents:**

**Product Specification**  
108-19056

No. of Positions	C=6.2		C=7.0		C=8.5	
	Part Numbers	Part Numbers	Part Numbers	Part Numbers	Part Numbers	Part Numbers
2x2	829095-2	829410-2	215307-2	215308-2	215309-2	215310-2
2x3	829095-3	829410-3	215307-3	215308-3	215309-3	215310-3
2x4	829095-4	829410-4	215307-4	215308-4	215309-4	215310-4
2x5	829095-5	829410-5	215307-5	215308-5	215309-5	215310-5
2x6	829095-6	829410-6	215307-6	215308-6	215309-6	215310-6
2x7	829095-7	829410-7	215307-7	215308-7	215309-7	215310-7
2x8	829095-8	829410-8	215307-8	215308-8	215309-8	215310-8
2x9	829095-9	829410-9	215307-9	215308-9	215309-9	215310-9
2x10	1-829095-0	1-829410-0	1-215307-0	1-215308-0	1-215309-0	1-215310-0
2x20	2-829095-0	2-829410-0	2-215307-0	2-215308-0	2-215309-0	2-215310-0
2x36	3-829095-6	3-829410-6	3-215307-6	3-215308-6	3-215309-6	3-215310-6

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

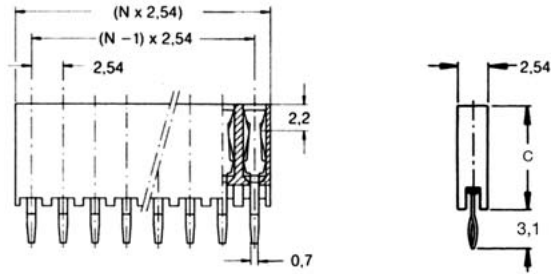
Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

**HV-100 Receptacles, Vertical PCB Mount, Sealed, Top Entry**

**Single Row Sealed, Kinked Legs with Retention Feature Anti-Tilt**



**Material and Finish:**

**Housing**—Polyester, glass filled, green UL 94V-0 rated

**Contact Material**—Phosphor bronze, plated as follows:

**Plating A**

**Contact Zone**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—2.5 µm tin over 1.3 µm nickel

**Plating B**—2.5 µm tin

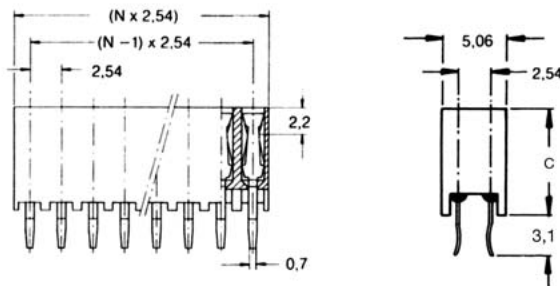
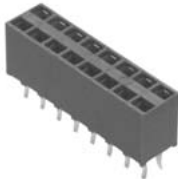
**Technical Documents:**

**Product Specification**  
108-19056

No. of Positions	C=7.0		C=8.5	
	Part Numbers	Part Numbers	Part Numbers	Part Numbers
2	215301-2	215302-2	215303-2	215304-2
3	215301-3	215302-3	215303-3	215304-3
4	215301-4	215302-4	215303-4	215304-4
5	215301-5	215302-5	215303-5	215304-5
6	215301-6	215302-6	215303-6	215304-6
7	215301-7	215302-7	215303-7	215304-7
8	215301-8	215302-8	215303-8	215304-8
9	215301-9	215302-9	215303-9	215304-9
10	1-215301-0	1-215302-0	1-215303-0	1-215304-0
20	2-215301-0	2-215302-0	2-215303-0	2-215304-0
36	3-215301-6	3-215302-6	3-215303-6	3-215304-6

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Double Row Sealed, Kinked Legs with Retention Feature Anti-Tilt**



**Material and Finish:**

**Housing**—Polyester, glass filled, green UL 94V-0 rated

**Contact Material**—Phosphor bronze, plated as follows:

**Plating A**

**Contact Zone**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—2.5 µm tin over 1.3 µm nickel

**Plating B**—2.5 µm tin

**Technical Documents:**

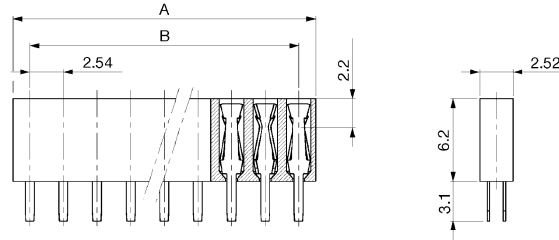
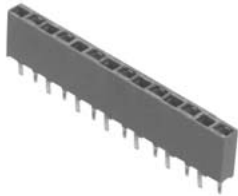
**Product Specification**  
108-19056

No. of Positions	C=7.0		C=8.5	
	Part Numbers	Part Numbers	Part Numbers	Part Numbers
2x2	215311-2	215312-2	215313-2	215314-2
2x3	215311-3	215312-3	215313-3	215314-3
2x4	215311-4	215312-4	215313-4	215314-4
2x5	215311-5	215312-5	215313-5	215314-5
2x6	215311-6	215312-6	215313-6	215314-6
2x7	215311-7	215312-7	215313-7	215314-7
2x8	215311-8	215312-8	215313-8	215314-8
2x9	215311-9	215312-9	215313-9	215314-9
2x10	1-215311-0	1-215312-0	1-215313-0	1-215314-0
2x20	2-215311-0	2-215312-0	2-215313-0	2-215314-0
2x36	3-215311-6	3-215312-6	3-215313-6	3-215314-6

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**HV-100 Receptacles, Vertical PCB Mount, Top or Bottom Entry**

**Single Row**



**Material and Finish:**

**Housing**—Polyester, glass filled, green UL 94V-0 rated

**Contact Material**—Phosphor bronze, plated as follows:

**Plating A**

**Contact Zone**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—2.5 µm tin over 1.3 µm nickel

**Plating B**—2.5 µm tin

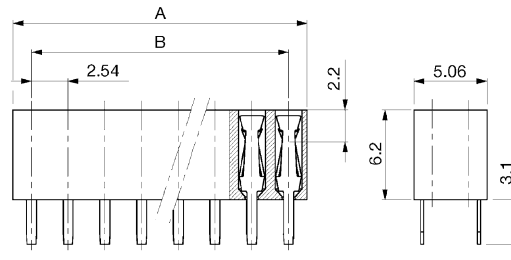
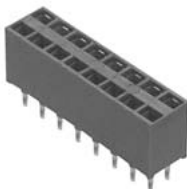
**Technical Documents:**

**Product Specification**  
108-19056

No. of Positions	Dimensions		Part Numbers	
	A	B	Plating A	Plating B
2	5.08	2.54	215305-2	215306-2
3	7.62	5.08	215305-3	215306-3
4	10.16	7.62	215305-4	215306-4
5	12.70	10.16	215305-5	215306-5
6	15.24	12.70	215305-6	215306-6
7	17.78	15.24	215305-7	215306-7
8	20.32	17.78	215305-8	215306-8
9	22.86	20.32	215305-9	215306-9
10	25.40	22.86	1-215305-0	1-215306-0
20	50.80	48.26	2-215305-0	2-215306-0
36	91.44	88.90	3-215305-6	3-215306-6

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Double Row**



**Material and Finish:**

**Housing**—Polyester, glass filled, green UL 94V-0 rated

**Contact Material**—Phosphor bronze, plated as follows:

**Plating A**

**Contact Zone**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—2.5 µm tin over 1.3 µm nickel

**Plating B**—2.5 µm tin

**Technical Documents:**

**Product Specification**  
108-19056

No. of Positions	Dimensions		Part Numbers	
	A	B	Plating A	Plating B
2x2	5.08	2.54	215315-2	215316-2
2x3	7.62	5.08	215315-3	215316-3
2x4	10.16	7.62	215315-4	215316-4
2x5	12.70	10.16	215315-5	215316-5
2x6	15.24	12.70	215315-6	215316-6
2x7	17.78	15.24	215315-7	215316-7
2x8	20.32	17.78	215315-8	215316-8
2x9	22.86	20.32	215315-9	215316-9
2x10	25.40	22.86	1-215315-0	1-215316-0
2x20	50.80	48.26	2-215315-0	2-215316-0
2x36	91.44	88.90	3-215315-6	3-215316-6

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

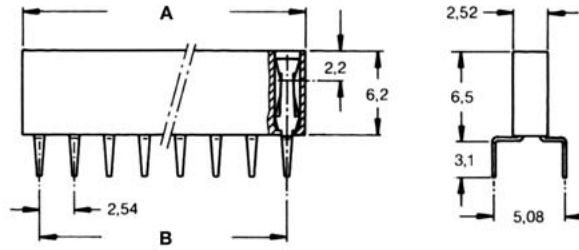
All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com



**HV-100 Receptacles, Vertical PCB Mount, Top or Bottom Entry**

**Single Row**



**Material and Finish:**

**Housing**—Polyester, glass filled, green UL 94V-0 rated

**Contact Material**—Phosphor bronze, plated as follows:

**Plating A**

**Contact Zone**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—2.5 µm tin over 1.3 µm nickel

**Plating B**—2.5 µm tin

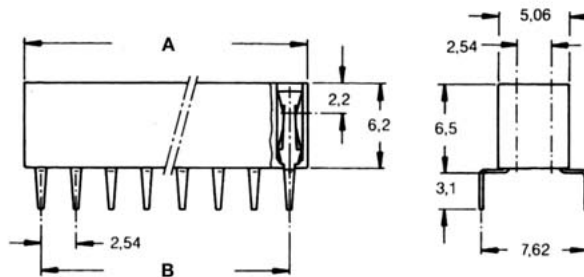
**Technical Documents:**

**Product Specification**  
108-19056

No. of Positions	Dimensions		Part Numbers	
	A	B	Plating A	Plating B
2	5.08	2.54	829265-2	829575-2
3	7.62	5.08	829265-3	829575-3
4	10.16	7.62	829265-4	829575-4
5	12.70	10.16	829265-5	829575-5
6	15.24	12.70	829265-6	829575-6
7	17.78	15.24	829265-7	829575-7
8	20.32	17.78	829265-8	829575-8
9	22.86	20.32	829265-9	829575-9
10	25.40	22.86	1-829265-0	1-829575-0
20	50.80	48.26	2-829265-0	2-829575-0
36	91.44	88.90	3-829265-6	3-829575-6

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Double Row**



**Material and Finish:**

**Housing**—Polyester, glass filled, green UL 94V-0 rated

**Contact Material**—Phosphor bronze, plated as follows:

**Plating A**

**Contact Zone**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—2.5 µm tin over 1.3 µm nickel

**Plating B**—2.5 µm tin

**Technical Documents:**

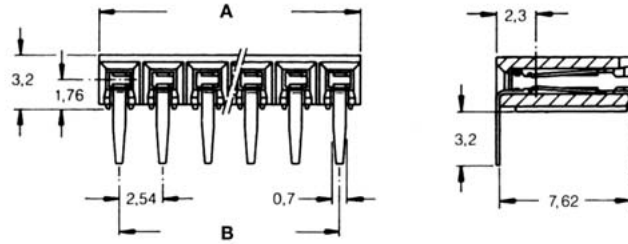
**Product Specification**  
108-19056

No. of Positions	Dimensions		Part Numbers	
	A	B	Plating A	Plating B
2x2	5.08	2.54	829264-2	829576-2
2x3	7.62	5.08	829264-3	829576-3
2x4	10.16	7.62	829264-4	829576-4
2x5	12.70	10.16	829264-5	829576-5
2x6	15.24	12.70	829264-6	829576-6
2x7	17.78	15.24	829264-7	829576-7
2x8	20.32	17.78	829264-8	829576-8
2x9	22.86	20.32	829264-9	829576-9
2x10	25.40	22.86	1-829264-0	1-829576-0
2x20	50.80	48.26	2-829264-0	2-829576-0
2x36	91.44	88.90	3-829264-6	3-829576-6

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**HV-190 Receptacles, Horizontal PCB Mount, Side Entry, End Stackable**

**Single Row**



**Material and Finish:**

**Housing**—Polyester, glass filled, green UL 94V-0 rated

**Contact Material**—Phosphor bronze, plated as follows:

**Plating A**

**Contact Zone**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—2.5 µm tin over 1.3 µm nickel

**Plating B**—2.5 µm tin

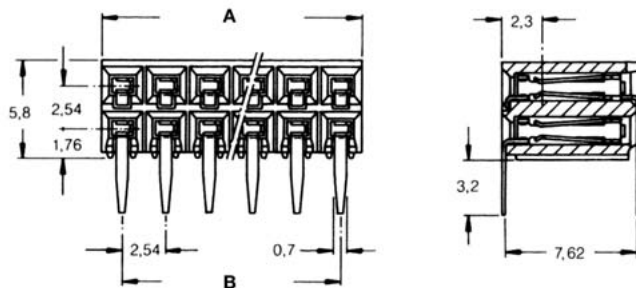
No. of Positions	Dimensions		Part Numbers	
	A	B	Plating A	Plating B
2	5.08	2.54	216602-2	216601-2
3	7.62	5.08	216602-3	216601-3
4	10.16	7.62	216602-4	216601-4
5	12.70	10.16	216602-5	216601-5
6	15.24	12.70	216602-6	216601-6
7	17.78	15.24	216602-7	216601-7
8	20.32	17.78	216602-8	216601-8
9	22.86	20.32	216602-9	216601-9
10	25.40	22.86	1-216602-0	1-216601-0
20	50.80	48.26	2-216602-0	2-216601-0
36	91.44	88.90	3-216602-6	3-216601-6

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Technical Documents:**

**Product Specification**  
108-19072

**Double Row**



**Material and Finish:**

**Housing**—Polyester, glass filled, green UL 94V-0 rated

**Contact Material**—Phosphor bronze, plated as follows:

**Plating A**

**Contact Zone**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—2.5 µm tin over 1.3 µm nickel

**Plating B**—2.5 µm tin

No. of Positions	Dimensions		Part Numbers	
	A	B	Plating A	Plating B
2x2	5.08	2.54	216604-2	216603-2
2x3	7.62	5.08	216604-3	216603-3
2x4	10.16	7.62	216604-4	216603-4
2x5	12.70	10.16	216604-5	216603-5
2x6	15.24	12.70	216604-6	216603-6
2x7	17.78	15.24	216604-7	216603-7
2x8	20.32	17.78	216604-8	216603-8
2x9	22.86	20.32	216604-9	216603-9
2x10	25.40	22.86	1-216604-0	1-216603-0
2x20	50.80	48.26	2-216604-0	2-216603-0
2x36	91.44	88.90	3-216604-6	3-216603-6

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Technical Documents:**

**Product Specification**  
108-19072

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

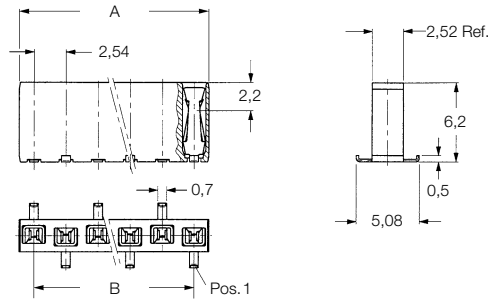
Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

**HV-100 Surface Mount Receptacles, Vertical PCB Mount, Top or Bottom Entry, End Stackable**

**Single Row**



**Material and Finish:**

**Housing and pick & place adapter**—Liquid Crystal Polymer (LCP), black, UL 94V-0 rated

**Contact Material**—Phosphor bronze, plated as follows:

**Plating A**

**Contact Zone**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—2.5 µm tin over 1.3 µm nickel

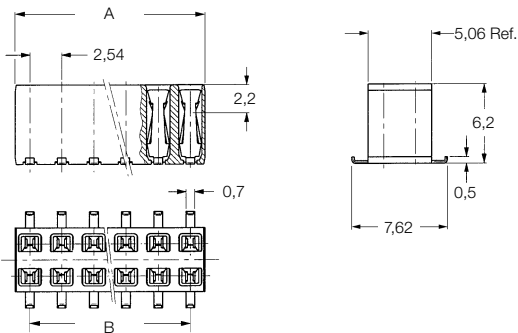
**Plating B**—2.5 µm tin

No. of Positions	Dimensions		Part Numbers Blister Packaging	
	A	B	Plating A	Plating B
3	7.62	5.08	1241152-3	1355344-3
4	10.16	7.62	1241152-4	1355344-4
5	12.70	10.16	1241152-5	1355344-5
6	15.24	12.70	1241152-6	1355344-6
7	17.78	15.24	1241152-7	1355344-7
8	20.32	17.78	1241152-8	1355344-8
9	22.86	20.32	1241152-9	1355344-9
10	25.40	22.86	1-1241152-0	1-1355344-0
11	27.94	25.40	1-1241152-1	1-1355344-1
12	30.48	27.94	1-1241152-2	1-1355344-2

**Technical Documents:**

**Product Specification**  
108-19056

**Double Row**



**Material and Finish:**

**Housing and pick & place adapter**—Liquid Crystal Polymer (LCP), black, UL 94V-0 rated

**Contact Material**—Phosphor bronze, plated as follows:

**Plating A**

**Contact Zone**—0.8 µm gold over 1.3 µm nickel

**Soldering Zone**—2.5 µm tin over 1.3 µm nickel

**Plating B**—2.5 µm tin

No. of Positions	Dimensions		Part Numbers Blister Packaging	
	A	B	Plating A	Plating B
2x2	5.08	2.54	969973-2	1355347-2
2x3	7.62	5.08	969973-3	1355347-3
2x4	10.16	7.62	969973-4	1355347-4
2x5	12.70	10.16	969973-5	1355347-5
2x6	15.24	12.70	969973-6	1355347-6
2x7	17.78	15.24	969973-7	1355347-7
2x8	20.32	17.78	969973-8	1355347-8
2x9	22.86	20.32	969973-9	1355347-9
2x10	25.40	22.86	1-969973-0	1-1355347-0
2x20	50.80	48.26	2-969973-0	2-1355347-0

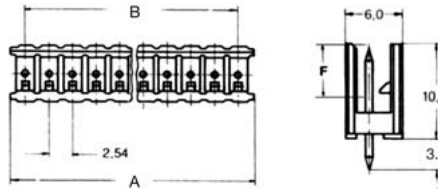
**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Technical Documents:**

**Product Specification**  
108-19056

**MOD II Surface Mount Compatible Headers, Shrouded, Straight**

**Single Row 0.63mm Round Post**



**Material and Finish:**

**Housing**—Polyester for high operating temp. (PCT), black, glass fibre filled

**Posts**—Phosphor bronze, (Plating A) or brass (Plating B) plated as follows:

**Plating A**

**Contact Zone (Area F)**—0.1 µm gold over 0.7 µm palladium alloy, over 1.3 µm nickel

**Soldering Zone**—2.0 µm min. tin over 1.3 µm nickel

**Plating B**—2.0 µm min. tin over 1.3 µm nickel

No. of Positions	Dimensions		F=4.4 Part Numbers	
	A	B	Plating A	Plating B
3	7.62	5.08	826467-3	827295-3
4	10.16	7.62	826467-4	827295-4
5	12.70	10.16	826467-5	827295-5
6	15.24	12.70	826467-6	827295-6
7	17.78	15.24	826467-7	827295-7
8	20.32	17.78	826467-8	827295-8
9	22.86	20.32	826467-9	827295-9
10	25.40	22.86	1-826467-0	1-827295-0
20	50.80	48.26	2-826467-0	2-827295-0
50	127.00	124.46	5-826467-0	5-827295-0

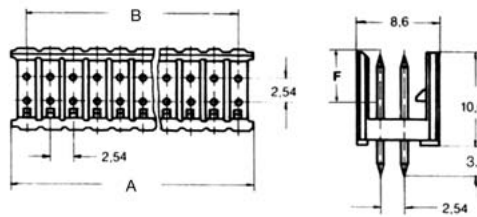
**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Technical Documents:**

**Product Specification**  
108-18012

**Mateable Connectors**  
MOD IV Receptacles 926475

**Double Row 0.63mm Round Post**



**Material and Finish:**

**Housing**—Polyester for high operating temp. (PCT), black, glass fibre filled

**Posts**—Phosphor bronze, (Plating A) or brass (Plating B) plated as follows:

**Plating A**

**Contact Zone (Area F)**—0.1 µm gold over 0.7 µm palladium alloy, over 1.3 µm nickel

**Soldering Zone**—2.0 µm min. tin over 1.3 µm nickel

**Plating B**—2.0 µm min. tin over 1.3 µm nickel

No. of Positions	Dimensions		F=4.4 Part Numbers	
	A	B	Plating A	Plating B
2x3	7.62	5.08	826469-3	827297-3
2x4	10.16	7.62	826469-4	827297-4
2x5	12.70	10.16	826469-5	827297-5
2x6	15.24	12.70	826469-6	827297-6
2x7	17.78	15.24	826469-7	827297-7
2x8	20.32	17.78	826469-8	827297-8
2x9	22.86	20.32	826469-9	827297-9
2x10	25.40	22.86	1-826469-0	1-827297-0
2x20	50.80	48.26	2-826469-0	2-827297-0
2x50	127.00	124.46	5-826469-0	5-827297-0

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Technical Documents:**

**Product Specification**  
108-18012

**Mateable Connectors**  
MOD IV Receptacles 926476

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

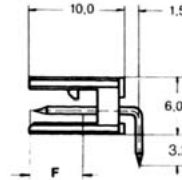
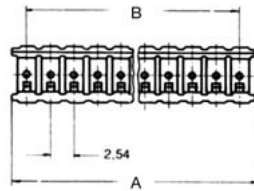
Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

**MOD II Surface Mount Compatible Headers, Shrouded, Right Angle**

**Single Row 0.63mm Round Post**



**Material and Finish:**

**Housing**—Polyester for high operating temp. (PCT), black, glass fibre filled

**Posts**—Phosphor bronze, (Plating A) or brass (Plating B) plated as follows:

**Plating A**

**Contact Zone (Area F)**—0.1 µm gold over 0.7 µm palladium alloy, over 1.3 µm nickel

**Soldering Zone**—2.0 µm min. tin over 1.3 µm nickel

**Plating B**—2.0 µm min. tin over 1.3 µm nickel

**Technical Documents:**

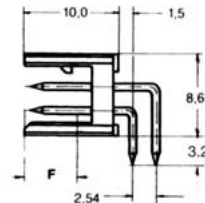
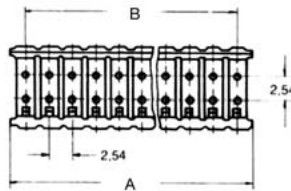
**Product Specification**  
108-18012

**Mateable Connectors**  
MOD IV Receptacles 926475

No. of Positions	Dimensions		F=4.4 Part Numbers	
	A	B	Plating A	Plating B
3	7.62	5.08	826468-3	827296-3
4	10.16	7.62	826468-4	827296-4
5	12.70	10.16	826468-5	827296-5
6	15.24	12.70	826468-6	827296-6
7	17.78	15.24	826468-7	827296-7
8	20.32	17.78	826468-8	827296-8
9	22.86	20.32	826468-9	827296-9
10	25.40	22.86	1-826468-0	1-827296-0
20	50.80	48.26	2-826468-0	2-827296-0
50	127.00	124.46	5-826468-0	5-827296-0

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Double Row 0.63mm Round Post**



**Material and Finish:**

**Housing**—Polyester for high operating temp. (PCT), black, glass fibre filled

**Posts**—Phosphor bronze, (Plating A) or brass (Plating B) plated as follows:

**Plating A**

**Contact Zone (Area F)**—0.1 µm gold over 0.7 µm palladium alloy, over 1.3 µm nickel

**Soldering Zone**—2.0 µm min. tin over 1.3 µm nickel

**Plating B**—2.0 µm min. tin over 1.3 µm nickel

**Technical Documents:**

**Product Specification**  
108-18012

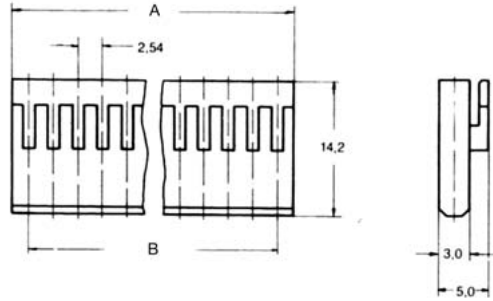
**Mateable Connectors**  
MOD IV Receptacles 926476

No. of Positions	Dimensions		F=4.4 Part Numbers	
	A	B	Plating A	Plating B
2x3	7.62	5.08	826470-3	827298-3
2x4	10.16	7.62	826470-4	827298-4
2x5	12.70	10.16	826470-5	827298-5
2x6	15.24	12.70	826470-6	827298-6
2x7	17.78	15.24	826470-7	827298-7
2x8	20.32	17.78	826470-8	827298-8
2x9	22.86	20.32	826470-9	827298-9
2x10	25.40	22.86	1-826470-0	1-827298-0
2x20	50.80	48.26	2-826470-0	2-827298-0
2x50	127.00	124.46	5-826470-0	5-827298-0

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**MOD IV Receptacle Housings**

**Single Row**



**Material and Finish:**

**Housing**—Polyester (PBT)  
black, glass fibre filled

**Technical Documents:**

**Product Specification**

108-25007  
108-25020  
108-25021

**Application Specification**

114-25003

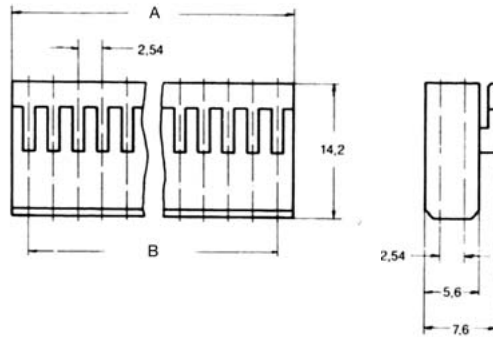
**Mateable Connectors**

MOD II Headers 827295  
MOD II Headers 827296  
MOD II Headers 826467  
MOD II Headers 826468

No. of Positions	Dimensions		Part Numbers
	A	B	
3	7.62	5.08	926475-3
4	10.16	7.62	926475-4
5	12.70	10.16	926475-5
6	15.24	12.70	926475-6
7	17.78	15.24	926475-7
8	20.32	17.78	926475-8
9	22.86	20.32	926475-9
10	25.40	22.86	1-926475-0
20	50.80	48.26	2-926475-0
36	91.44	88.90	3-926475-6

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Double Row**



**Material and Finish:**

**Housing**—Polyester (PBT)  
black, glass fibre filled

**Technical Documents:**

**Product Specification**

108-25007  
108-25020  
108-25021

**Application Specification**

114-25003

**Mateable Connectors**

MOD II Headers 827297  
MOD II Headers 827298  
MOD II Headers 826469  
MOD II Headers 826470

No. of Positions	Dimensions		Part Numbers
	A	B	
2x2	5.08	2.54	926476-2
2x3	7.62	5.08	926476-3
2x4	10.16	7.62	926476-4
2x5	12.70	10.16	926476-5
2x6	15.24	12.70	926476-6
2x7	17.78	15.24	926476-7
2x8	20.32	17.78	926476-8
2x9	22.86	20.32	926476-9
2x10	25.40	22.86	1-926476-0
2x20	50.80	48.26	2-926476-0
2x36	91.44	88.90	3-926476-6

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

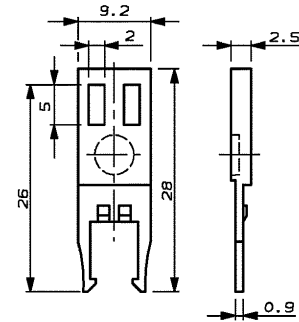
www.tycoelectronics.com

**MOD IV Accessories for Receptacle Housings 926475 and 926476**

**Retention Plug with Strain Relief**

**Material and Finish:**  
Polycarbonate, glass fibre filled

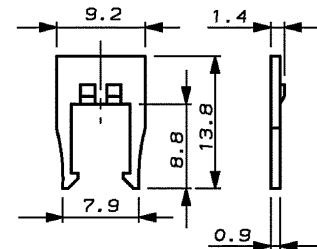
Part Numbers	Colour
926478-1	Black
926478-2	Green
926478-3	Red



**Retention Plug**

**Material:**  
Polycarbonate, glass fibre filled

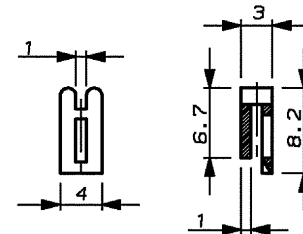
Part Numbers	Colour
926477-1	Black
926477-2	Green
926477-3	Red



**Keying Plug**

**Material:**  
Polyamide 6.6 glass fibre filled

Part Numbers	Colour
926498-1	Black
926498-2	Green
926498-3	Red

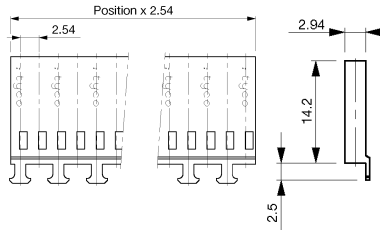


**MOD IV Receptacle Housings**

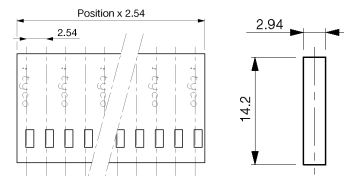
**Single Row (with and without Strain Relief)**



**with Strain Relief**



**without Strain Relief**



**Material and Finish:**

Green polyamide, 6.6 UL 94V-HB rated

**Keying Plugs:**

926519-2, Green  
1-926519-2, Red

**Technical Documents:**

**Product Specification**

108-25007  
108-25020  
108-25021

**Application Specification**

114-25003

**Mateable Connectors**

MOD II Economy LIne Breakaway  
Pin Headers

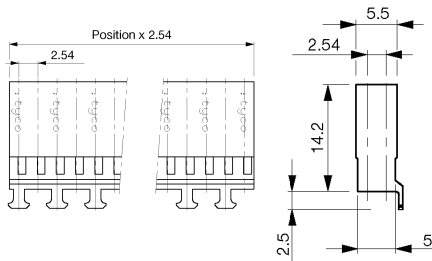
No. of Positions	Part Numbers	
	With Strain Relief	Without Strain Relief
2	925369-2	925366-2
3	925369-3	925366-3
4	925369-4	925366-4
5	925369-5	925366-5
6	925369-6	925366-6
7	925369-7	925366-7
8	925369-8	925366-8
9	925369-9	925366-9
10	1-925369-0	1-925366-0
20	2-925369-0	2-925366-0
50	5-925369-0	5-925366-0

**Ordering Information:** For intermediate number of positions, please combine dash numbers

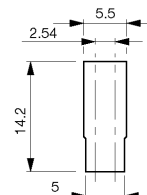
**Double Row (with and without Strain Relief)**



**with Strain Relief**



**without Strain Relief**



**Material and Finish:**

Green polyamide, 6.6 UL 94V-HB rated

**Keying Plugs:**

926519-2, Green  
1-926519-2, Red

**Technical Documents:**

**Product Specification**

108-25007  
108-25020  
108-25021

**Application Specification**

114-25003

**Mateable Connectors**

MOD II Economy LIne Breakaway  
Pin Headers

No. of Positions	Part Numbers	
	With Strain Relief	Without Strain Relief
2x2	925370-2	925367-2
2x3	925370-3	925367-3
2x4	925370-4	925367-4
2x5	925370-5	925367-5
2x6	925370-6	925367-6
2x7	925370-7	925367-7
2x8	925370-8	925367-8
2x9	925370-9	925367-9
2x10	1-925370-0	1-925367-0
2x20	2-925370-0	2-925367-0
2x50	5-925370-0	5-925367-0

**Ordering Information:** For intermediate number of positions, please combine dash numbers

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com



**MOD IV/V Crimp Snap-In Receptacle Contacts, with Insulation Support, for use with MOD IV Receptacle Housings**

**Material and Finish:**

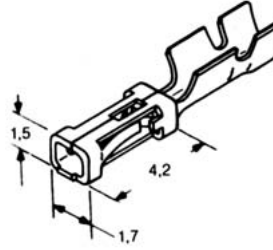
**Body**—Phosphor bronze, plated as follows:

**Plating A**—Selectively plated 0.8 µm gold on contact area, gold flash on crimp area, with entire contact underplated 1.3 µm nickel

**Plating B**—Selectively plated 0.8 µm gold on contact area, with gold flash over 1.3 µm nickel on entire contact

**Plating C**—Selectively plated 0.8 µm gold on contact area, tin plated on crimp area, with entire contact underplated 1.3 µm nickel

**Plating D**—Plated 2 µm tin



**Related Product Data:**

**Application Tooling**

Hand Tool: 169481-1  
Extraction Tool: 166645-1

**Product Specification**

108-25020  
MOD IV Standard Contact Pressure

108-25021  
MOD IV Intermediate Contact Pressure

108-25007  
MOD V High Contact Pressure

**Application Specification**  
114-25003

**MOD IV Receptacle Contacts with Standard Contact Pressure**

Wire Size Range mm <sup>2</sup>	AWG	Insulation Dia. (Max) mm	Version	Part Numbers	
				Plating B	Plating A
0.032-0.09	32-28	1.2	Reel	167020-2	167020-1
			Loose Piece	167023-2	167023-1
0.2-0.56	24-20	1.4	Reel	167300-6	167300-8
			Loose Piece	141603-3	141603-4

\* Consult Tyco Electronics for this wire size range

**MOD IV Receptacle Contacts with Intermediate Contact Pressure**

Wire Size Range mm <sup>2</sup>	AWG	Insulation Dia. (Max) mm	Version	Part Numbers		
				Plating B	Plating A	Plating D
0.032-0.09	32-28	1.2	Reel	167021-2	167021-1	167021-3
			Loose Piece	167024-2	167024-1	167024-3
0.2-0.56	24-20	1.4	Reel	167301-4	2-167301-4	2-167301-2
			Loose Piece	141708-1	1-141708-2	1-141708-1

\* Consult Tyco Electronics for this wire size range

**Strip Contacts:**

**HD-I Applicator**

To help you to establish the correct PN for your application (options), please visit the Applicator page on our Tooling website (address below) and enter your Terminal PN in the search function. Or alternatively call your local contact for personal assistance

**MOD V Receptacle Contacts with High Contact Pressure**

Wire Size Range mm <sup>2</sup>	AWG	Insulation Dia. (Max) mm	Version	Part Numbers		
				Plating B	Plating C	Plating D
0.032-0.09	32-28	1.2	Reel	167022-2	167022-1	167022-3
			Loose Piece	167025-2	167025-1	167025-3
0.2-0.56	24-20	1.4	Reel	166309-2	-	166309-3
			Loose Piece	166310-2	-	166310-3

\* Consult Tyco Electronics for this wire size range



(Images are representative only.)

**To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)**

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

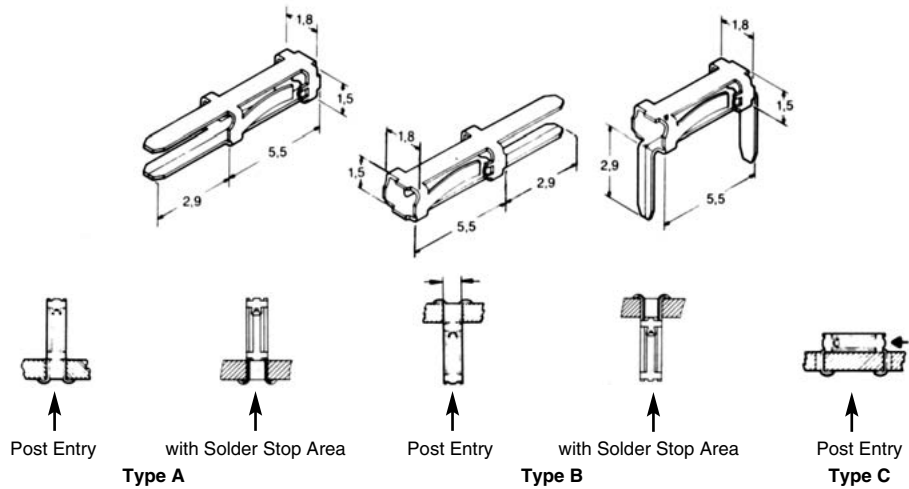
Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

[www.tycoelectronics.com](http://www.tycoelectronics.com)

**MOD II PCB Mount Receptacle Contacts**



**Material and Finish:**

Phosphor Bronze

**Technical Documents:**

**Application Specification**  
114-25004

Part Numbers							Finish (Contact Zone)
Type A		Type B		Type C			
On Reel	Loose Piece	On Reel	Loose Piece	On Reel	Loose Piece		
85861-3	—	—	—	5-85863-3	5-85866-3	Galvanised tin plated	
167651-1	—	167652-1	—	—	—	Tin plated with Solder Stop Area	
85861-4	—	—	85865-4	5-85863-4	5-85866-4	0.8µm Au over 1.3µm Ni	
141577-2	141577-4	141578-2	141578-4	141579-2	141579-4	Duplex 0.8µm Au over 1.3µm Ni*	

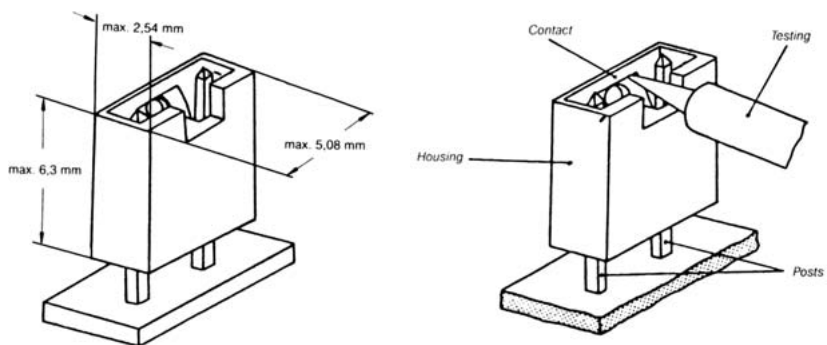
\* In the duplex gold plated version, the rest of the receptacle is nickel plated, the solder tabs are tin plated

**Keying Plug**  
Part Number 86286-1



**MOD IV Shunt Connector**

**Shunt Connectors**



**Material and Finish:**

**Housing**—Thermoplastic Polyester  
UL 94V-0 rated colour as below

**Contact Material**—Beryllium Copper

**Plating A (green)**—0.4 µm gold over 1.3 µm nickel

**Plating B (green)**—1 µm gold over 1.3 µm nickel

**Plating C (black)**—2.5 µm tin

	Part Numbers		
	Plating A	Plating B	Plating C
Strip Form	142270-1	142270-5	142270-3
Loose Piece	827914-1	—	827914-3

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

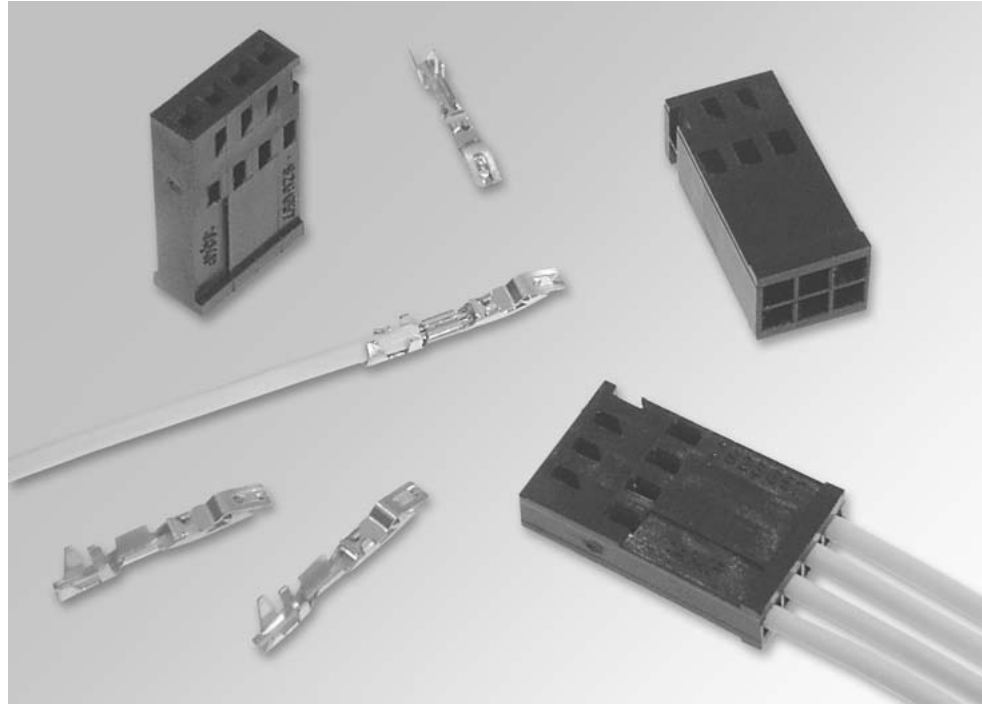
Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

**Product Facts**

- Self retaining contact system
- Rapid installation
- Connection to 0.63 x 0.63 or 0.79 x 1.57mm posts
- Flame retardant Thermoplastic housings are UL 94V-0 rated
- Tin or gold plated contacts



**Performance Specifications:**

- Contact Current Rating—**  
3 A (0.63 x 0.63mm posts)  
5 A (0.79 x 1.57mm posts)
- Operating temperature—**  
-65 to +105°C (gold plating)  
-65 to +85°C (tin plating)

- Contact Resistance—**  
12mΩ max (gold plating)  
16mΩ max (tin plating)

- Insulation Resistance—**  
5000 MΩ min

Locking clip connectors provide reliable and secure low cost connection for a variety of applications. Designed to mate with 0.63mm x 0.63mm or 0.79mm x 1.57mm header posts, these connectors provide permanent connection integrity with quick connect/disconnect flexibility. Their self-retaining contacts allow rapid installation without the need for additional fastening to hold contacts and/or connector housings in place. When installed, locking clip connectors are positively locked and cannot be detached directly on the housing, deflecting the contact springs within the connector and releasing the posts. For non-housed individual contacts, disconnection is achieved through the use of an inexpensive extraction tool.

**AMPMODU Locking Clip Receptacle Housings**

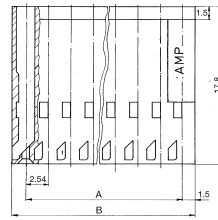
Available in single and double row variants, housings accept the range of locking clip contacts for secure connection of multiple circuits. Stackable open ended housings permit a number of connectors to be placed side by side without loss of pitch.

**AMPMODU Locking Clip Receptacle Contacts**

Suitable for installation into AMPMODU Locking Clip housings or for individual wire connection, contacts are offered for wire size ranges 20-30AWG (0.05mm<sup>2</sup> to 0.56mm<sup>2</sup>) and with a choice of gold or tin plating. Contact springs provide lasting high contact to post retention and are available in both loose piece, and reeled format for efficient volume production.

**Locking Clip Receptacle Housings** (For use with 0.63mm Square Posts)

**Single Row**



**Material and Finish:**  
**Housing**—Thermoplastic Polyester  
GV, Black, UL 94V-0 Rated

**Related Product Data:**  
**Product Specification**  
108-36028 & 108-36028-1

**Application Specification**  
114-25006

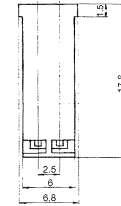
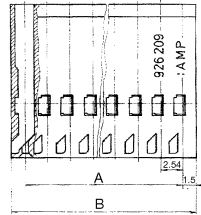
**Both Ends Closed Housings**

Number of Cavities	Dimensions (mm)		Part Numbers
	B	A	
1	2.9	—	926010-1
2	5.5	2.54	926657-2
3	8.1	5.08	926657-3
4	10.6	7.62	926657-4
5	13.2	10.16	926657-5
6	15.7	12.70	926657-6
7	18.3	15.24	926657-7
8	20.8	17.78	926657-8
9	23.3	20.32	926657-9
10	25.9	22.86	1-926657-0
11	28.4	25.40	1-926657-1
12	30.9	27.94	1-926657-2
13	33.5	30.48	1-926657-3
14	36.0	33.02	1-926657-4
15	38.6	35.56	1-926657-5

**Stackable Side Open Housings**

Number of Cavities	Dimension (mm)		Part Numbers
	A		
—	—		—
2	2.54		5-926657-2
3	5.08		5-926657-3
4	7.62		5-926657-4
5	10.16		5-926657-5
6	12.70		5-926657-6
7	15.24		5-926657-7
8	17.78		5-926657-8
9	20.32		5-926657-9
10	22.86		6-926657-0
11	25.40		6-926657-1
12	27.94		6-926657-2
13	30.48		6-926657-3
14	33.02		6-926657-4
15	35.56		6-926657-5

**Double Row**



**Material and Finish:**  
**Housing**—Thermoplastic Polyester  
GV, Black, UL 94V-0 Rated

**Related Product Data:**  
**Product Specification**  
108-36028 & 108-36028-1

**Application Specification**  
114-25006

**Both Ends Closed Housings**

Number of Cavities	Dimensions (mm)		Part Numbers
	B	A	
2x2	5.5	2.54	926209-2
2x3	8.1	5.08	926209-3
2x4	10.6	7.62	926209-4
2x5	13.2	10.16	926209-5
2x6	15.7	12.70	926209-6
2x7	18.3	15.24	926209-7
2x8	20.8	17.78	926209-8
2x9	23.3	20.32	926209-9
2x10	25.9	22.86	1-926209-0
2x11	28.4	25.40	1-926209-1
2x12	30.9	27.94	1-926209-2
2x13	33.5	30.48	1-926209-3
2x14	36.0	33.02	1-926209-4
2x15	38.6	35.56	1-926209-5

**Stackable Side Open Housings**

Number of Cavities	Dimension (mm)		Part Numbers
	A		
2x2	2.54		5-926209-2
2x3	5.08		5-926209-3
2x4	7.62		5-926209-4
2x5	10.16		5-926209-5
2x6	12.70		5-926209-6
2x7	15.24		5-926209-7
2x8	17.78		5-926209-8
2x9	20.32		5-926209-9
2x10	22.86		6-926209-0
2x11	25.40		6-926209-1
2x12	27.94		6-926209-2
2x13	30.48		6-926209-3
2x14	33.02		6-926209-4
2x15	35.56		6-926209-5

**Keying Plug**  
**Part Number 926329-1**



**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

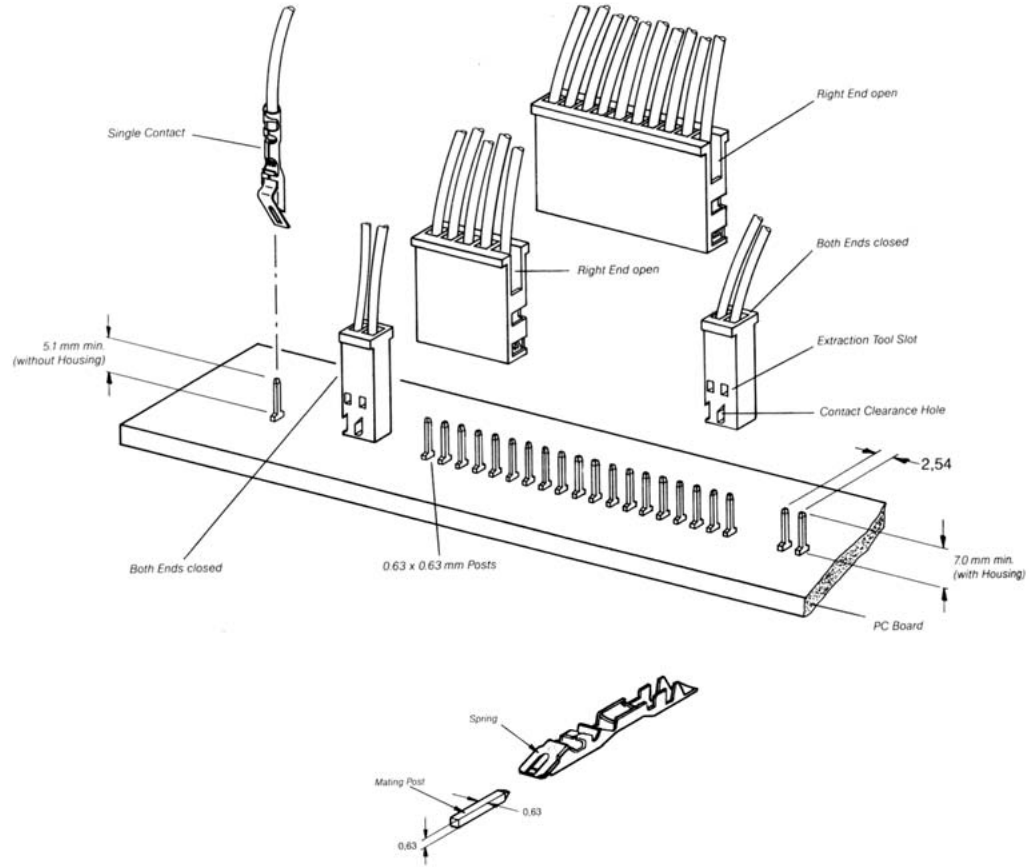
Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

**Locking Clip Receptacle Contacts (For use with 0.63mm Square Posts)**



**Material and Finish:**

**Contact Spring**—Stainless Steel  
**Contact Material**—Phosphor Bronze  
**Plating A**—Selectively plated 0.8 µm gold on contact area, with gold flash over 1.3 µm nickel on entire contact  
**Plating B**—2.5 µm tin over 1.3 µm nickel on entire contact

AWG	Strip Form	Loose Piece	Hand Tool	
			commercial*	premium
30-28	87190-1	87191-1		
	5-87190-2	5-87191-2		90295-1
26-22	87124-1	87165-1	656075-1	91533-1
	5-87124-2	5-87165-2		
20	867052-2	-		
	5-867052-1	-		

\* SDE die-set (options)

**Related Product Data:**

**Product Specification**  
108-36028 & 108-36028-1

**Application Specification**  
114-25006



**Extraction Tool  
Part No. 91084-1**

**To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)**

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

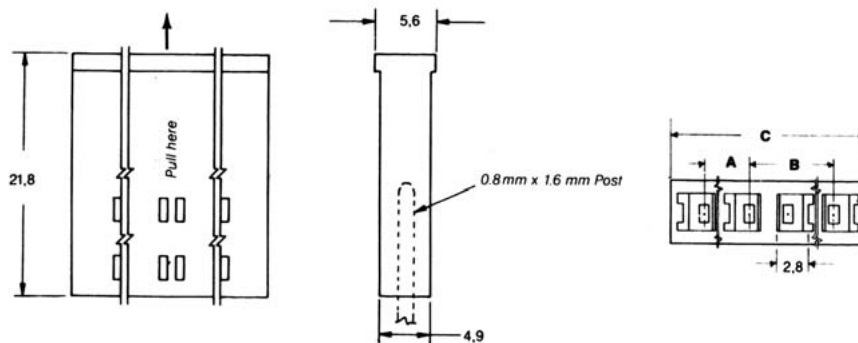
Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

[www.tycoelectronics.com](http://www.tycoelectronics.com)

**Locking Clip Receptacle Housings** (For use with 0.79mm x 1.57mm Square Posts)

**Single Row**



**Material and Finish:**

**Housing Material**—Polyamide GV, Black, UL 94V-0 Rated

**Related Product Data:**

**Product Specification**  
108-36029

**Application Specification**

114-25008

No. of Positions	Dimensions			Part Numbers
	A	B	C	
1	—	—	5.08	87270-1
2	—	—	9.55	87270-2
3	3.96	3.96	13.51	1-87270-3
4	3.96	7.92	17.48	87270-4
5	7.92	7.92	21.44	1-87270-4
6	7.92	11.90	25.40	87270-5
7	11.90	11.90	29.36	1-87270-5
8	11.90	15.84	33.32	87270-6
9	15.84	15.84	37.28	1-87270-6
10	15.84	19.81	41.24	87270-7

**Material and Finish:**

**Contact Spring**—Stainless Steel

**Contact Material**—Phosphor Bronze

**Plating A**—Selectively plated 0.4 µm gold on contact area, with gold flash over 1.3 µm nickel on entire contact

**Plating B**—2.5 µm tin over 1.3 µm nickel on entire contact

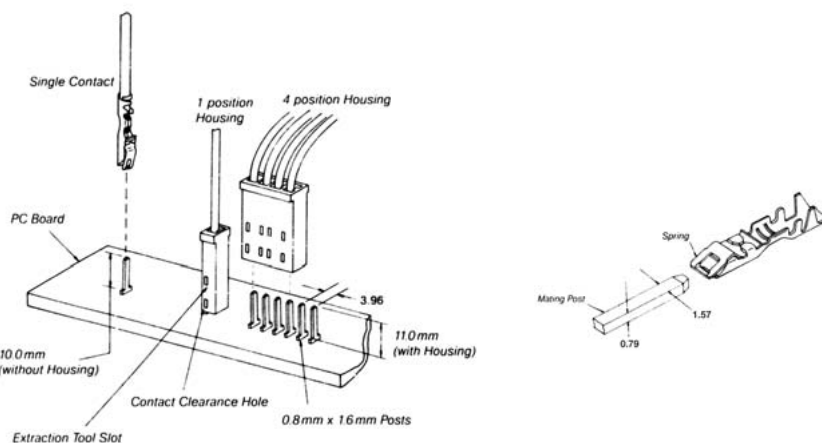
**Related Product Data:**

**Product Specification**  
108-36029

**Application Specification**

114-25008

**Locking Clip Receptacle Contacts** (For use with 0.79mm x 1.57mm Square Posts)



**Strip Contacts:**

**Applicator**

To help you to establish the correct PN for your application (options), please call your local contact for personal assistance.

Wire Size Range		Insulation Diameter mm	Finish	Part Numbers		Hand Tool
AWG	mm <sup>2</sup>			On Reel	Loose Piece	
22-18	0.3-0.9	1.3-2.5	Plating A	87269-2	87278-2	90308-1
			Plating B	5-87269-1	5-87278-1	



**Extraction Tool**  
Part No. 91104-1

To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

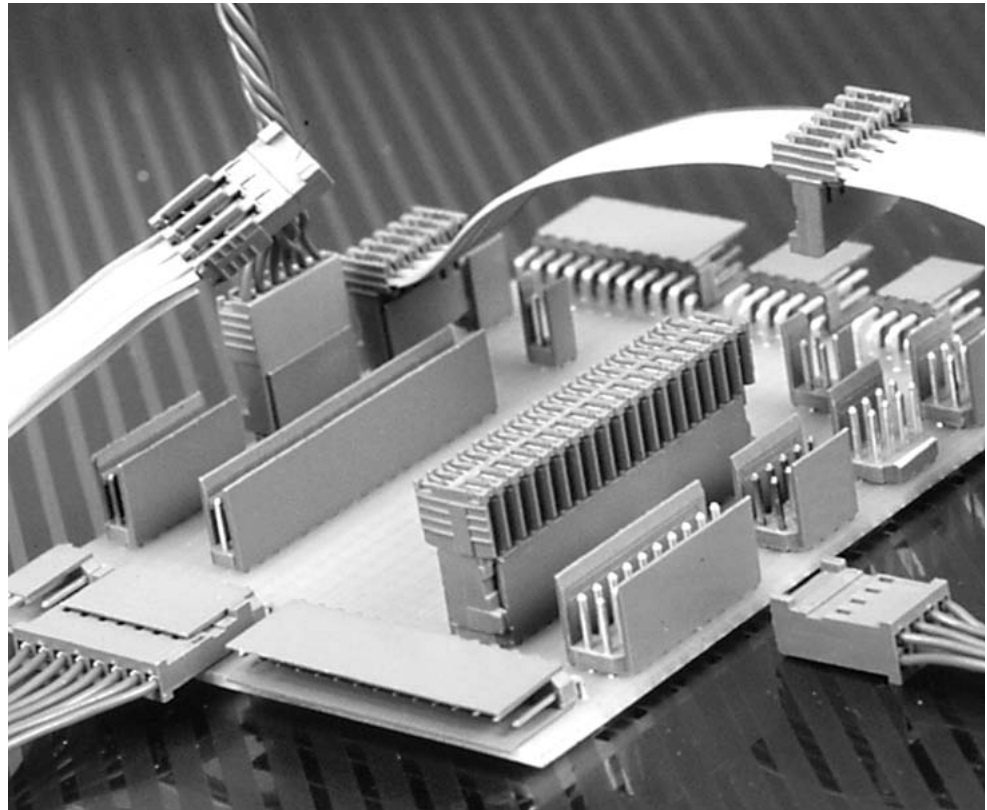
Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

[www.tycoelectronics.com](http://www.tycoelectronics.com)

**Product Facts**

- Receptacle assemblies preloaded with Insulation Displacement Contacts (IDC) to terminate discrete wires or 2.54 mm centerline ribbon cables
- Receptacle housings receive crimp snap-in contacts to terminate discrete wires (straight exit)
- Headers provided for straight or right-angle mounting to be soldered onto 1.6 mm thick printed circuit boards
- Protective shrouds feature an integrated detent latching device
- Compliant to the CEI IEC 603-8 International Standard



**Performance Specifications:**

**Electrical**

**Contact Current Rating**—  
3 A max at 20°C

**Contact Termination Resistance**—  
20 mΩ max (HE 13)  
30 mΩ max (HE 14)

**Dielectric Withstanding Voltage**—  
1000 V rms (HE 13)  
500 V rms (HE 14)

**Insulation Resistance**—  
5,000 megaohms (HE 13)  
1,000 megaohms (HE 14)

**Environmental**

**Operating Temperature**—  
-55°C to +125°C (HE13)  
-40°C to +100°C (HE14)

**Mechanical**

**Durability**—  
400 cycles (HE 13)  
30 cycles (HE 14)

**Insertion/Withdrawal Force**—  
1.5 N max per contact + latching force (HE 13)  
3 N max per contact + latching force (HE 14)

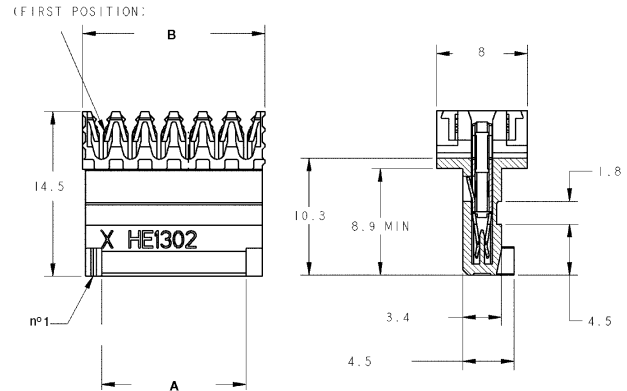
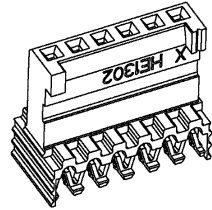
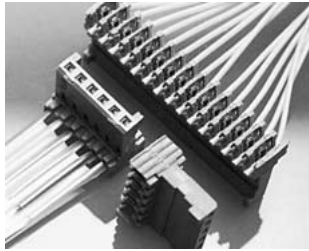
A multi-contact connector range designed to reliably meet today's interconnection requirements for signal transmission in a variety of computer, telecommunications and industrial applications.

Complying fully with the CEI IEC 603-8 international standard, this wire-to-board interconnection system is composed of IDC receptacle assemblies for discrete wires or ribbon cable, receptacle housings for crimp snap-in receptacle contacts and 2.54mm pitch vertical or right-angle shrouded and polarised board-mount headers.

All products are available with a choice of gold (HE13) or tin (HE14) plating finishes.

**IDC Receptacle Assembly, Right-Angle**

**Single Row**



**Material and Finish:**

**Housing**—Blue flame retardant glass filled polyester, UL 94V-0 rated

**IDC Contact**—Phosphor bronze, plated as follows:

**HE13**—Selectively plated 0.4 µm gold on contact area, 0.8 µm tin min on termination area with entire contact underplated 1.3 µm nickel

**HE14**—Plated 1µm min. tin

**Technical Documents:**

**Product Specification**  
108-15053

**Application Specification:**  
114-15030

Pistol Grip Hand Tool, complete  
PN 734041-1

Hand Tool Head  
PN 734040 -1

Pistol Grip  
PN 169756-1

Pistol Grip Hand Tool, complete  
PN 945419-1

Insertion Die 944872-1  
to use with Manual Press 91085-2

Pneumatic Bench Press  
PN 948900-2

**HE13**

No. of Positions	Dimensions A B		Part Numbers			
			26 AWG		24 AWG	
			Tube	Loose Piece	Tube	Loose Piece
2	2.54	5.88	281712-2	144274-2	281709-2	144273-2
3	5.08	8.42	281712-3	144274-3	281709-3	144273-3
4	7.62	10.96	281712-4	144274-4	281709-4	144273-4
5	10.16	13.50	281712-5	144274-5	281709-5	144273-5
6	12.70	16.04	281712-6	144274-6	281709-6	144273-6
7	15.24	18.58	281712-7	144274-7	281709-7	144273-7
8	17.78	21.12	281712-8	144274-8	281709-8	144273-8
10	22.86	26.20	1-281712-0	1-144274-0	1-281709-0	1-144273-0
12	27.94	31.28	1-281712-2	1-144274-2	1-281709-2	1-144273-2
15	35.56	38.90	1-281712-5	1-144274-5	1-281709-5	1-144273-5
18	43.18	46.52	1-281712-8	1-144274-8	1-281709-8	1-144273-8

Receptacles for 28 AWG Wire available on request

**HE14**

No. of Positions	Dimensions A B		Part Numbers			
			26 AWG		24 AWG	
			Tube	Loose Piece	Tube	Loose Piece
2	2.54	5.88	281711-2	144271-2	281708-2	144270-2
3	5.08	8.42	281711-3	144271-3	281708-3	144270-3
4	7.62	10.96	281711-4	144271-4	281708-4	144270-4
5	10.16	13.50	281711-5	144271-5	281708-5	144270-5
6	12.70	16.04	281711-6	144271-6	281708-6	144270-6
7	15.24	18.58	281711-7	144271-7	281708-7	144270-7
8	17.78	21.12	281711-8	144271-8	281708-8	144270-8
10	22.86	26.20	1-281711-0	1-144271-0	1-281708-0	1-144270-0
12	27.94	31.28	1-281711-2	1-144271-2	1-281708-2	1-144270-2
15	35.56	38.90	1-281711-5	1-144271-5	1-281708-5	1-144270-5
18	43.18	46.52	1-281711-8	1-144271-8	1-281708-8	1-144270-8

Receptacles for 28 AWG Wire available on request

**Note**

To help you to establish the correct PN for your application (options), please visit the Tooling website (address below) and select "by Product Type" from the left hand menu, then choose HE 13 & HE 14.

Or alternatively call your local contact for personal assistance.



(Images are representative only.)

**To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)**

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

[www.tycoelectronics.com](http://www.tycoelectronics.com)



**Single Row**

**Material and Finish:**

**Housing**—Blue flame retardant glass filled polyester, UL 94V-0 rated

**IDC Contact**—Phosphor bronze, plated as follows:

**HE13**—Selectively plated 0.4 µm gold on contact area, 0.8 µm tin min on termination area with entire contact underplated 1.3 µm nickel

**HE14**—Plated 1µm min. tin

**Technical Documents:**

**Product Specification**  
108-15053

**Application Specification:**  
114-15031

Pistol Grip Hand Tool, complete  
PN 734043-1

Hand Tool Head  
PN 734042-1

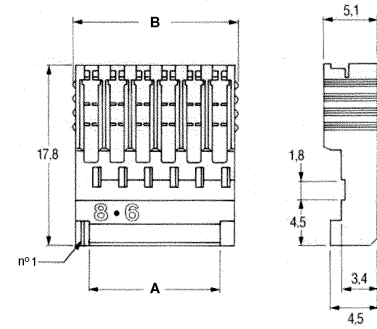
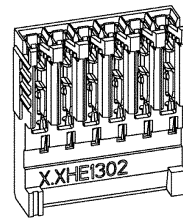
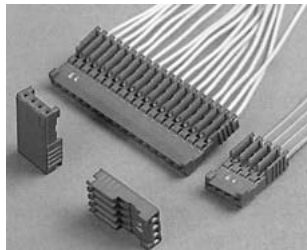
Pistol Grip  
PN 169756-1 or 314813-1

Pistol Grip Hand Tool, complete  
PN 946807-1

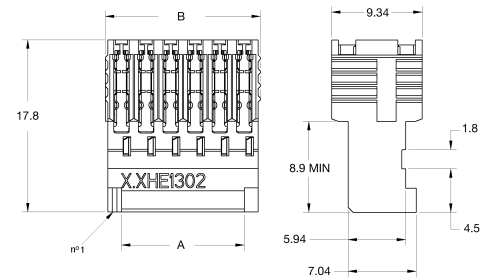
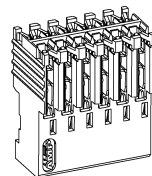
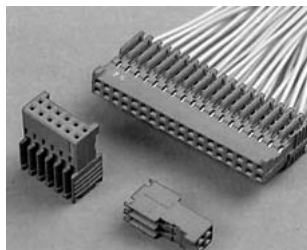
Gang Tool 947572-1  
to use with Manual Press PN 91085-2

Pneumatic Press  
PN 949300-1 without foot switch  
PN 949300-2 with foot switch

**IDC Receptacle Assembly, Straight**



No. of Positions	Dimensions		Part Numbers			
			HE13		HE14	
			28-26 AWG Loose Piece	26-24 AWG Loose Piece	28-26 AWG Loose Piece	26-24 AWG Loose Piece
2	2.54	5.88	281787-2	281784-2	281786-2	281783-2
3	5.08	8.42	281787-3	281784-3	281786-3	281783-3
4	7.62	10.96	281787-4	281784-4	281786-4	281783-4
5	10.16	13.50	281787-5	281784-5	281786-5	281783-5
6	12.70	16.04	281787-6	281784-6	281786-6	281783-6
8	17.78	21.12	281787-8	281784-8	281786-8	281783-8
10	22.86	26.20	1-281787-0	1-281784-0	1-281786-0	1-281783-0
12	27.94	31.28	1-281787-2	1-281784-2	1-281786-2	1-281783-2
15	35.56	38.90	1-281787-5	1-281784-5	1-281786-5	1-281783-5
18	43.18	46.52	1-281787-8	1-281784-8	1-281786-8	1-281783-8



**Double Row**

**Material and Finish:**

**Housing**—Blue flame retardant glass filled polyester, UL 94V-0 rated

**IDC Contact**—Phosphor bronze, plated as follows:

**HE13**—Selectively plated 0.4 µm gold on contact area, 0.8 µm tin min on termination area with entire contact underplated 1.3 µm nickel

**HE14**—Plated 1µm min. tin

**Technical Documents:**

**Product Specification**  
108-15053

**Application Specification:**  
114-15031

No. of Positions	Dimensions		Part Numbers			
			HE13		HE14	
			28-26 AWG Loose Piece	26-24 AWG Loose Piece	28-26 AWG Loose Piece	26-24 AWG Loose Piece
2x2	2.54	5.88	281793-2	281790-2	281792-2	281789-2
2x3	5.08	8.42	281793-3	281790-3	281792-3	281789-3
2x4	7.62	10.96	281793-4	281790-4	281792-4	281789-4
2x5	10.16	13.50	281793-5	281790-5	281792-5	281789-5
2x6	12.70	16.04	281793-6	281790-6	281792-6	281789-6
2x8	17.78	21.12	281793-8	281790-8	281792-8	281789-8
2x10	22.86	26.20	1-281793-0	1-281790-0	1-281792-0	1-281789-0
2x12	27.94	31.28	1-281793-2	1-281790-2	1-281792-2	1-281789-2
2x15	35.56	38.90	1-281793-5	1-281790-5	1-281792-5	1-281789-5
2x18	43.18	46.52	1-281793-8	1-281790-8	1-281792-8	1-281789-8

**Note**

To help you to establish the correct PN for your application (options), please visit the Tooling website (address below) and select "by Product Type" from the left hand menu, then choose HE 13 & HE 14.

Or alternatively call your local contact for personal assistance.



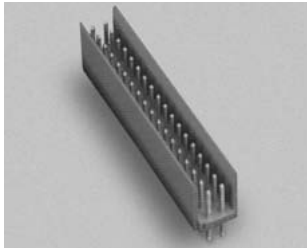
(Images are representative only.)

**To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)**

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

**Shrouded Headers, Straight**

**Straight 0.63 mm Square Post**



**Material and Finish:**

**Housing**—Blue flame retardant glass filled polyester, UL 94V-0 rated

**Posts**—Phosphor bronze, plated as follows:

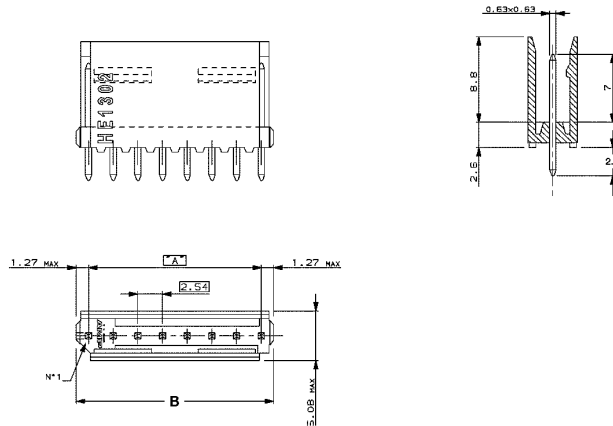
**HE13**—Selectively plated 0.4 µm gold on contact area, gold flash on insertion area, 2.5 µm tin min on solder tail with entire post underplated 1.3 µm nickel

**HE14**—Tin plated min. 2.5 µm on solder area, with entire post tin plated 0.8 µm over 0.8 µm nickel

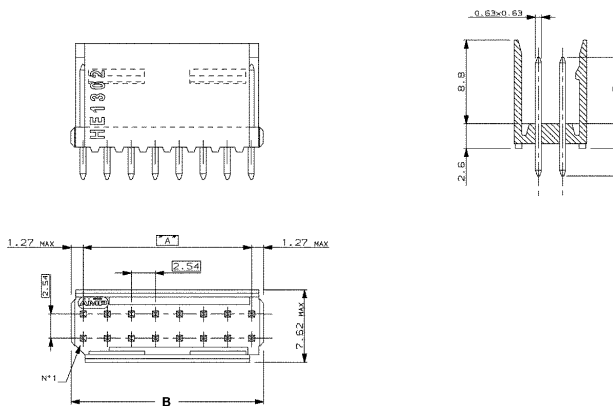
**Technical Documents:**

**Product Specification**  
108-15053

**Single-Row**



**Double-Row**



No. of Positions	Dimensions		Single-Row		Double-Row	
			Type / Part Numbers		Type / Part Numbers	
	A	B	HE13	HE14	HE13	HE14
2	2.54	5.08	281696-2	281695-2	281740-2	281739-2
3	5.08	7.62	281696-3	281695-3	281740-3	281739-3
4	7.62	10.16	281696-4	281695-4	281740-4	281739-4
5	10.16	12.70	281696-5	281695-5	281740-5	281739-5
6	12.70	15.24	281696-6	281695-6	281740-6	281739-6
7	15.24	17.78	281696-7	281695-7	—	—
8	17.78	20.32	281696-8	281695-8	281740-8	281739-8
10	22.86	25.40	1-281696-0	1-281695-0	1-281740-0	1-281739-0
12	27.94	30.48	1-281696-2	1-281695-2	1-281740-2	1-281739-2
13	30.48	33.82	—	—	1-281740-3	1-281739-3
15	35.56	38.10	1-281696-5	1-281695-5	1-281740-5	1-281739-5
17	40.64	43.18	1-281696-7	1-281695-7	1-281740-7	1-281739-7
18	43.18	45.72	1-281696-8	1-281695-8	1-281740-8	1-281739-8
20	48.26	50.80	—	—	2-281740-0	2-281739-0

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

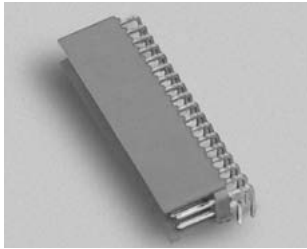
Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

**Shrouded Headers, Right Angle**

**Right-Angle 0.63 mm Square Post**



**Material and Finish:**

**Housing**—Blue flame retardant glass filled polyester, UL 94V-0 rated

**Posts**—Phosphor bronze, plated as follows:

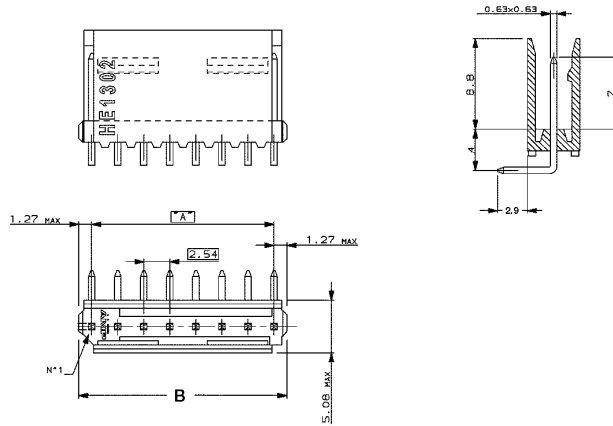
**HE13**—Selectively plated 0.4 µm gold on contact area, gold flash on insertion area, 2.5 µm tin min on solder tail with entire post underplated 1.3 µm nickel

**HE14**—Tin plated min. 2.5 µm on solder area, with entire post tin plated 0.8 µm over 0.8 µm nickel

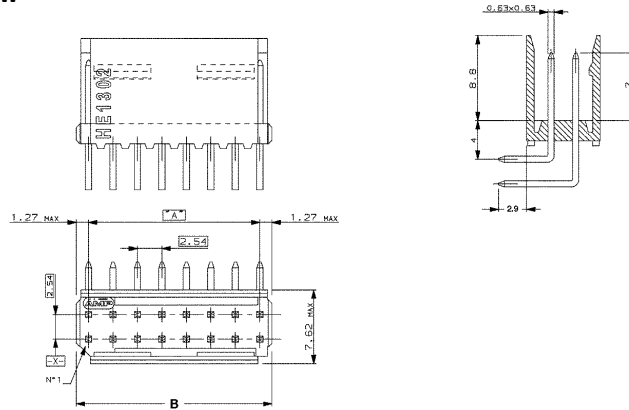
**Technical Documents:**

**Product Specification**  
108-15053

**Single-Row**



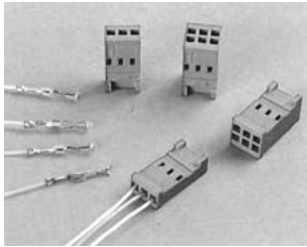
**Double-Row**



No. of Positions	Dimensions		Single Row		Double-Row	
	A	B	Type / Part Numbers		Type / Part Numbers	
			HE13	HE14	HE13	HE14
2	2.54	5.08	281699-2	281698-2	281743-2	281742-2
3	5.08	7.62	281699-3	281698-3	281743-3	281742-3
4	7.62	10.16	281699-4	281698-4	281743-4	281742-4
5	10.16	12.70	281699-5	281698-5	281743-5	281742-5
6	12.70	15.24	281699-6	281698-6	281743-6	281742-6
7	15.24	17.78	281699-7	281698-7	—	—
8	17.78	20.32	281699-8	281698-8	281743-8	281742-8
10	22.86	25.40	1-281699-0	1-281698-0	1-281743-0	1-281742-0
12	27.94	30.48	1-281699-2	1-281698-2	1-281743-2	1-281742-2
13	30.48	33.82	—	—	1-281743-3	1-281742-3
15	35.56	38.10	1-281699-5	1-281698-5	1-281743-5	1-281742-5
17	40.64	43.18	1-281699-7	1-281698-7	1-281743-7	1-281742-7
18	43.18	45.72	1-281699-8	1-281698-8	1-281743-8	1-281742-8
20	48.26	50.80	—	—	2-281743-0	2-281742-0

**Receptacle Housings**

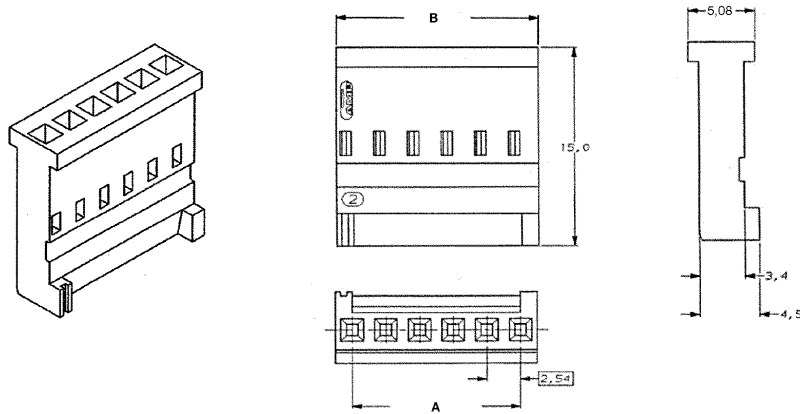
**Single & Double Row Receptacle Housings**



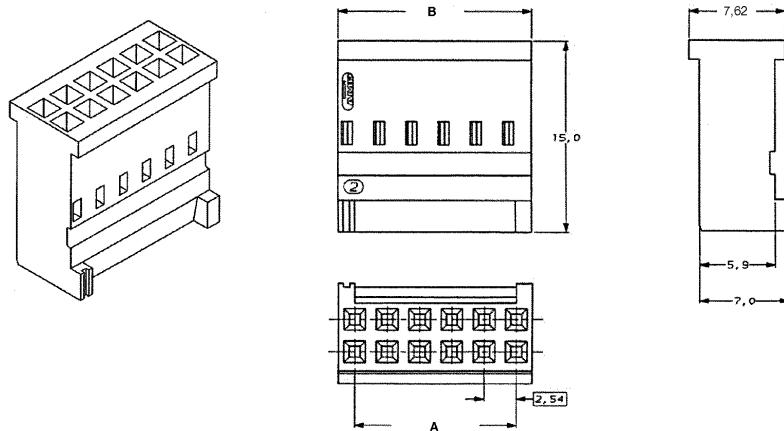
**Material and Finish:**  
**Housing**—Blue flame retardant glass filled polyester, UL 94V-0 rated

**Technical Documents:**  
**Product Specification**  
108-15053

**Single Row**



**Double Row**



No. of Positions	Dimensions		Part Numbers	
	A	B	Single Row	Double Row
3	5.08	7.62	281838-3	281839-3
4	7.62	10.16	281838-4	281839-4
5	10.16	12.70	281838-5	281839-5
6	12.70	15.24	281838-6	281839-6
7	15.24	17.78	281838-7	281839-7
8	17.78	20.32	281838-8	281839-8
9	20.32	22.86	281838-9	281839-9
10	22.86	25.40	1-281838-0	1-281839-0
12	27.94	30.48	1-281838-2	1-281839-2
14	33.02	35.56	1-281838-4	-
15	35.56	38.10	1-281838-5	1-281839-5
18	43.18	45.72	1-281838-8	1-281839-8

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

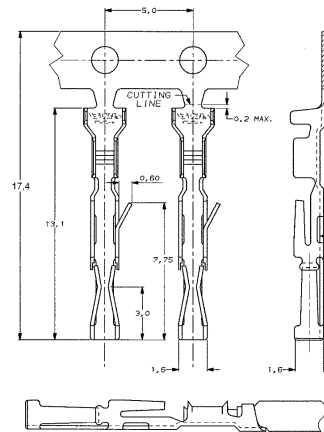
Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

**Crimp Snap-In Receptacle Contacts, with Insulation Support**



**Material and Finish:**

Phosphor bronze, plated as follows:

**HE13**—Selectively plated 0.8 µm gold on contact area, 2.5 µm tin on crimp area, with entire contact underplated 1.3 µm nickel

**HE14**—Plated 2.5 µm tin

**Technical Documents:**

**Product Specification**  
108-15053

Wire Size Range mm²	AWG	Insulation Diameter mm	Plating	Part Numbers		Hand Tool
				Strip Form	Loose Piece	
0.22-0.08	24-28	1.5-0.8	HE 13	188746-1	182734-3	947679-1
			HE 14	188744-1	182734-2	

**Strip Contacts:**

**Applicator**

To help you to establish the correct PN for your application (options), please call your local contact for personal assistance.



(Images are representative only.)

**To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)**

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

**Micro Interconnect Plug and Receptacle Connector Assemblies**

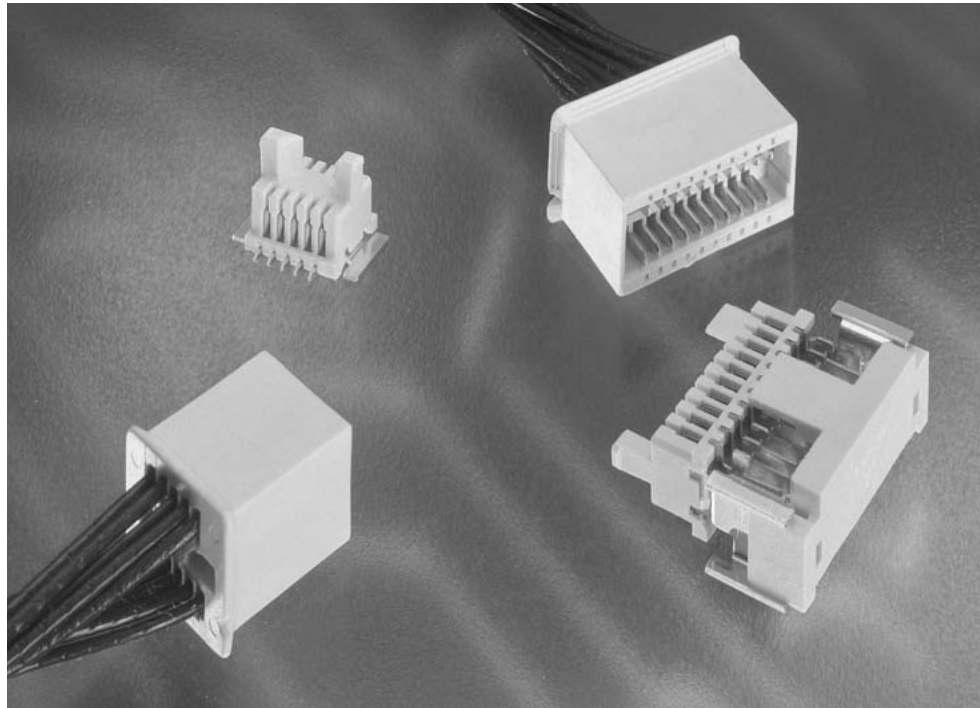
**Product Facts**

- High density, .8 [.031] centerline
- Vertical and right angle surface mount receptacles
- Dual-row housing, 4-40 positions
- Dual-beam receptacle contact provides reliable, redundant points of contact
- Crimp Snap-In plug contact utilizing the "F"-Crimp for 28 & 30 AWG discrete wire
- Detent style latching
- Shrouding and polarization
- Strain relief option available
- Application tooling utilizes mini-applicators
- Plug contact serviceability
- Receptacles packaged in embossed tape, per EIA 481 standards
- Recognized under the Component Program of Underwriters Laboratories., File No. E28476

**Technical Documents**

**Product Specification**  
108-1955

**Application Specification**  
114-13051



The AMPMODU Micro Interconnect System is the next generation family of products that has been designed around a high density, .8 [.031] centerline configuration. The first release in the series is the cable-to-board, discrete wire system, available in 4 through 40 positions.

Due to the small scale of the product, the contact interface is opposite vs. that of the larger-centerline AMPMODU product. For Micro Interconnect, the wire is crimped to the more-robust plug blade contact rather than the receptacle contact.

The surface-mount receptacle connectors are available in both vertical and right angle configurations. They are manufactured using automated equipment and later handled with automatic placement equipment at the customer's site. Both the vertical and right-angle receptacles provide ample

surface area for vacuum pick-up. The center section of the vertical receptacle between the dual receptacle rows is the vacuum surface. For the right angle receptacle, the vacuum surface is an integral feature of the plastic organizer component.

The plug half of Micro Interconnect likewise consists of 4 through 40 positions. It utilizes 28 to 30 gauge discrete wire for the crimp contacts. A special feature of this housing is the flange around the perimeter, which provides a convenient gripping feature. This flange is notched in one location to provide a convenient Pin No. 1 indicator.

An optional strain relief is also available to help gather the individual wires at the plug wire exit. The strain relief serves to better protect the terminated leads in more rigorous applications.

**Performance Specifications**

**Electrical Characteristics:**

Contact Current Rating:  
(Signal Application Only)  
1 ampere per contact - 28 AWG  
0.75 ampere per contact - 30 AWG

Termination Resistance:  
25 milliohms max.

**Environmental Characteristics:**

Operating Temperature:  
-55°C [-67°F] to  
85°C [+185°F]

**Need more information?**

**Call Technical Support at the numbers listed below.**

Technical Support is staffed with specialists well versed in Tyco Electronics products. They can provide you with:

- Technical Support
- Catalogs
- Technical Documents
- Product Samples
- Tyco Electronics Authorized Distributor Locations

**Receptacle Assembly, Vertical Surface Mount**

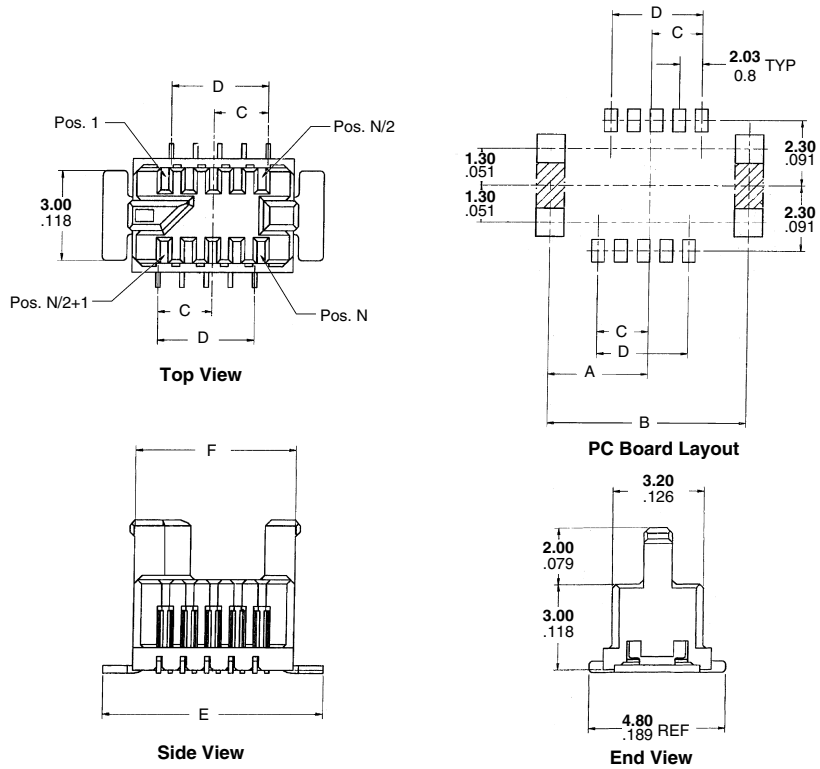


**Material and Finish**

**Housing** — Thermoplastic (Beige), 94V-0 Rated

**Contacts** — Copper alloy, duplex plated 0.00076 [.000030] gold in contact area, 0.00013 [.000005] gold in solder area, with entire contact underplated 0.00127 [.000050] nickel

**Boardlocks** — Copper alloy, pre-plated 0.0038 [.000150] bright tin underplated 0.00127 [.000050] nickel.



**Related Product Data**

**Technical Documents:**

**Product Specification**

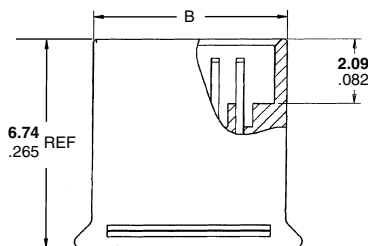
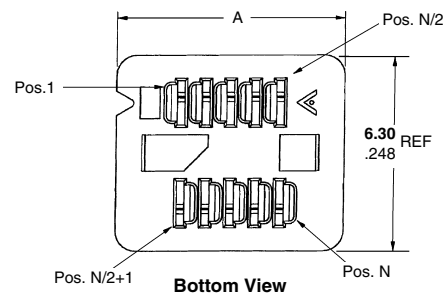
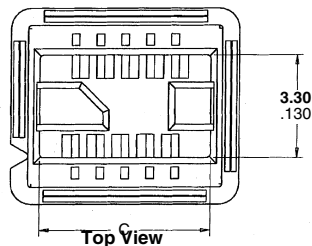
108-1955

**Application Specification**

114-13051

No. of Positions	Dimensions						Part Number
	A	B	C	D	E	F	
4	2.31 [.091]	4.62 [.182]	0.60 [.023]	0.80 [.031]	4.95 [.195]	2.94 [.116]	5-1445339-1
6	2.71 [.107]	5.42 [.213]	1.00 [.039]	1.60 [.063]	5.75 [.226]	3.74 [.147]	5-1375870-1
8	3.11 [.122]	6.22 [.245]	1.40 [.055]	2.40 [.094]	6.55 [.258]	4.54 [.179]	5-1375870-2
10	3.51 [.138]	7.02 [.276]	1.80 [.071]	3.20 [.126]	7.35 [.289]	5.34 [.210]	5-1375870-3
12	3.91 [.154]	7.82 [.308]	2.20 [.087]	4.00 [.157]	8.15 [.321]	6.14 [.242]	5-1375870-4
14	4.31 [.170]	8.62 [.339]	2.60 [.102]	4.80 [.189]	8.95 [.352]	6.94 [.273]	5-1375870-5
16	4.71 [.185]	9.42 [.371]	3.00 [.118]	5.60 [.220]	9.75 [.384]	7.74 [.305]	5-1375870-6
18	5.11 [.201]	10.22 [.402]	3.40 [.134]	6.40 [.252]	10.55 [.415]	8.54 [.336]	5-1375870-7
20	5.51 [.217]	11.02 [.434]	3.80 [.150]	7.20 [.283]	11.35 [.447]	9.34 [.368]	5-1375870-8
22	5.91 [.233]	11.82 [.465]	4.20 [.165]	8.00 [.315]	12.15 [.478]	10.14 [.399]	5-1375870-9
24	6.31 [.248]	12.62 [.497]	4.60 [.181]	8.80 [.346]	12.95 [.510]	10.94 [.431]	6-1375870-0
26	6.71 [.264]	13.42 [.528]	5.00 [.197]	9.60 [.378]	13.75 [.541]	11.74 [.462]	6-1375870-1
28	7.11 [.280]	14.22 [.560]	5.40 [.213]	10.40 [.409]	14.55 [.573]	12.54 [.494]	6-1375870-2
30	7.51 [.296]	15.02 [.591]	5.80 [.228]	11.20 [.441]	15.35 [.604]	13.34 [.525]	6-1375870-3
32	7.91 [.311]	15.82 [.623]	6.20 [.244]	12.00 [.472]	16.15 [.636]	14.14 [.557]	6-1375870-4
34	8.31 [.327]	16.62 [.654]	6.60 [.260]	12.80 [.504]	16.95 [.667]	14.94 [.588]	6-1375870-5
36	8.71 [.343]	17.42 [.686]	7.00 [.276]	13.60 [.535]	17.75 [.699]	15.74 [.620]	6-1375870-6
38	9.11 [.359]	18.22 [.717]	7.40 [.291]	14.40 [.567]	18.55 [.730]	16.54 [.651]	6-1375870-7
40	9.51 [.374]	19.02 [.749]	7.80 [.307]	15.20 [.598]	19.35 [.762]	17.34 [.683]	6-1375870-8

**Plug Housing**



2  
PCB and Wire Connectors

**Material and Finish**

**Housing** — Thermoplastic (beige), 94V-0 rated

**Technical Documents:**

**Product Specification**

108-1955

**Application Specification**

114-13051

No. of Positions	Dimensions			Part Number
	A	B	C	
4	4.95 [.195]	3.85 [.152]	3.10 [.122]	1445340-1
6	5.75 [.226]	4.65 [.183]	3.90 [.154]	1375875-1
8	6.55 [.258]	5.45 [.215]	4.70 [.185]	1375875-2
10	7.35 [.289]	6.25 [.246]	5.50 [.217]	1375875-3
12	8.15 [.321]	7.05 [.278]	6.30 [.248]	1375875-4
14	8.95 [.352]	7.85 [.309]	7.10 [.280]	1375875-5
16	9.75 [.384]	8.65 [.341]	7.90 [.311]	1375875-6
18	10.55 [.415]	9.45 [.372]	8.70 [.343]	1375875-7
20	11.35 [.447]	10.25 [.404]	9.50 [.374]	1375875-8
22	12.15 [.478]	11.05 [.435]	10.30 [.406]	1375875-9
24	12.95 [.510]	11.85 [.467]	11.10 [.437]	1-1375875-0
26	13.75 [.541]	12.65 [.498]	11.90 [.469]	1-1375875-1
28	14.55 [.573]	13.45 [.530]	12.70 [.500]	1-1375875-2
30	15.35 [.604]	14.25 [.561]	13.50 [.531]	1-1375875-3
32	16.15 [.636]	15.05 [.593]	14.30 [.563]	1-1375875-4
34	16.95 [.667]	15.85 [.624]	15.10 [.594]	1-1375875-5
36	17.75 [.699]	16.65 [.656]	15.90 [.626]	1-1375875-6
38	18.55 [.730]	17.45 [.687]	16.70 [.657]	1-1375875-7
40	19.35 [.762]	18.25 [.719]	17.50 [.689]	1-1375875-8

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

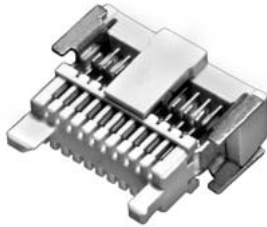
Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com



**Receptacle Assembly, Right-Angle, Surface Mount**



**Material and Finish**

**Housing and Organizer** —

Thermoplastic (beige), 94V-0 rated

**Contacts** — Copper alloy, duplex plated 0.00076 [.000030] gold in contact area, 0.00254 [.000100] matte tin in solder area, with entire contact underplated 0.00127 [.000050] nickel.

**Boardlocks** — Copper alloy, pre-plated 0.0038 [.000150] bright tin underplated 0.00127 [.000050] nickel.

**Related Product Data**

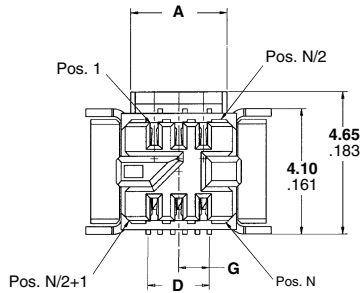
**Technical Documents:**

**Product Specification**

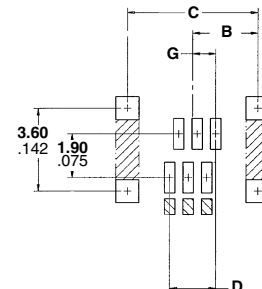
108-1955

**Application Specification**

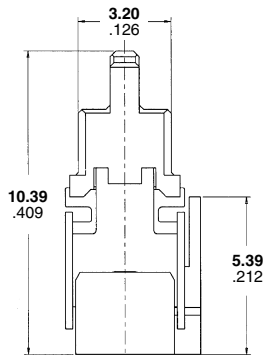
114-13051



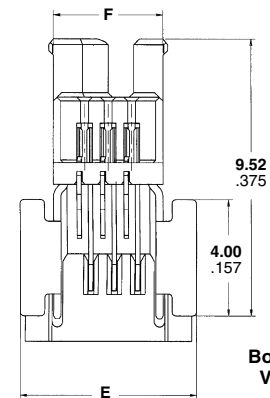
**Top View**



**PC Board Layout**



**Side View**



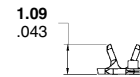
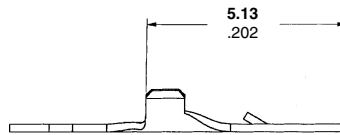
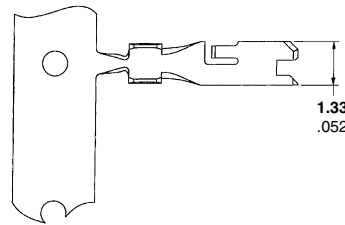
**Bottom View**

No. of Positions	Dimensions							Part Number
	A	B	C	D	E	F	G	
4	2.32 [.091]	2.41 [.095]	4.82 [.190]	1.20 [.047]	5.21 [.205]	2.94 [.116]	0.60 [.024]	5-1445940-1
6	3.12 [.123]	2.81 [.111]	5.62 [.221]	2.00 [.079]	6.01 [.237]	3.74 [.147]	1.00 [.039]	5-1445297-1
8	3.92 [.154]	3.21 [.126]	6.42 [.253]	2.80 [.110]	6.81 [.268]	4.54 [.179]	1.40 [.055]	5-1445297-2
10	4.72 [.186]	3.61 [.142]	7.22 [.284]	3.60 [.142]	7.61 [.300]	5.34 [.210]	1.80 [.071]	5-1445297-3
12	5.52 [.217]	4.01 [.158]	8.02 [.316]	4.40 [.173]	8.41 [.331]	6.14 [.242]	2.20 [.087]	5-1445297-4
14	6.32 [.249]	4.41 [.174]	8.82 [.347]	5.20 [.205]	9.21 [.363]	6.94 [.273]	2.60 [.102]	5-1445297-5
16	7.12 [.280]	4.81 [.189]	9.62 [.379]	6.00 [.236]	10.01 [.394]	7.74 [.305]	3.00 [.118]	5-1445297-6
18	7.92 [.312]	5.21 [.205]	10.42 [.410]	6.80 [.268]	10.81 [.426]	8.54 [.336]	3.40 [.134]	5-1445297-7
20	8.72 [.343]	5.61 [.221]	11.22 [.442]	7.60 [.299]	11.61 [.457]	9.34 [.368]	3.80 [.150]	5-1445297-8
22	9.52 [.375]	6.01 [.237]	12.02 [.473]	8.40 [.331]	12.41 [.489]	10.14 [.399]	4.20 [.165]	5-1445297-9
24	10.32 [.406]	6.41 [.252]	12.82 [.505]	9.20 [.362]	13.21 [.520]	10.94 [.431]	4.60 [.181]	6-1445297-0
26	11.12 [.438]	6.81 [.268]	13.62 [.536]	10.00 [.394]	14.01 [.552]	11.74 [.462]	5.00 [.197]	6-1445297-1
28	11.92 [.469]	7.21 [.284]	14.42 [.568]	10.80 [.425]	14.81 [.583]	12.54 [.494]	5.40 [.213]	6-1445297-2
30	12.72 [.501]	7.61 [.300]	15.22 [.599]	11.60 [.457]	15.61 [.615]	13.34 [.525]	5.80 [.228]	6-1445297-3
32	13.52 [.532]	8.01 [.315]	16.02 [.631]	12.40 [.488]	16.41 [.646]	14.14 [.557]	6.20 [.244]	6-1445297-4
34	14.32 [.564]	8.41 [.331]	16.82 [.662]	13.20 [.520]	17.21 [.678]	14.94 [.588]	6.60 [.260]	6-1445297-5
36	15.12 [.595]	8.81 [.347]	17.62 [.694]	14.00 [.551]	18.01 [.709]	15.74 [.620]	7.00 [.276]	6-1445297-6
38	15.92 [.627]	9.21 [.363]	18.42 [.725]	14.80 [.583]	18.81 [.741]	16.54 [.651]	7.40 [.291]	6-1445297-7
40	16.72 [.658]	9.61 [.378]	19.22 [.757]	15.60 [.614]	19.61 [.772]	17.34 [.683]	7.80 [.307]	6-1445297-8

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

**Plug Contact**

**Part Number 5-1375876-2**



**Material and Finish**

**Contacts**—Copper alloy, duplex plated 0.00076 [.000030] gold in contact area, 0.00254 [.000100] bright tin in crimp area, with entire contact underplated 0.00127 [.000050] nickel

**Related Product Data**

**Technical Documents:**

**Product Specification**

108-1955

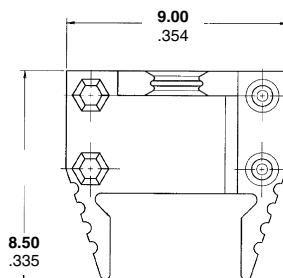
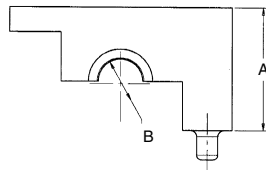
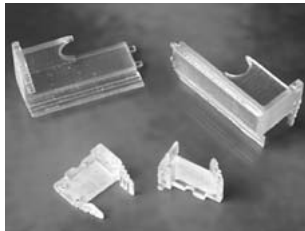
**Application Specification**

114-13051

Wire Size Range	Insulation Diameter (Max.)
30-28	0.60 [.024]

2  
PCB and Wire Connectors

**Hermaphroditic Strain Relief**



No. of Positions	Dimensions		Part Number
	A	B	
4	2.60 [.102]	1.15 [.045]	1445976-1
6	3.40 [.134]	1.37 [.054]	1445976-2
8	4.20 [.165]	1.59 [.063]	1445976-3
10	5.00 [.197]	1.80 [.071]	1445976-4
12	5.80 [.228]	2.03 [.080]	1445976-5
14	6.60 [.260]	2.24 [.088]	1445976-6
16	7.40 [.291]	2.46 [.097]	1445976-7
18	8.20 [.323]	2.68 [.106]	1445976-8
20	9.00 [.354]	2.90 [.114]	1445976-9
22	9.80 [.386]	3.00 [.118]	1-1445976-0
24	10.60 [.417]	3.10 [.122]	1-1445976-1
26	11.40 [.449]	3.20 [.126]	1-1445976-2
28	12.20 [.480]	3.30 [.130]	1-1445976-3
30	13.00 [.512]	3.40 [.134]	1-1445976-4
32	13.80 [.543]	3.50 [.138]	1-1445976-5
34	14.60 [.575]	3.60 [.142]	1-1445976-6
36	15.40 [.606]	3.70 [.146]	1-1445976-7
38	16.20 [.638]	3.80 [.150]	1-1445976-8
40	17.00 [.669]	3.90 [.154]	1-1445976-9

**Material and Finish**

**Housing**—Thermoplastic (beige), 94V-0 rated

**Related Product Data**

Housings used with - pg. 7

**Related Product Data**

**Technical Documents:**

**Product Specification**

108-1955

**Application Specification**

114-13051

**Note:** Two pieces required per connector assembly.

**Application Tooling/Instruction Sheet Cross Reference**

Tool Part No.	Instruction Sheet
1385161-3	408-8040
1385161-2	408-8040
1490583-1	408-8583
1490584-1	408-8584
1583957-1	408-8685

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

**Tooling**

**Application Tooling**

Insertion Tool **1490583-1**  
 Extraction Tool **1490584-1**  
 Unmating Tool **1583957-1**

**Strip Contacts:**

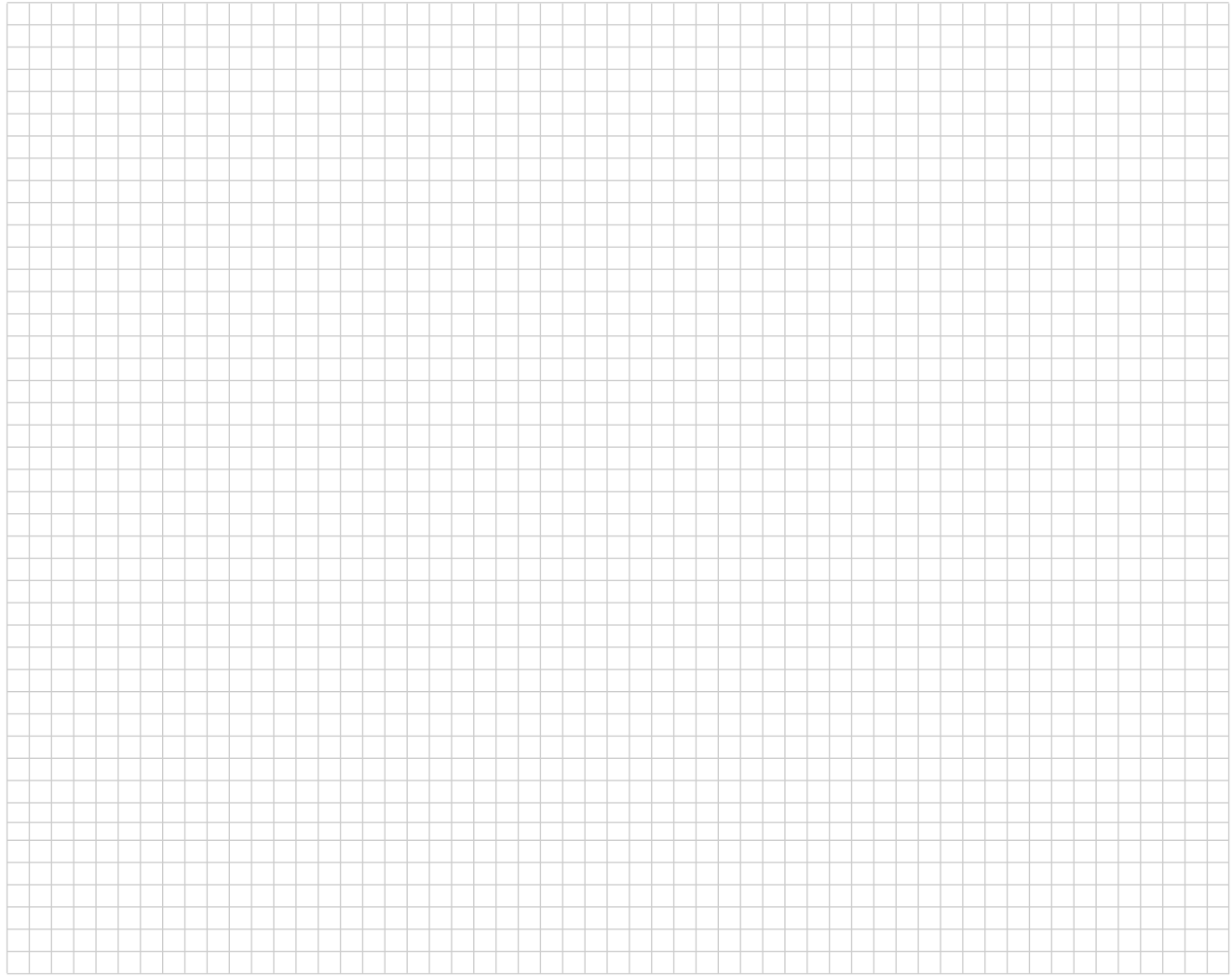
**HD-I Applicator**

To help you to establish the correct PN for your application (options), please visit the Applicator page on our Tooling website (address below) and enter your Terminal PN in the search function. Or alternatively call your local contact for personal assistance

**Technical Documents**

**Product Specification:** 108-1955  
**Application Specification:** 114-13051

**Engineering Notes**



(Images are representative only.)

**To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)**

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

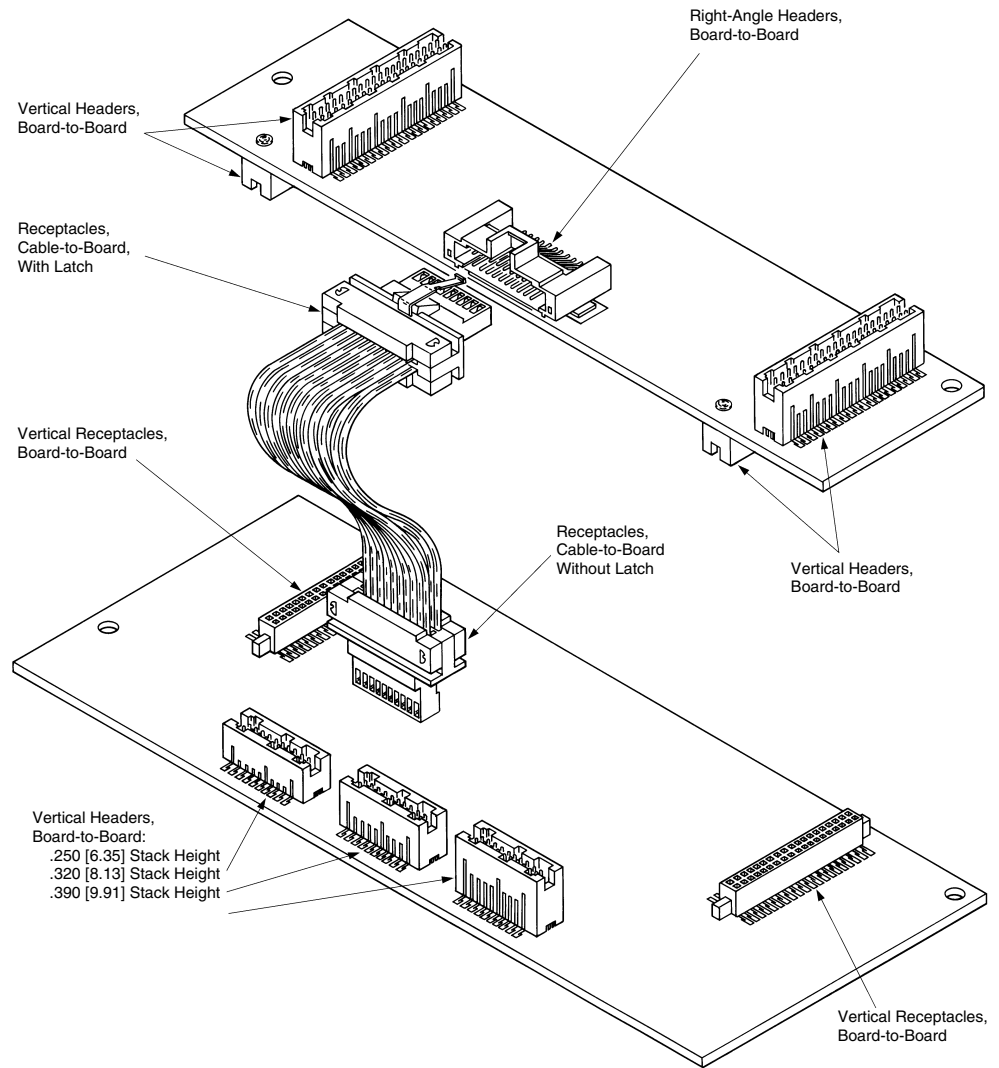
Dimensions are shown for reference purposes only.  
 Conversion Rate:  
 25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
 Consult Tyco Electronics for latest Specifications.

[www.tycoelectronics.com](http://www.tycoelectronics.com)

**AMPMODU 50/50 Grid Connector System**



2  
PCB and Wire Connectors

**Produced under a Quality Management System certified to ISO 9001**

A copy of the certificate is available upon request.



**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch



Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

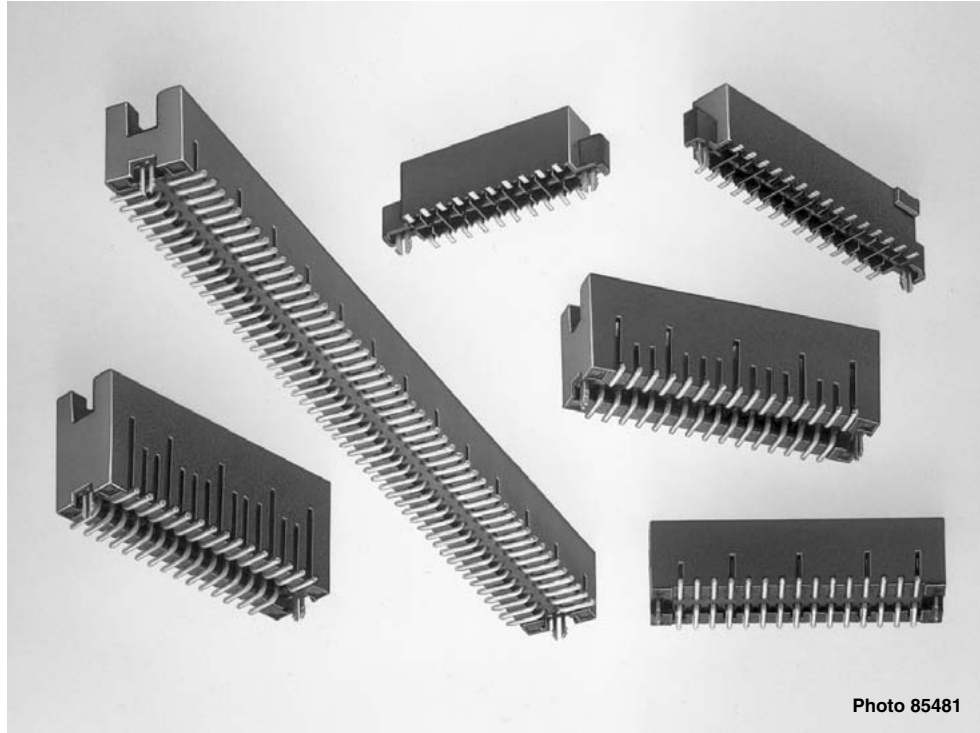
All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

[www.tycoelectronics.com](http://www.tycoelectronics.com)

**Board-to-Board Vertical Receptacles and Headers**

**Product Facts**

- Surface-mount products for parallel board-to-board applications, as well as right-angle board-to-board and cable-to-board applications
- High density .050 x .050 [1.27x1.27] centerline grid
- Three board-to-board stack heights: .250 [6.35], .320 [8.13] and .390 [9.91]
- Non-protrusive metallic holddowns
- Reliable dual beam receptacle contacts for redundant contact
- Duplex plated receptacle and post contacts; gold plated on mating areas, tin plated on tails
- Compatible with standard surface-mount processing (VPR and IR)
- Receptacle and header allow for drainage of processing fluids
- Tape and reel packaging available, contact Tyco Electronics for details
- Polarized header and receptacle assemblies
- Sizes of 10, 20, 30, 40, 50, 60, 70, 80 and 100 positions
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 
- Certified by Canadian Standards Association File No. LR7189 



AMPMODU 50/50 Grid Vertical Headers and Receptacles are designed for parallel board-to-board stacking in high density applications.

Right-angle board-to-board and cable-to-board applications are also possible, since the vertical receptacles also mate with non-latching right-angle headers and the vertical headers also mate with non-latching cable connectors.

Available are double row, vertical shrouded headers and receptacles in sizes ranging from 10 through 100 positions (in 10 position increments).

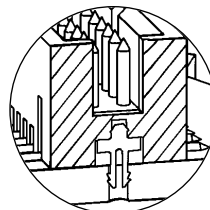
Parallel board-to-board stack heights of .250 [6.35], .320 [8.13] and .390 [9.91] are achievable by selection of the appropriate header. The receptacle is the same for all three stack height headers.

Non-protrusive metallic holddowns are designed for use in .062 [1.57] or thicker

PC boards and allow surface mounting to both sides of the board. In addition to providing retention during processing, the holddowns are soldered during reflow and therefore provide long term strain relief for the lead solder joints.

AMPMODU 50/50 Grid Vertical Headers and Receptacles are compatible with standard surface-mount processes; IR (infrared) and VPR (vapor phase reflow). The surface-mount connectors have been designed so that dimensioning, tolerances, referenced datums, holddown characteristics

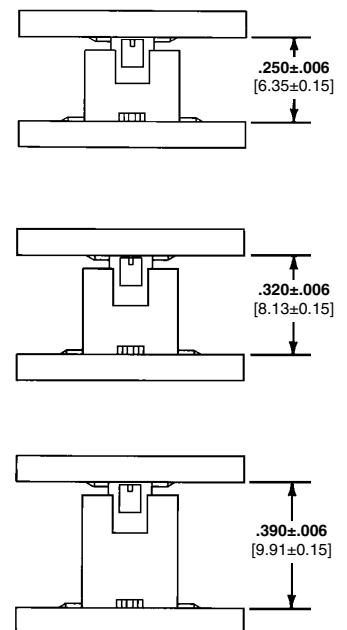
**Non-Protrusive Metallic Holddowns**



and packaging methods result in a system that is compatible with robotic assembly.

The headers and receptacles feature polarization to prevent misalignment.

**Three Board Stack Heights**



**Board-to-Board Vertical Receptacles, Double Row, .050 x .050  
[1.27 x 1.27] Centerline**

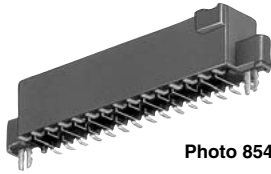


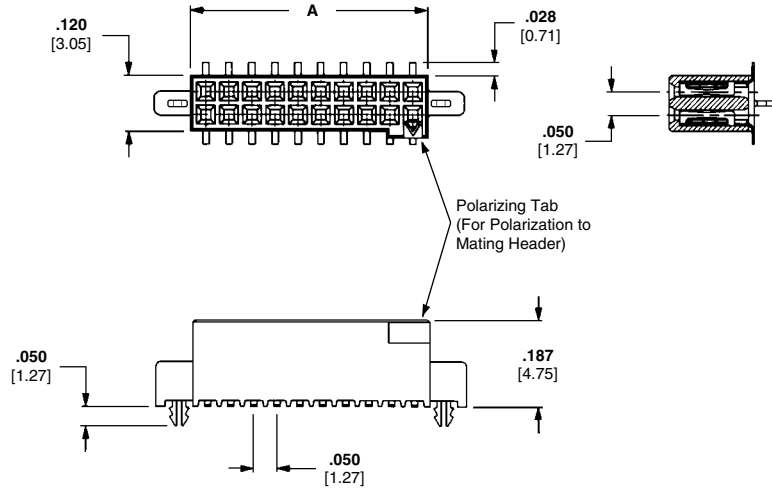
Photo 85482

**Material and Finish:**

**Housing**—Glass-filled thermoplastic, black, 94V-0 rated

**Contacts**—Copper alloy; duplex plated .000030 [0.00076] gold in mating area, .000150 [0.00381] tin on solder tail, with entire contact underplated .000050 [0.00127] nickel

**Holddown**—Copper alloy; plated .000150 [0.00381] tin over .000050 [0.00127] nickel



**Related Product Data:**

**Product Specification** 108-1332

**Application Specification**  
114-7010

**Packaging:** Tube

No. of Pos.	Dimension A	Receptacle Part Numbers	
		Tube	
10	.266 [6.75]	5-104652-1	
20	.516 [13.11]	5-104652-2	
30	.766 [19.46]	5-104652-3	
40	1.016 [25.81]	5-104652-4	
50	1.266 [32.16]	5-104652-5	
60	1.516 [38.51]	5-104652-6	
70	1.766 [44.86]	5-104652-7	
80	2.016 [51.21]	5-104652-8	
100	2.516 [63.91]	6-104652-0	

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

**Board-to-Board Vertical Headers, Double Row, .050 x .050 [1.27 x 1.27] Centerline**



Photo 85480

For .250 [6.35] Mated Height

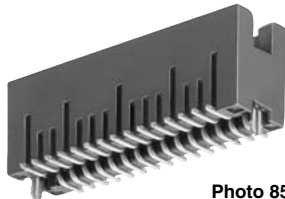


Photo 85479

For .320 [8.13] Mated Height

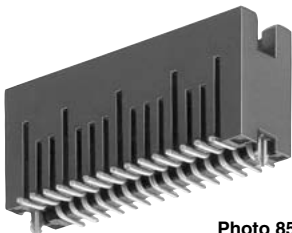
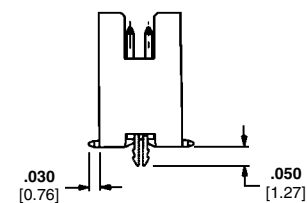
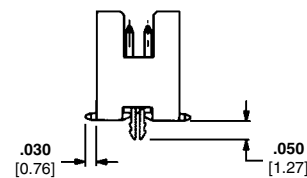
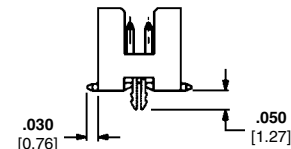
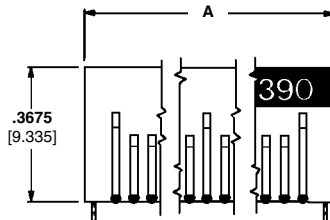
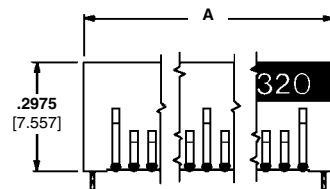
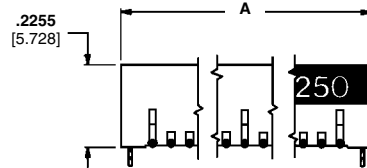
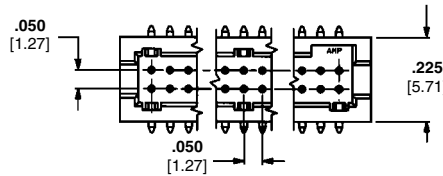


Photo 85478

For .390 [9.91] Mated Height



**Material and Finish:**

**Housing**—Glass-filled thermoplastic, black, 94V-0 rated

**Contacts**—Phosphor bronze; duplex plated .000030 [0.00076] gold in mating area, .000150 [0.00381] tin on solder tail, with entire contact underplated .000050 [0.00127] nickel

**Holddown**—Copper alloy; plated .000150 [0.00381] tin over .000050 [0.00127] nickel

**Related Product Data:**

**Product Specification** 108-1332

**Application Specification** 114-7010

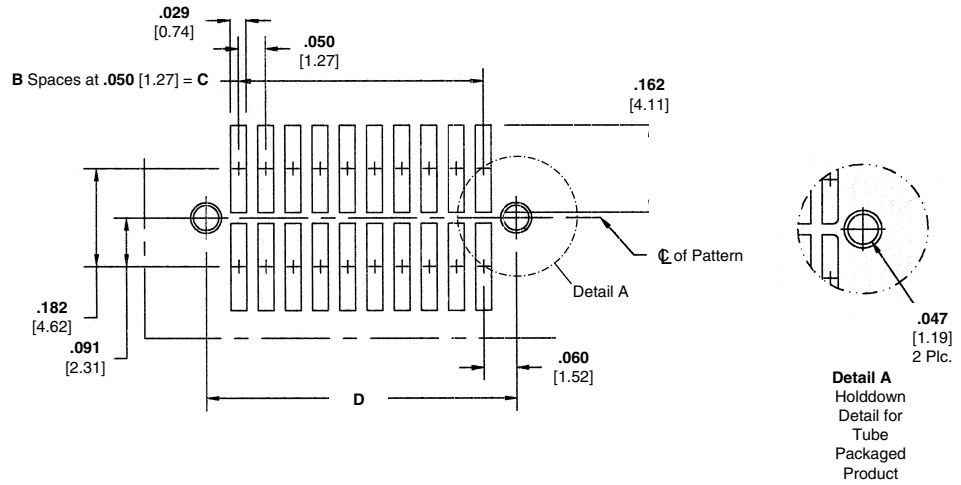
**Packaging:** Tube

No. of Pos.	Dimension A	Header Part Numbers		
		.250 [6.35] Mated Height	.320 [8.13] Mated Height	.390 [9.91] Mated Height
		Tubes	Tubes	Tubes
10	.372 [9.44]	5-104655-1	5-104656-1	5-104693-1
20	.622 [15.79]	5-104655-3	5-104656-2	5-104693-2
30	.872 [22.14]	5-104655-4	5-104656-3	5-104693-3
40	1.122 [28.49]	5-104655-5	5-104656-4	5-104693-4
50	1.372 [34.84]	5-104655-6	5-104656-5	5-104693-5
60	1.622 [41.19]	5-104655-7	5-104656-6	5-104693-6
70	1.872 [47.54]	5-104655-8	5-104656-7	5-104693-7
80	2.122 [53.89]	5-104655-9	5-104656-8	5-104693-8
90	2.372 [60.24]	—	5-104656-9	5-104693-9
100	2.622 [66.59]	6-104655-1	6-104656-0	6-104693-0

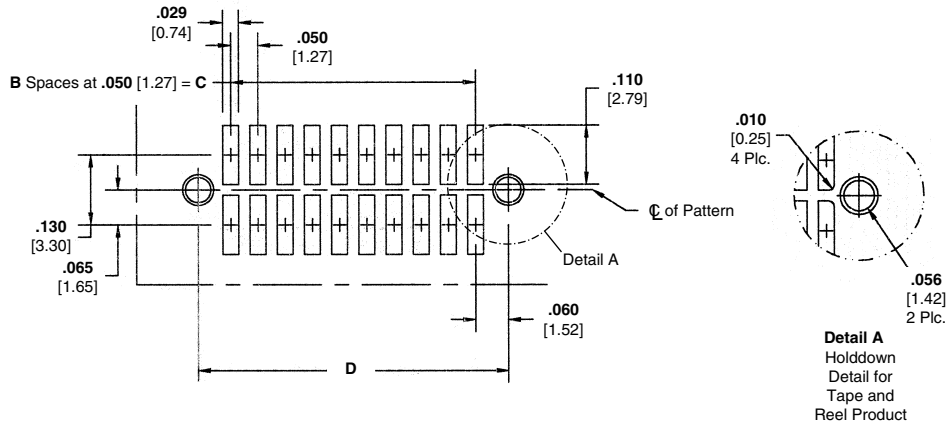
**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

**Recommended PC Board Layouts for Vertical Connectors**

**Receptacles**



**Headers**



No. of Pos.	Receptacle Dimensions			Header Dimensions		
	B	C	D	B	C	D
10	4	.200 [5.08]	.320 [8.12]	4	.200 [5.08]	.322 [8.17]
20	9	.450 [11.43]	.570 [14.48]	9	.450 [11.43]	.572 [14.52]
30	14	.700 [17.78]	.820 [20.83]	14	.700 [17.78]	.822 [20.87]
40	19	.950 [24.13]	1.070 [27.19]	19	.950 [24.13]	1.072 [27.22]
50	24	1.200 [30.48]	1.320 [33.53]	24	1.200 [30.48]	1.322 [33.57]
60	29	1.450 [36.83]	1.570 [39.88]	29	1.450 [36.83]	1.572 [39.92]
70	34	1.700 [43.18]	1.820 [46.23]	34	1.700 [43.18]	1.822 [46.27]
80	39	1.950 [49.53]	2.070 [52.58]	39	1.950 [49.53]	2.072 [52.62]
90	44	2.200 [55.88]	2.320 [58.93]	44	2.200 [55.88]	2.322 [58.97]
100	49	2.450 [62.23]	2.570 [65.28]	49	2.450 [62.23]	2.572 [65.32]

**Note:** Refer to Tyco Electronics Customer Drawings for additional PC board layout information and dimensional tolerances.

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.



All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

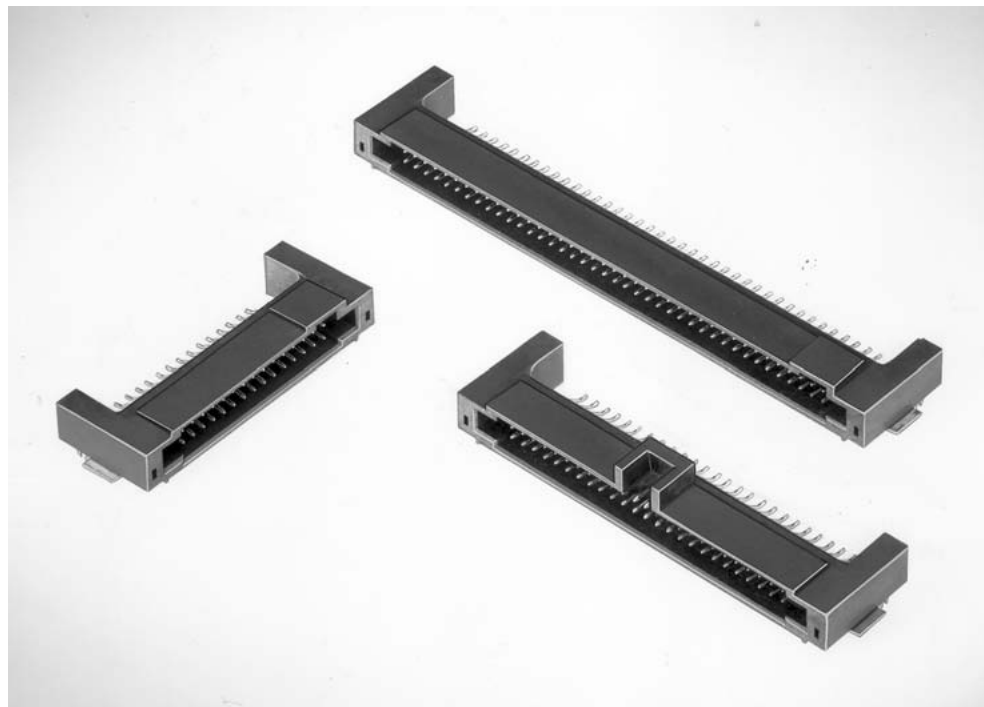
www.tycoelectronics.com



**Board-to-Board Right-Angle Headers**

**Product Facts**

- Surface-mount products for right-angle board-to-board and cable-to-board applications
- Double-row, right-angle shrouded headers
- High density .050 x .050 [1.27 x 1.27] centerline grid
- Latching and non-latching versions available
- Non-protrusive metallic holddowns
- Metallic tabs, when soldered to PC board pad, provide added mechanical support
- Duplex plated post contacts; gold plated on mating area, tin plated on tails
- Compatible with standard surface-mount processing (VPR and IR)
- Standoffs on header housings allow for drainage of processing fluids
- All headers are polarized
- Sizes of 10, 20, 30, 40, 50, 60, 70, 80 and 100 positions
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 
- Certified by Canadian Standards Association File No. LR7189 



AMPMODU 50/50 Grid Right-Angle Headers will accommodate a variety of high density packaging applications; right-angle board-to-board applications when mated with vertical receptacles and right-angle cable-to-board applications when mated with cable connectors. The small .050 x .050 [1.27 x 1.27] centerline contact spacing allows efficient use of the PC board area.

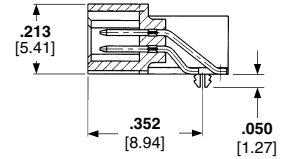
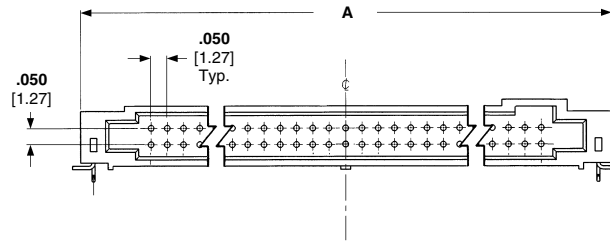
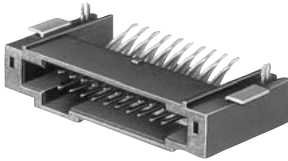
Mechanical support of the headers to the PC board is provided by non-protrusive metallic holddowns designed for .062 [1.57] or thicker PC boards. These holddowns are of the same design as those used in the vertical headers and

receptacles. There are also metallic tabs that are soldered to the surfaces of the PC board pads for added support.

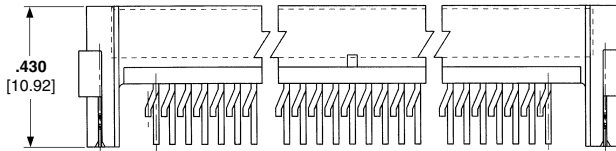
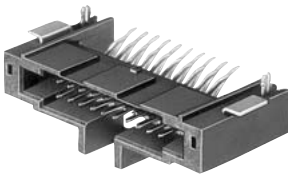
AMPMODU 50/50 Grid Right-Angle Headers are available in double-row, in either latching or non-latching versions, and in sizes ranging from 10 through 100 positions (in 10 position increments). The latching version provides positive retention when mated with the latching cable connector. All headers feature polarization to help prevent misalignment during mating.

**Board-to-Board Right-Angle Headers, Double Row, .050 x .050  
[1.27 x 1.27] Centerline**

**Non-Latching Header**



**Latching Header**



**Material and Finish:**

**Housing** — Liquid crystal polymer, black, 94V-0 rated

**Contacts** — Brass; duplex plated .000030 [0.00076] gold in mating area, .000150 [0.00381] tin on solder tail, with entire contact underplated .000050 [0.00127] nickel

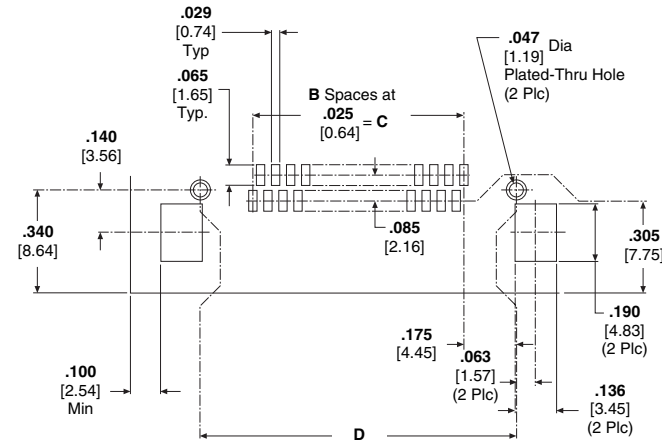
**Holddown** — Copper alloy; plated .0000150 [0.00381] tin over .000050 [0.00127] nickel

**Related Product Data:**

**Product Specification** 108-1443

**Application Specification** 114-7010

**Packaging:** Tube



**Recommended PC Board Layout**

**Note:** Refer to Tyco Electronics Customer Drawings for additional PC board layout information and dimensional tolerances.

No. of Pos.	Dimensions				Header Part Numbers	
	A	B	C	D	Latching	Non-Latching
10	.630 [16.00]	9	.225 [5.72]	.550 [13.97]	5-104895-1	5-104894-1
20	.880 [22.35]	19	.475 [12.07]	.800 [20.32]	5-104895-2	5-104894-2
30	1.130 [28.70]	29	.725 [18.42]	1.050 [26.67]	5-104895-3	5-104894-3
40	1.380 [35.05]	39	.975 [24.77]	1.300 [33.02]	5-104895-4	5-104894-4
50	1.630 [41.40]	49	1.225 [31.12]	1.550 [39.37]	5-104895-5	5-104894-5
60	1.880 [47.75]	59	1.475 [37.47]	1.800 [45.72]	5-104895-6	5-104894-6
70	2.130 [54.10]	69	1.725 [43.82]	2.050 [52.07]	5-104895-7	5-104894-7
80	2.380 [60.45]	79	1.975 [50.17]	2.300 [58.42]	5-104895-8	5-104894-8
100	2.880 [73.15]	99	2.475 [62.87]	2.800 [71.12]	6-104895-0	6-104894-0

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch



Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

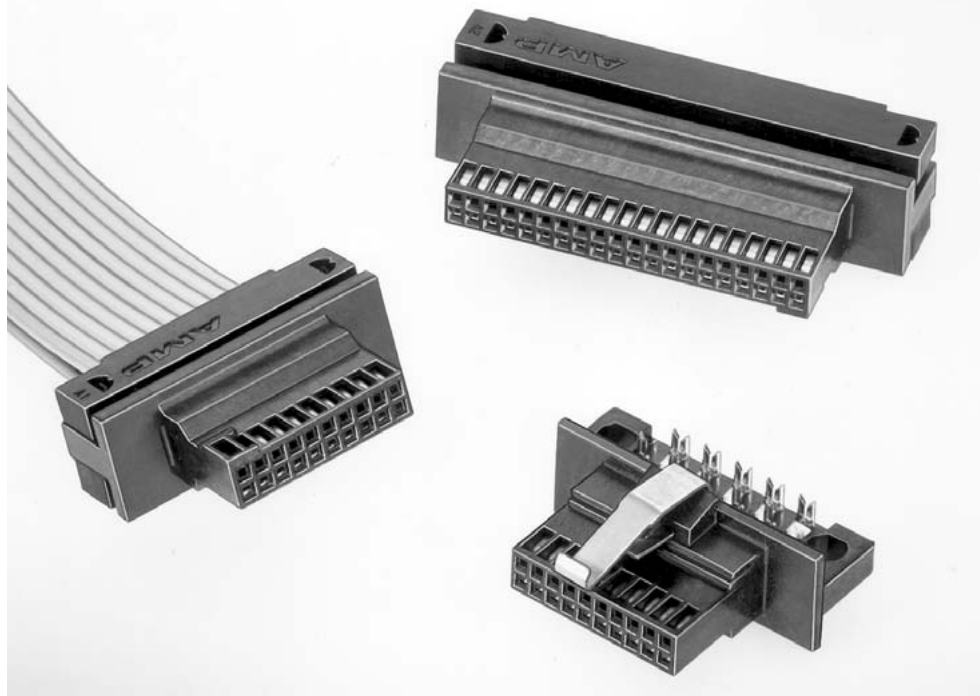
All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

**Cable-to-Board Connectors**

**Product Facts**

- Double-row receptacle connectors provide cable-to-board connection capabilities for vertical headers (non-latching) and right-angle headers (latching and non-latching)
- IDC (Insulation Displacement Crimp) mass termination of solid or stranded round conductor .050 [1.27] centerline ribbon cable with PVC or polyethylene insulation
- Accommodates ribbon cable conductor sizes of 28 AWG [0.08-0.09 mm<sup>2</sup>] and 30 AWG [0.05 mm<sup>2</sup>] and insulation diameters up to .036 [0.91] maximum
- Reliable single beam receptacle contact design
- Duplex plated receptacle contacts; gold plated in mating area, bright tin in termination area
- Terminating covers (sold separately) provide both strain relief and protection to the termination area
- Sizes of 10, 20, 30, 40, 50, 60, 70, 80 and 100 positions
- Connectors available with or without metal latch
- Connectors without latches are polarized to help prevent mismatching
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 
- Certified by Canadian Standards Association File No. LR7189 



These double-row cable connectors, with a .050 x .050 [1.27 x 1.27] centerline contact spacing, provide cable-to-board connection capabilities for the AMPMODU 50/50 Grid Connector System. Cable connectors without a latch will mate with the vertical headers, while cable connectors with or without a latch can be used to mate with the right-angle headers.

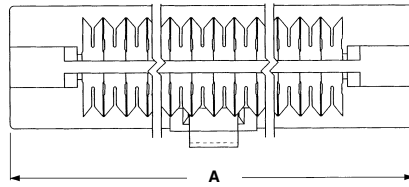
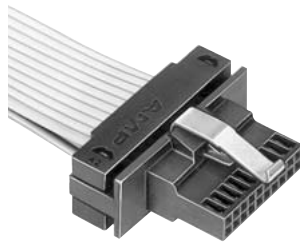
The cable connectors feature reliable single-beam IDC (insulation displacement crimp) contacts which are duplex plated with .000030 [0.00076] gold. These contacts can be mass terminated to either solid or stranded round conductor

ribbon cable with conductor sizes of 28 AWG [0.08-0.09 mm<sup>2</sup>] and 30 AWG [0.05 mm<sup>2</sup>] and a maximum insulation diameter of .036 [0.91]. During termination, the terminating covers, which must be purchased separately, assist in guiding the wire into the IDC contacts, then provide strain relief when fully seated. Actual termination is accomplished with the AMP manual tooling.

The latching version of the cable connector is equipped with a metal latch which provides positive retention of the receptacle cable connector when mated with a surface-mounted right-angle header. The cable

connector without a metal latch features polarization to help prevent mismatching. All connectors are available in sizes ranging from 10 through 100 positions (in 10 position increments).

**Cable-to-Board Receptacle Connectors, Double Row, .050 x .050  
[1.27 x 1.27] Centerline (Continued)**



**Material and Finish:**

**Housing** — Thermoplastic, black, 94V-0 rated

**Latch** — Stainless steel

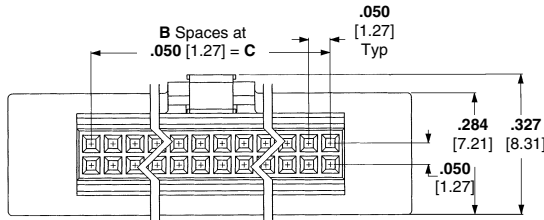
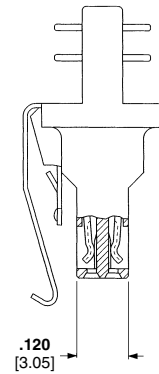
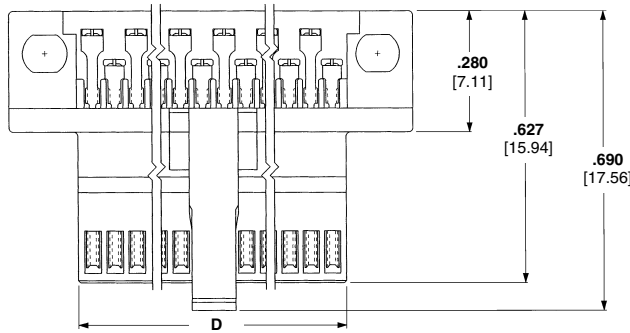
**Contacts** — Phosphor bronze; duplex plated .000030 [0.00076] minimum gold in mating area, .000050 [0.00127] minimum bright tin in termination area, with entire contact underplated .000050 [0.00127] minimum nickel

**Related Product Data:**

**Product Specification** 108-1443

**Application Specification** 408-9817, 408-9909

**Packaging:** Tube



No. of Pos.	Dimensions				Receptacle Part Numbers	
	A	B	C	D	With Latch	Without Latch
10	.578 [14.68]	4	.200 [5.08]	.266 [6.76]	5-104892-1	5-104893-1
20	.828 [21.03]	9	.450 [11.43]	.516 [13.11]	5-104892-2	5-104893-2
30	1.078 [27.38]	14	.700 [17.78]	.766 [19.46]	5-104892-3	5-104893-3
40	1.328 [33.73]	19	.950 [24.13]	1.016 [25.81]	5-104892-4	5-104893-4
50	1.578 [40.08]	24	1.200 [30.48]	1.266 [32.16]	5-104892-5	5-104893-5
60	1.828 [46.43]	29	1.450 [36.83]	1.516 [38.51]	5-104892-6	5-104893-6
70	2.078 [52.78]	34	1.700 [43.18]	1.766 [44.86]	5-104892-7	5-104893-7
80	2.328 [59.13]	39	1.950 [49.53]	2.016 [51.21]	5-104892-8	5-104893-8
100	2.828 [71.83]	49	2.450 [62.23]	2.516 [63.91]	6-104892-0	6-104893-0

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

**Terminating Covers for Cable Connectors**



**Material:**

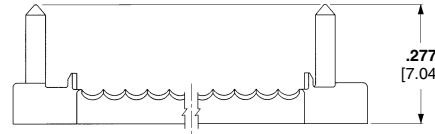
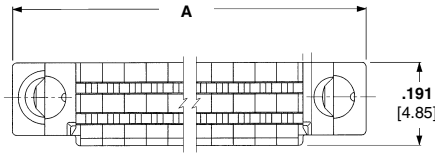
Glass-filled thermoplastic,  
black, 94V-0 rated

**Related Product Data:**

**Product Specification** 108-1443

**Application Specification**  
408-9817, 408-9909

**Packaging:** Plastic bag



No. of Pos.	Dimension A	Terminator Cover Part Numbers
10	.565 [14.35]	104891-1
20	.815 [20.70]	104891-2
30	1.065 [27.05]	104891-3
40	1.315 [33.82]	104891-4
50	1.565 [39.75]	104891-5
60	1.815 [46.10]	104891-6
70	2.065 [52.45]	104891-7
80	2.315 [58.80]	104891-8
100	2.815 [71.50]	1-104891-0

**Note:** Terminating covers must be purchased separately, two are required for each cable connector.

**Application Tooling for Cable Connectors**

The AMP Manual Miniature Application Frame Assembly 91295-1, equipped with a Cover Closing Kit 543518-1, is used for the IDC termination of ribbon cable to the cable connectors.

Prior to termination, the covers must be partially assembled onto a connector housing, the cable inserted between the covers and contacts and the covers preclosed by hand, clamping the cable in place.

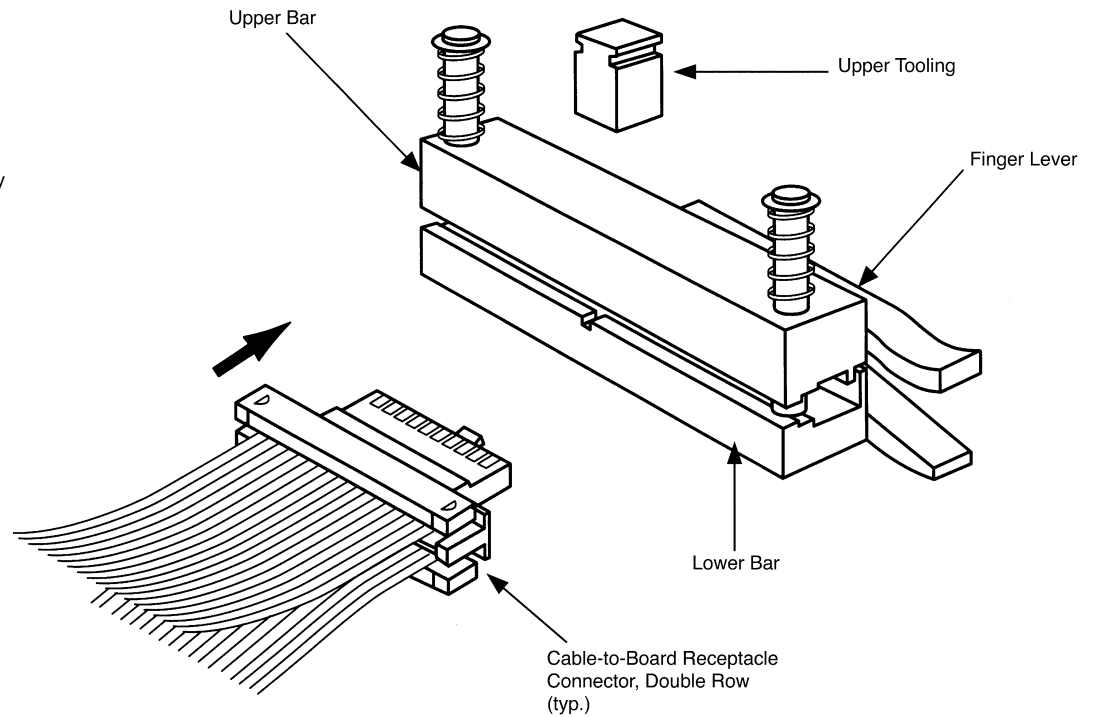
In the Manual Miniature Application Frame Assembly, the covers are fully seated to complete the mass termination and provide strain relief for the completed connection.



Photo 94522

Manual Miniature Application Frame Assembly 91295-1 with Cover Closing Kit 543518-1

**Note:** Refer to AMP Instruction Sheets 408-9817 (Frame Assembly 91295-1) and 408-9909 (Cover Closing Kit 543518-1) for complete termination/tooling information.



**To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)**

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

[www.tycoelectronics.com](http://www.tycoelectronics.com)

## Performance Specifications

### Board-to-Board Connectors, Vertical and Right-Angle

**Mating Force:** 6.4 oz (1.78 N) max. per contact  
**Unmating Force:** 1.0 oz [0.28 N] min. per contact  
**Durability:** Tested to 200 cycles min.  
**Current Rating:** (30°C T rise): .5 ampere per contact  
**Operating Temperature Range:** -65°C to +105°C  
**Termination Resistance:** 16 milliohms max. (initial)  
**Insulation Resistance:** 5000 megohms min. (initial)  
**Dielectric Withstanding Voltage:** 300 VAC

### Cable-to-Board Connectors

**Mating Force:** 6.4 oz (1.78 N) max. per contact  
**Unmating Force Without Latch:** .5 oz [0.14 N] min. per contact  
**Durability:** Tested to 200 cycles min.  
**Current Rating:** (10°C T rise): .5 ampere per contact  
**Operating Temperature Range:** -65°C to +105°C  
**Termination Resistance:** 25 milliohms max. (initial and final)  
**Insulation Resistance:** 5000 megohms min. (initial)  
**Dielectric Withstanding Voltage:** 300 VAC

## Technical Documents

Various technical documents are available for your use:

**Product Specifications** describe technical performance characteristics and verification tests. They are intended for the Design, Component and Quality Engineer.

108-1332      AMPMODU 50/50 Grid Vertical Board-to-Board Connectors  
 108-1443      AMPMODU 50/50 Grid Right-Angle Board-to-Board and Cable Connectors

**Application Specifications** describe requirements for using the product in its intended application and/or crimping information. They are intended for the Packaging and Design Engineer and the Machine Setup Person.

114-7010      AMPMODU 50/50 Grid Connector System

**Instruction Sheets** provide instructions for assembling or applying the product. They are intended for the Manufacturing Assembler or Operator.

408-9817      AMP Manual Miniature Application Frame Assembly 91295-1  
 408-9909      AMP Cover Closing Kit 543518-1



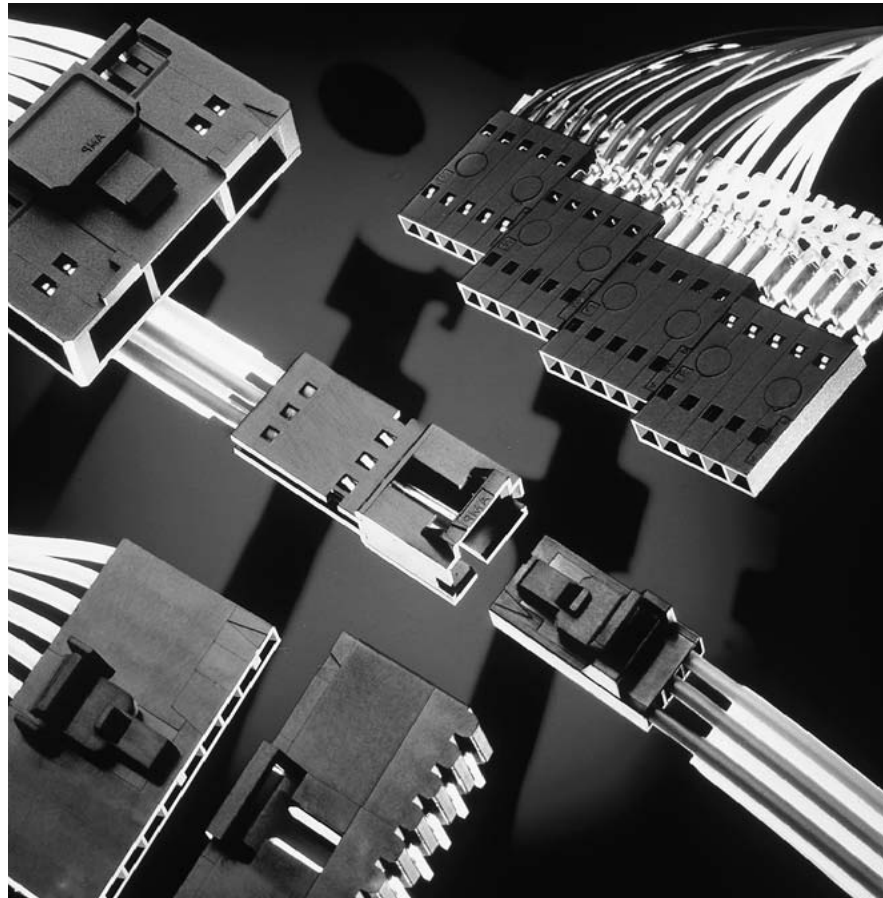
(Images are representative only.)

**To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)**

**MTE Interconnection System**

**Product Facts**

- Receptacle assemblies mate with .025 [0.64] sq. posts; mating post length is .200 [5.08] min., .250 [6.35] max.
- Proven AMPMODU receptacle contact design; dual cantilever beams, built-in anti-overstress, completely enclosed "box" design, standard or high-pressure
- Insulation displacement technology
- Two contact sizes for terminating 30-22 AWG [0.05-0.3 mm<sup>2</sup>] wire range; .054 [1.37] max. insulation diameter with an insulation wall thickness of .015 [0.38] max.
- Choice of gold duplex or tin plated contacts
- Interchangeable crimp snap-in pin and receptacle contacts available
- Housing sizes 2 through 25 positions, single-row .100 [2.54] centers
- Colors also available
- Plain housings are end-to-end and/or back-to-back stackable for open pin field applications
- Optional header with "swaged tail" feature helps prevent movement prior to flow soldering
- Integral latch provides positive retention between header and receptacle housing
- Coupling shrouds permit ganging of smaller connectors with guide ribs to form larger single- or double-row latching connectors
- Mass terminating tooling provides lowest applied cost for most production needs
- SMT and SMT compatible, high-temp headers available
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR7189



The AMPMODU MTE Interconnection System offers both wire-to-board and wire-to-wire connectors using .025 [0.64] sq. post technology.

The AMPMODU MTE Interconnection System consists of single-row housings with contacts preloaded on .100 [2.54] centers. Housings are furnished with contacts partially inserted, leaving the termination areas exposed. Final contact insertion is accomplished automatically by Tyco Electronics application equipment, and manually when terminated with the Tyco Electronics pistol grip hand tool.

The heart of the system is the insulation displacement contact design, featured in both pin and receptacle contacts. The receptacle

contact, available in either standard or high-pressure, features dual cantilever beams in an enclosed "box." The post stop helps prevent a mating post from disturbing the wire termination and also limits the mating depth of a long post to protect a wrap-type termination at the base of the post. The forward contact stop helps prevent contact overinsertion prior to termination. All contacts are furnished on carrier strips which are interlocked for stability and positive location during termination.

Single-row housings are available in sizes 2 through 25 positions. Included are three styles of receptacle housings—plain, polarized/latching and ribbed and two styles of pin housings, shrouded with polarizing/latching feature and ribbed.

**Performance Specifications**

**Electrical Characteristics**

**Contact Current Rating**—3 amperes for single contact in free air (Amperage could vary due to ambient temperature, wire size and duty cycles.)

**Contact Termination Resistance**—15 milliohms (max.)

**Dielectric Withstanding Voltage**—At Sea Level—600 VAC, rms  
At 70,000 Ft. [21 336 m]—225 VAC, rms

**Insulation Resistance**—5,000 megohms (min.)

**Environmental Characteristics**

**Operating Temperature**—-65°C to +105°C

**Vibration**—15 G's (gold), 10 G's (tin)

**Physical Shock**—50 G's

**Industrial Mixed Flow Gasing**—Class 1 (20 days) (gold)

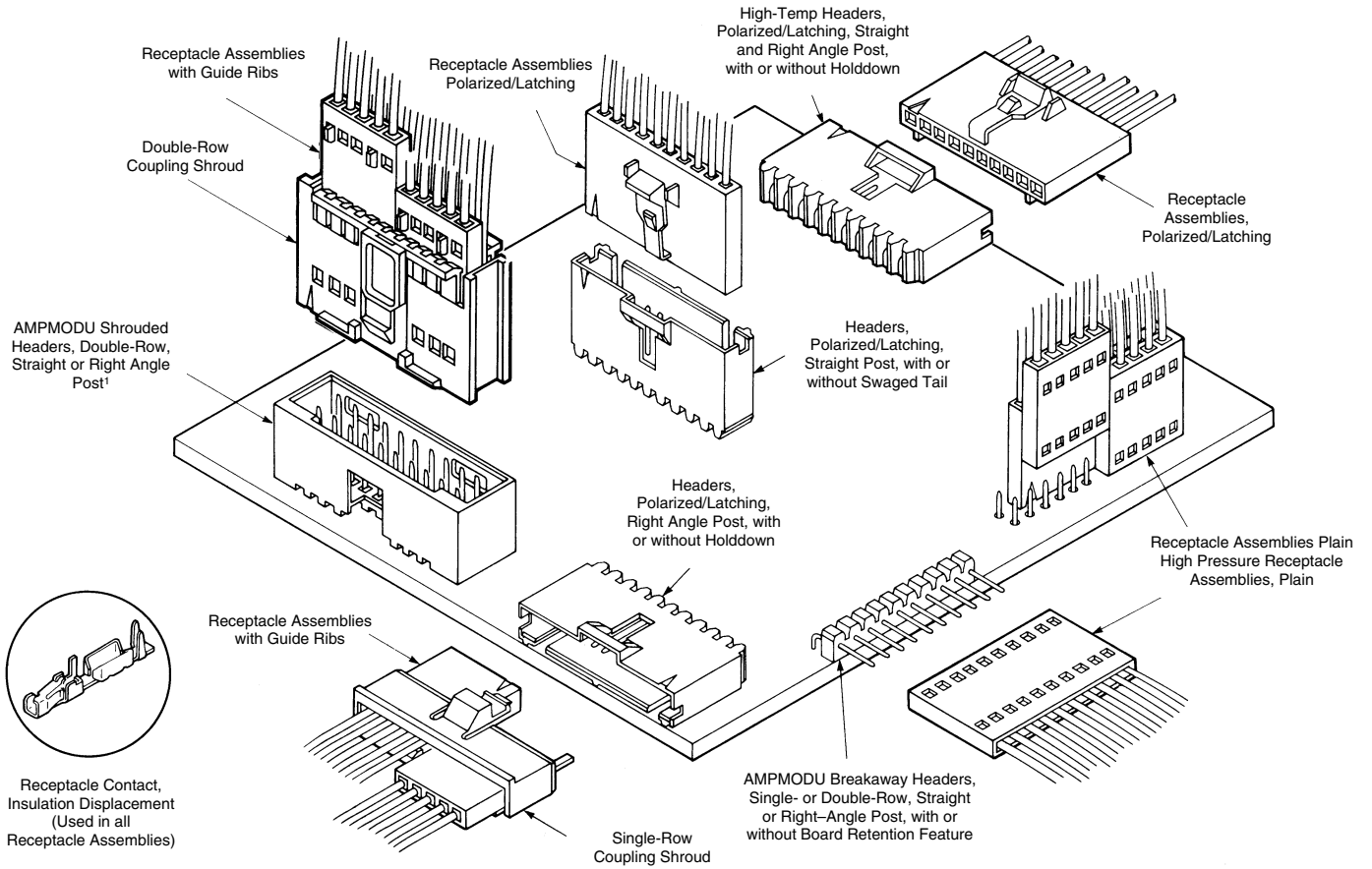
**Product Specification**  
108-25034

**Application Specification**  
114-25026



**MTE Interconnection System (Continued)**

**Wire-to-Board**

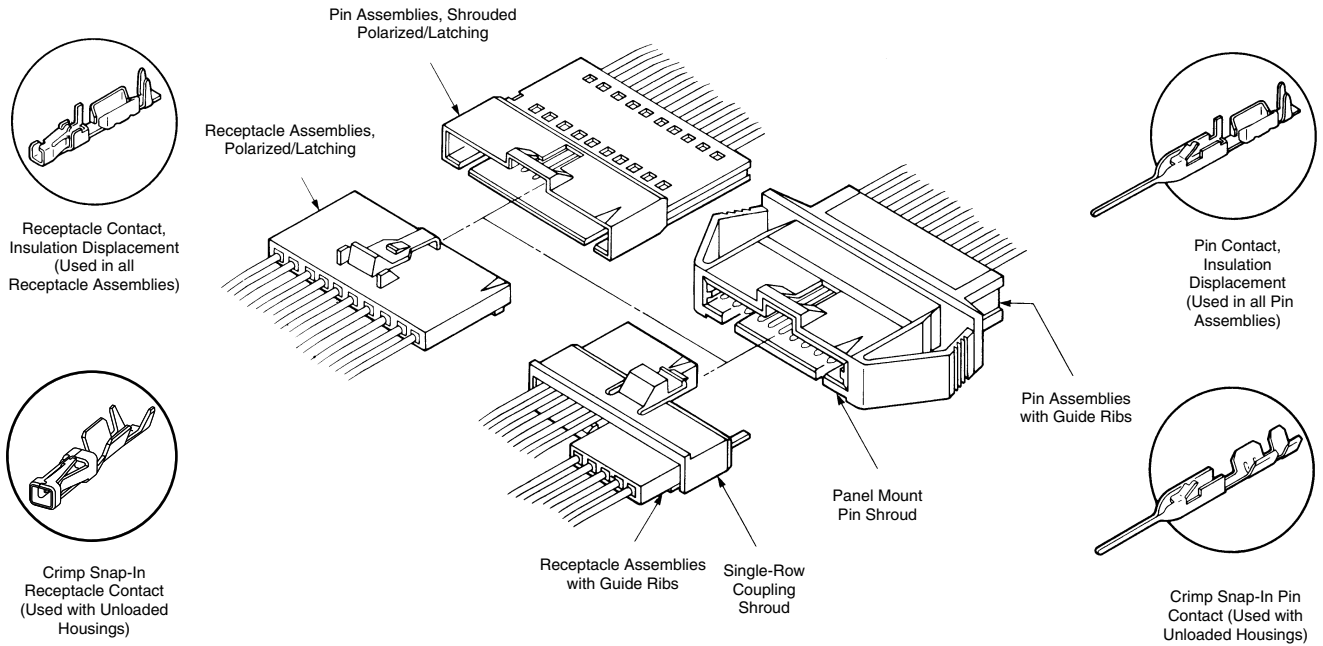


<sup>1</sup>Mating AMPMODU Double-Row Shrouded Header Assemblies must have .318 [8.08] mating post length and .150 [3.81] dimension from centerline of last post to inside of end shroud wall.

<sup>2</sup>Surface Mount Right-Angle and Vertical Headers are also available

**MTE Interconnection System (Continued)**

**Wire-to-Wire**



**Note:** For wire-to-wire applications shown above, all pin and receptacle assembly combinations are intermateable.

2  
PCB and Wire Connectors

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

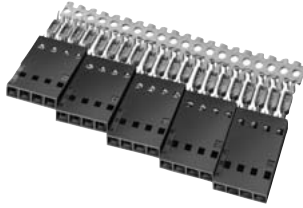
Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

[www.tycoelectronics.com](http://www.tycoelectronics.com)

**MTE Receptacle Assemblies—Plain, Single-Row, .100 [2.54] Centerline**



Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

**Material and Finish:**

**Housing**—Black thermoplastic, 94V-0 rated

**Contacts**—Phosphor Bronze, plated as follows:

**Plating A**—Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B**—Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating C**—.000100 [0.00254] bright tin over .000050 [0.00127] nickel on entire contact

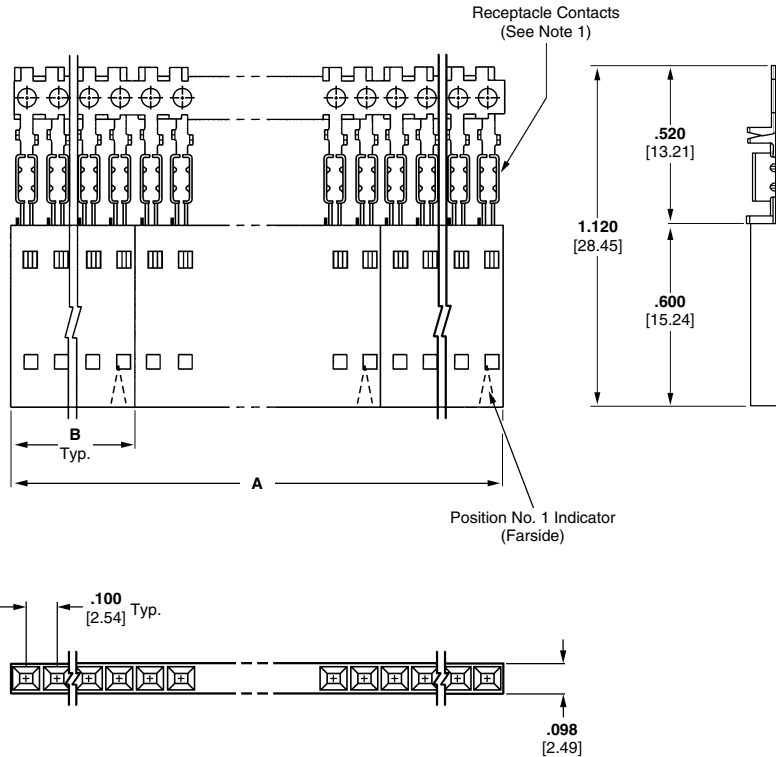
**Note:** Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded housings is .200 [5.08] min., .250 [6.35] max.

**Related Product Data:**

**Product Specification** 108-25034

**Application Specification** 114-25026

These receptacle assemblies with plain housings can be stacked end-to-end and/or side-to-side for single or double-row connections to an open pin field with a .100 [2.54] centerline grid.



Apply wire IDC termination only  
Pistolgrip Head - Handle options  
PN 58336-1

Seat pre-crimped contacts into housing  
Pistolgrip Head - Handle options  
PN 58569-1

Extraction Tool  
PN 843477-1

**Loose Piece Contacts:**

**Hand Tool / Die**

For accessories and other options please visit the hand tool page of our tooling web site (address below) and use the search function and the online hand tool catalogue.

Or alternatively call your local contact for personal assistance.



(Images are representative only.)

To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)

**MTE Receptacle Assemblies—Strip Form Plain, Single-Row, .100 [2.54] Centerline (Continued)**

No. of Pos.	Dimensions		Housing Quantities Per Strip Segment	Strip Form Receptacle Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire			Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire			Unloaded Housings
	A	B		Plating A	Plating B	Plating C	Plating A	Plating B	Plating C	
2	2.000 [50.80]	.198 [5.03]	10	5-103979-1	5-103978-1	5-103977-1	5-103976-1	5-103975-1	5-103974-1	103688-1
3	2.400 [60.96]	.298 [7.57]	8	5-103979-2	5-103978-2	5-103977-2	5-103976-2	5-103975-2	5-103974-2	103688-2
4	1.990 [50.55]	.398 [10.11]	5	5-103979-3	5-103978-3	5-103977-3	5-103976-3	5-103975-3	5-103974-3	103688-3
5	1.990 [50.55]	.498 [12.65]	4	5-103979-4	5-103978-4	5-103977-4	5-103976-4	5-103975-4	5-103974-4	103688-4
6	2.390 [60.71]	.598 [15.19]	4	5-103979-5	5-103978-5	5-103977-5	5-103976-5	5-103975-5	5-103974-5	103688-5
7	1.400 [35.56]	.698 [17.73]	2	5-103979-6	5-103978-6	5-103977-6	5-103976-6	5-103975-6	5-103974-6	103688-6
8	1.600 [40.64]	.798 [20.27]	2	5-103979-7	5-103978-7	5-103977-7	5-103976-7	5-103975-7	5-103974-7	103688-7
9	1.800 [45.72]	.898 [22.81]	2	5-103979-8	5-103978-8	5-103977-8	5-103976-8	5-103975-8	5-103974-8	103688-8
10	2.000 [50.80]	.998 [23.35]	2	5-103979-9	5-103978-9	5-103977-9	5-103976-9	5-103975-9	5-103974-9	103688-9
11	2.200 [55.88]	1.098 [27.89]	2	6-103979-0	6-103978-0	6-103977-0	6-103976-0	6-103975-0	6-103974-0	1-103688-0
12	2.400 [60.96]	1.198 [30.43]	2	6-103979-1	6-103978-1	6-103977-1	6-103976-1	6-103975-1	6-103974-1	1-103688-1

2  
PCB and Wire Connectors

**MTE Receptacle Assemblies—Individual Form Plain, Single-Row, .100 [2.54] Centerline**

No. of Pos.	Dimensions B	Individual Receptacle Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire			Individual Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire			Unloaded Housings
		Plating A	Plating B	Plating C	Plating A	Plating B	Plating C	
13	1.298 [32.96]	6-103903-2	6-103684-2	6-103685-2	6-103902-2	6-103686-2	6-103687-2	1-103688-2
14	1.398 [35.51]	6-103903-3	6-103684-3	6-103685-3	6-103902-3	6-103686-3	6-103687-3	1-103688-3
15	1.498 [38.05]	6-103903-4	6-103684-4	6-103685-4	6-103902-4	6-103686-4	6-103687-4	1-103688-4
16	1.598 [40.59]	6-103903-5	6-103684-5	6-103685-5	6-103902-5	6-103686-5	6-103687-5	1-103688-5
17	1.698 [43.13]	6-103903-6	6-103684-6	6-103685-6	6-103902-6	6-103686-6	6-103687-6	1-103688-6
18	1.798 [45.67]	6-103903-7	6-103684-7	6-103685-7	6-103902-7	6-103686-7	6-103687-7	1-103688-7
19	1.898 [48.20]	6-103903-8	6-103684-8	6-103685-8	6-103902-8	6-103686-8	6-103687-8	1-103688-8
20	1.998 [50.75]	6-103903-9	6-103684-9	6-103685-9	6-103902-9	6-103686-9	6-103687-9	1-103688-9
21	2.098 [53.29]	7-103903-0	7-103684-0	7-103685-0	7-103902-0	7-103686-0	7-103687-0	2-103688-0
22	2.198 [55.83]	7-103903-1	7-103684-1	7-103685-1	7-103902-1	7-103686-1	7-103687-1	2-103688-1
23	2.298 [58.37]	7-103903-2	7-103684-2	7-103685-2	7-103902-2	7-103686-2	7-103687-2	2-103688-2
24	2.398 [60.91]	7-103903-3	7-103684-3	7-103685-3	7-103902-3	7-103686-3	7-103687-3	2-103688-3
25	2.498 [63.45]	7-103903-4	7-103684-4	7-103685-4	7-103902-4	7-103686-4	7-103687-4	2-103688-4

Notes: Keying plugs are available



(Images are representative only.)

To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)

Note: Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

[www.tycoelectronics.com](http://www.tycoelectronics.com)



Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

**Material and Finish:**

**Housing**—Black thermoplastic, 94V-0 rated

**Contacts**—Phosphor Bronze, plated as follows:

**Plating A**—Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B**—Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating C**—.000100 [0.00254] bright tin over .000050 [0.00127] nickel on entire contact

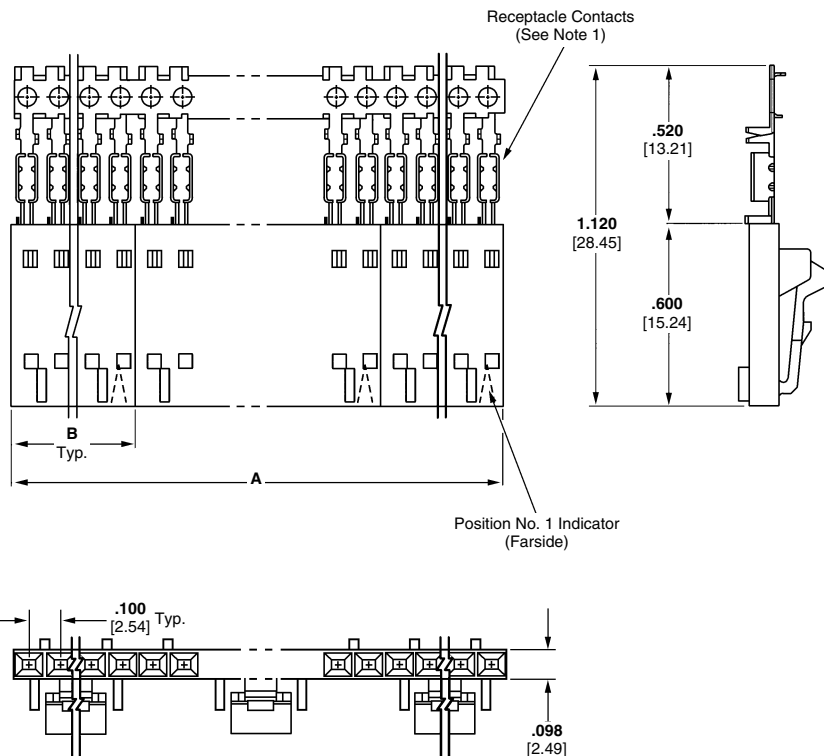
**Note:** Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded housings is .200 [5.08] min., .250 [6.35] max.

**Related Product Data:**

**Product Specification**  
108-25034

**Application Specification**  
114-25026

**MTE Receptacle Assemblies—Polarized/Latching, Single-Row, .100 [2.54] Centerline**



Apply wire IDC termination only  
Pistolgrip Head - Handle options  
PN 58336-1

Seat pre-crimped contacts into housing  
Pistolgrip Head - Handle options  
PN 58569-1

Extraction Tool  
PN 843477-1

**Loose Piece Contacts:**

**Hand Tool / Die**

For accessories and other options please visit the hand tool page of our tooling web site (address below) and use the search function and the online hand tool catalogue.

Or alternatively call your local contact for personal assistance.



(Images are representative only.)

**To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)**

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

[www.tycoelectronics.com](http://www.tycoelectronics.com)

**MTE Receptacle Assemblies—Strip Form Polarized/Latching, Single-Row, .100 [2.54] Centerline (Continued)**

No. of Pos.	Dimensions		Housing Quantities Per Strip Segment	Strip Form Receptacle Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire			Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire			Unloaded Housings
	A	B		Plating A	Plating B	Plating C	Plating A	Plating B	Plating C	
2	2.000 [50.80]	.198 [5.03]	10	5-103961-1	5-103960-1	5-103959-1	5-103958-1	5-103957-1	5-103956-1	104257-1
3	2.400 [60.96]	.298 [7.57]	8	5-103961-2	5-103960-2	5-103959-2	5-103958-2	5-103957-2	5-103956-2	104257-2
4	1.990 [50.55]	.398 [10.11]	5	5-103961-3	5-103960-3	5-103959-3	5-103958-3	5-103957-3	5-103956-3	104257-3
5	1.990 [50.55]	.498 [12.65]	4	5-103961-4	5-103960-4	5-103959-4	5-103958-4	5-103957-4	5-103956-4	104257-4
6	2.390 [60.71]	.598 [15.19]	4	5-103961-5	5-103960-5	5-103959-5	5-103958-5	5-103957-5	5-103956-5	104257-5
7	1.400 [35.56]	.698 [17.73]	2	5-103961-6	5-103960-6	5-103959-6	5-103958-6	5-103957-6	5-103956-6	104257-6
8	1.600 [40.64]	.798 [20.27]	2	5-103961-7	5-103960-7	5-103959-7	5-103958-7	5-103957-7	5-103956-7	104257-7
9	1.800 [45.72]	.898 [22.81]	2	5-103961-8	5-103960-8	5-103959-8	5-103958-8	5-103957-8	5-103956-8	104257-8
10	2.000 [50.80]	.998 [23.35]	2	5-103961-9	5-103960-9	5-103959-9	5-103958-9	5-103957-9	5-103956-9	104257-9
11	2.200 [55.88]	1.098 [27.89]	2	6-103961-0	6-103960-0	6-103959-0	6-103958-0	6-103957-0	6-103956-0	1-104257-0
12	2.400 [60.96]	1.198 [30.43]	2	6-103961-1	6-103960-1	6-103959-1	6-103958-1	6-103957-1	6-103956-1	1-104257-1

2  
PCB and Wire Connectors

**MTE Receptacle Assemblies—Individual Form Polarized/Latching, Single-Row, .100 [2.54] Centerline**

No. of Pos.	Dimensions B	Individual Receptacle Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire			Individual Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire			Unloaded Housings
		Plating A	Plating B	Plating C	Plating A	Plating B	Plating C	
13	1.298 [32.96]	6-103897-2	6-103640-2	6-103641-2	6-103734-2	6-103644-2	6-103645-2	1-104257-2
14	1.398 [35.51]	6-103897-3	6-103640-3	6-103641-3	6-103734-3	6-103644-3	6-103645-3	1-104257-3
15	1.498 [38.05]	6-103897-4	6-103640-4	6-103641-4	6-103734-4	6-103644-4	6-103645-4	1-104257-4
16	1.598 [40.59]	6-103897-5	6-103640-5	6-103641-5	6-103734-5	6-103644-5	6-103645-5	1-104257-5
17	1.698 [43.13]	6-103897-6	6-103640-6	6-103641-6	6-103734-6	6-103644-6	6-103645-6	1-104257-6
18	1.798 [45.67]	6-103897-7	6-103640-7	6-103641-7	6-103734-7	6-103644-7	6-103645-7	1-104257-7
19	1.898 [48.20]	6-103897-8	6-103640-8	6-103641-8	6-103734-8	6-103644-8	6-103645-8	1-104257-8
20	1.998 [50.75]	6-103897-9	6-103640-9	6-103641-9	6-103734-9	6-103644-9	6-103645-9	1-104257-9
21	2.098 [53.29]	7-103897-0	7-103640-0	7-103641-0	7-103734-0	7-103644-0	7-103645-0	2-104257-0
22	2.198 [55.83]	7-103897-1	7-103640-1	7-103641-1	7-103734-1	7-103644-1	7-103645-1	2-104257-1
23	2.298 [58.37]	7-103897-2	7-103640-2	7-103641-2	7-103734-2	7-103644-2	7-103645-2	2-104257-2
24	2.398 [60.91]	7-103897-3	7-103640-3	7-103641-3	7-103734-3	7-103644-3	7-103645-3	2-104257-3
25	2.498 [63.45]	7-103897-4	7-103640-4	7-103641-4	7-103734-4	7-103644-4	7-103645-4	2-104257-4

Notes: Keying plugs are available



(Images are representative only.)

To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)

Note: Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

[www.tycoelectronics.com](http://www.tycoelectronics.com)

**MTE Receptacle Assemblies—Guide Ribs,  
Single-Row, .100 [2.54] Centerline**



Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

**Material and Finish:**

**Housing**—Black thermoplastic, 94V-0 rated

**Contacts**—Phosphor Bronze, plated as follows:

**Plating A**—Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B**—Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating C**—.000100 [0.00254] bright tin over .000050 [0.00127] nickel on entire contact

**Note:** Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded housings is .200 [5.08] min., .250 [6.35] max.

**Related Product Data:**

**Product Specification**  
108-25034

**Application Specification**  
114-25026

Apply wire IDC termination only  
Pistolgrip Head - Handle options  
PN 58336-1

Seat pre-crimped contacts into housing  
Pistolgrip Head - Handle options  
PN 58569-1

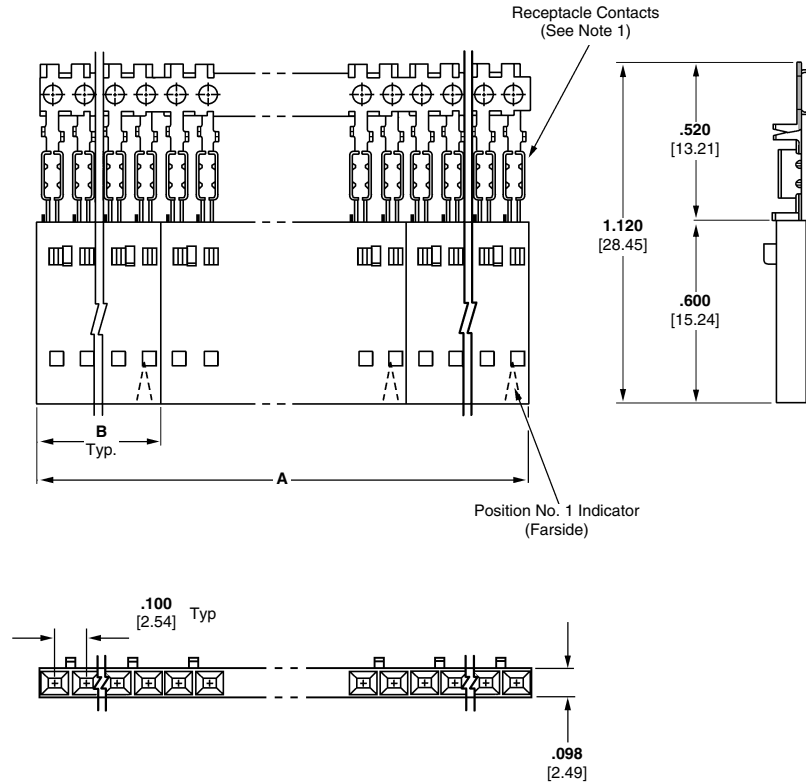
Extraction Tool  
PN 843477-1

**Loose Piece Contacts:**

**Hand Tool / Die**

For accessories and other options please visit the hand tool page of our tooling web site (address below) and use the search function and the online hand tool catalogue.

Or alternatively call your local contact for personal assistance.



(Images are representative only.)

**To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)**

**MTE Receptacle Assemblies—Strip Form with Guide Ribs, Single-Row, .100 [2.54] Centerline (Continued)**

No. of Pos.	Dimensions		Housing Quantities Per Strip Segment	Strip Form Receptacle Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire			Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire			Unloaded Housings
	A	B		Plating A	Plating B	Plating C	Plating A	Plating B	Plating C	
2	2.000 [50.80]	.198 [5.03]	10	5-103973-1	5-103972-1	5-103971-1	5-103970-1	5-103969-1	5-103968-1	103648-1
3	2.400 [60.96]	.298 [7.57]	8	5-103973-2	5-103972-2	5-103971-2	5-103970-2	5-103969-2	5-103968-2	103648-2
4	1.990 [50.55]	.398 [10.11]	5	5-103973-3	5-103972-3	5-103971-3	5-103970-3	5-103969-3	5-103968-3	103648-3
5	1.990 [50.55]	.498 [12.65]	4	5-103973-4	5-103972-4	5-103971-4	5-103970-4	5-103969-4	5-103968-4	103648-4
6	2.390 [60.71]	.598 [15.19]	4	5-103973-5	5-103972-5	5-103971-5	5-103970-5	5-103969-5	5-103968-5	103648-5
7	1.400 [35.56]	.698 [17.73]	2	5-103973-6	5-103972-6	5-103971-6	5-103970-6	5-103969-6	5-103968-6	103648-6
8	1.600 [40.64]	.798 [20.27]	2	5-103973-7	5-103972-7	5-103971-7	5-103970-7	5-103969-7	5-103968-7	103648-7
9	1.800 [45.72]	.898 [22.81]	2	5-103973-8	5-103972-8	5-103971-8	5-103970-8	5-103969-8	5-103968-8	103648-8
10	2.000 [50.80]	.998 [23.35]	2	5-103973-9	5-103972-9	5-103971-9	5-103970-9	5-103969-9	5-103968-9	103648-9
11	2.200 [55.88]	1.098 [27.89]	2	6-103973-0	6-103972-0	6-103971-0	6-103970-0	6-103969-0	6-103968-0	1-103648-0
12	2.400 [60.96]	1.198 [30.43]	2	6-103973-1	6-103972-1	6-103971-1	6-103970-1	6-103969-1	6-103968-1	1-103648-1

2  
PCB and Wire Connectors

**MTE Receptacle Assemblies—Individual Form with Guide Ribs, Single-Row, .100 [2.54] Centerline**

No. of Pos.	Dimensions B	Individual Receptacle Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire			Individual Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire			Unloaded Housings
		Plating A	Plating B	Plating C	Plating A	Plating B	Plating C	
13	1.298 [32.96]	6-103901-2	6-103649-2	6-103650-2	6-103900-2	6-103651-2	6-103652-2	1-103648-2
14	1.398 [35.51]	6-103901-3	6-103649-3	6-103650-3	6-103900-3	6-103651-3	6-103652-3	1-103648-3
15	1.498 [38.05]	6-103901-4	6-103649-4	6-103650-4	6-103900-4	6-103651-4	6-103652-4	1-103648-4
16	1.598 [40.59]	6-103901-5	6-103649-5	6-103650-5	6-103900-5	6-103651-5	6-103652-5	1-103648-5
17	1.698 [43.13]	6-103901-6	6-103649-6	6-103650-6	6-103900-6	6-103651-6	6-103652-6	1-103648-6
18	1.798 [45.67]	6-103901-7	6-103649-7	6-103650-7	6-103900-7	6-103651-7	6-103652-7	1-103648-7
19	1.898 [48.20]	6-103901-8	6-103649-8	6-103650-8	6-103900-8	6-103651-8	6-103652-8	1-103648-8
20	1.998 [50.75]	6-103901-9	6-103649-9	6-103650-9	6-103900-9	6-103651-9	6-103652-9	1-103648-9
21	2.098 [53.29]	7-103901-0	7-103649-0	7-103650-0	7-103900-0	7-103651-0	7-103652-0	2-103648-0
22	2.198 [55.83]	7-103901-1	7-103649-1	7-103650-1	7-103900-1	7-103651-1	7-103652-1	2-103648-1
23	2.298 [58.37]	7-103901-2	7-103649-2	7-103650-2	7-103900-2	7-103651-2	7-103652-2	2-103648-2
24	2.398 [60.91]	7-103901-3	7-103649-3	7-103650-3	7-103900-3	7-103651-3	7-103652-3	2-103648-3
25	2.498 [63.45]	7-103901-4	7-103649-4	7-103650-4	7-103900-4	7-103651-4	7-103652-4	2-103648-4

**Notes:** Keying plugs are available



(Images are representative only.)

**To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)**

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

[www.tycoelectronics.com](http://www.tycoelectronics.com)



**MTE High Pressure Receptacle Assemblies—Plain, Single-Row, .100 [2.54] Centerline**



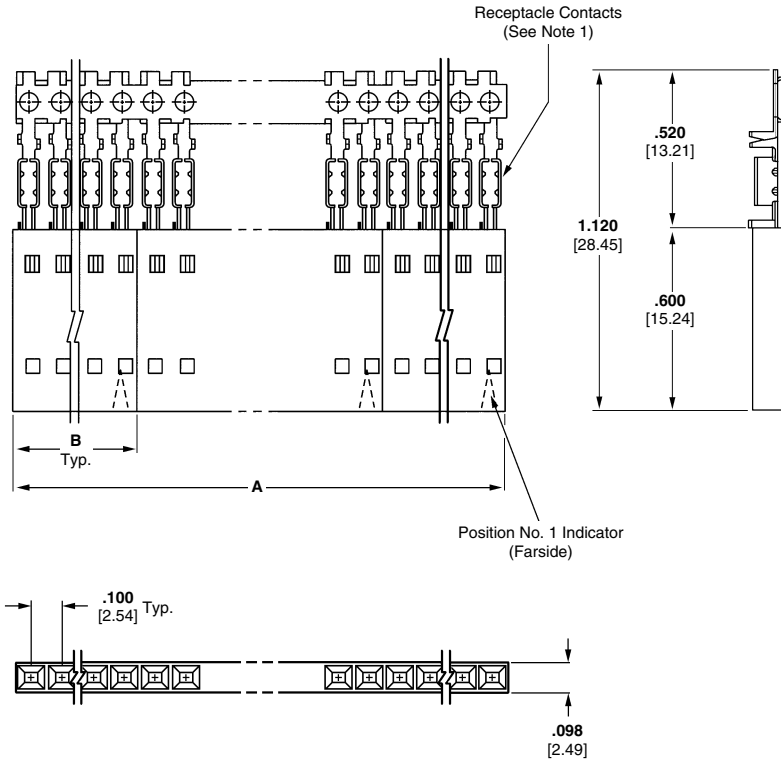
Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

**Material and Finish:**

**Housing**—Black thermoplastic, 94V-0 rated

**Contacts**—Phosphor Bronze, duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Note:** Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded housings is .200 [5.08] min., .250 [6.35] max.



**Related Product Data:**

**Product Specification**

108-25034

**Application Specification**

114-25026

Apply wire IDC termination only  
Pistolgrip Head - Handle options  
PN 58336-1

Seat pre-crimped contacts into housing  
Pistolgrip Head - Handle options  
PN 58569-1

Extraction Tool  
PN 843477-1

**Loose Piece Contacts:**

**Hand Tool / Die**

For accessories and other options please visit the hand tool page of our tooling web site (address below) and use the search function and the online hand tool catalogue.

Or alternatively call your local contact for personal assistance.

No. of Pos	Dimensions		Housings Quantites Per Strip Segment	Strip Form Receptacle Assembly	Strip Form Receptacle Assembly
	A	B		30-26 AWG [.05-.15mm <sup>2</sup> ] Wire	26-22 AWG [.12-.30mm <sup>2</sup> ] Wire
2	1.980 [50.29]	.198 [5.03]	10	5-104438-1	5-104439-1
3	1.490 [37.85]	.298 [7.57]	5	5-104438-2	5-104439-2
4	1.990 [50.55]	.398 [10.11]	5	5-104438-3	5-104439-3
5	1.990 [50.55]	.498 [12.65]	4	5-104438-4	5-104439-4
6	2.390 [60.71]	.598 [15.19]	4	5-104438-5	5-104439-5
7	1.400 [35.56]	.698 [17.73]	2	5-104438-6	5-104439-6
8	1.600 [40.64]	.798 [20.27]	2	5-104438-7	5-104439-7
9	1.800 [45.72]	.898 [22.81]	2	5-104438-8	5-104439-8
10	2.000 [50.80]	.998 [23.35]	2	5-104438-9	5-104439-9
11	2.200 [55.88]	1.098 [27.89]	2	6-104438-0	6-104439-0
12	2.400 [60.96]	1.198 [30.43]	2	6-104438-1	6-104439-1

- Notes:**
1. Receptacle assemblies are furnished with strip contacts partially inserted into housing—contacts latched into "preload" windows. Contacts are fully inserted into housings automatically when terminated with AMP application machines, or manually when terminated with AMP pistol grip hand tool.
  2. High pressure receptacle contacts can be made available in other housing styles and position sizes. Contact your Tyco Electronics sales representative.



(Images are representative only.)

**To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)**

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

**MTE High Pressure Receptacle Assemblies – Guide Ribs**

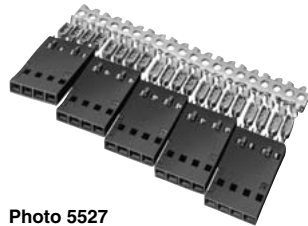


Photo 5527

Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

**Material and Finish:**

**Housing**—Thermoplastic, Color-Black, 94V-0 rated

**Contacts**—Phosphor Bronze, Duplex plated .000030 [0.00076] gold on contact area .000100 [0.00254] min. tin on crimp area, with entire post under-plated .000050 [0.00127] nickel.

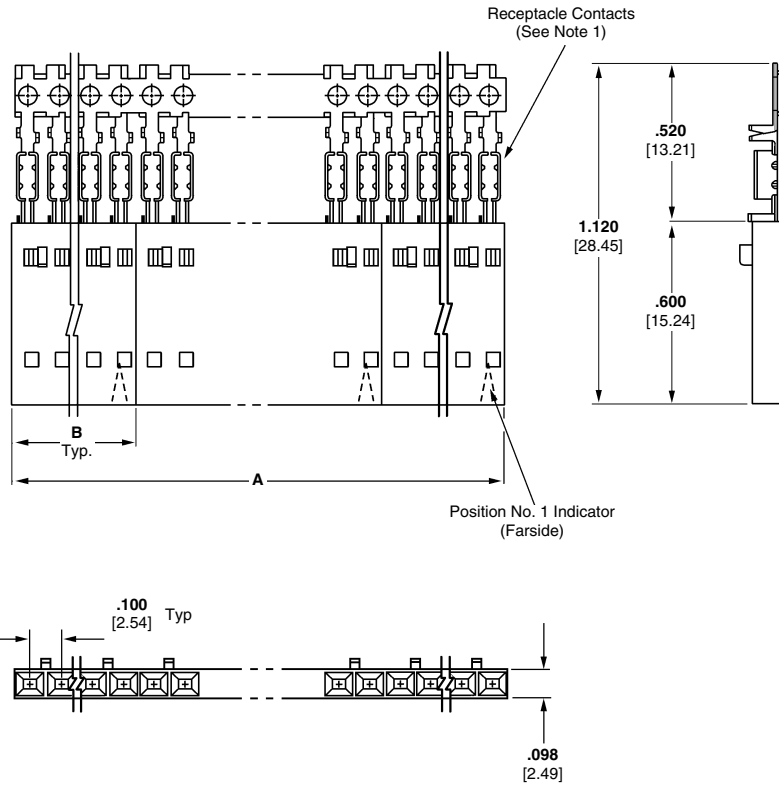
**Related Product Data:**

**Product Specification**

108-25034

**Application Specification**

114-25026



No. of Pos	Dimensions		Housings Quantites Per Strip Segment	Strip Form Receptacle Assembly 30-26 AWG	Strip Form Receptacle Assembly 26-22 AWG
	A	B		[.05-.15mm <sup>2</sup> ] Wire	[.12-.30mm <sup>2</sup> ] Wire
2	1.980 [50.29]	.198 [5.03]	10	5-147396-1	5-147030-3
3	1.490 [37.85]	.298 [7.57]	5	5-147396-2	5-147030-4
4	1.990 [50.55]	.398 [10.11]	5	5-147396-3	5-147030-1
5	1.990 [50.55]	.498 [12.65]	4	5-147396-4	5-147030-2
6	2.390 [60.71]	.598 [15.19]	4	5-147396-5	5-147030-5
7	1.400 [35.56]	.698 [17.73]	2	5-147396-6	5-147030-6
8	1.600 [40.64]	.798 [20.27]	2	5-147396-7	5-147030-7
9	1.800 [45.72]	.898 [22.81]	2	5-147396-8	5-147030-8
10	2.000 [50.80]	.998 [23.35]	2	5-147396-9	5-147030-9
11	2.200 [55.88]	1.098 [27.89]	2	6-147396-0	6-147030-0
12	2.400 [60.96]	1.198 [30.43]	2	6-147396-1	6-147030-1



(Images are representative only.)

**To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)**

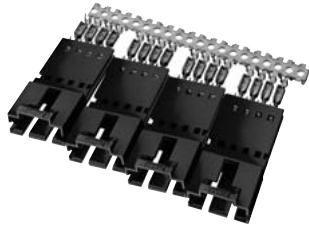
**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

[www.tycoelectronics.com](http://www.tycoelectronics.com)



Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

**Material and Finish:**

**Housing**—Black thermoplastic, 94V-0 rated

**Contacts**—Phosphor Bronze, plated as follows:

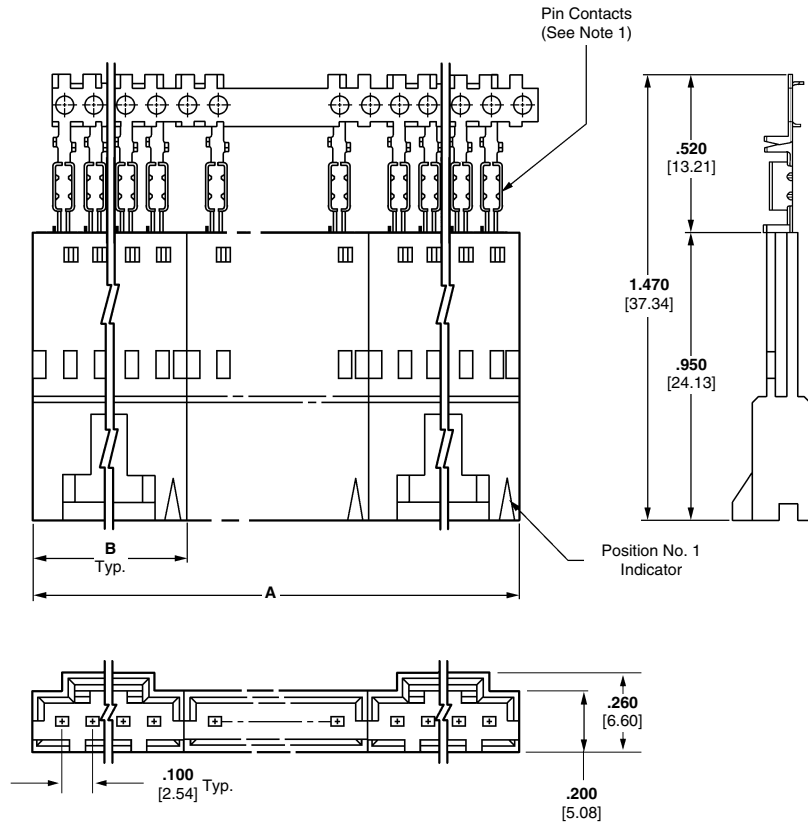
**Plating A**—Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B**—Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating C**—.000100 [0.00254] bright tin over .000050 [0.00127] nickel on entire contact

**Note:** Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max.

**MTE Pin Assemblies, Shrouded—Polarized/Latching, Single-Row, .100 [2.54] Centerline**



**Related Product Data:**

**Product Specification**  
108-25034

**Application Specification**  
114-25026

Apply wire IDC termination only  
Pistolgrip Head - Handle options  
PN 58336-1

Seat pre-crimped contacts into housing  
Pistolgrip Head - Handle options  
PN 58569-1

Extraction Tool  
PN 843477-1

**Loose Piece Contacts:**  
**Hand Tool / Die**

For accessories and other options please visit the hand tool page of our tooling web site (address below) and use the search function and the online hand tool catalogue.

Or alternatively call your local contact for personal assistance.



(Images are representative only.)

**To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)**

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

**MTE Pin Assemblies, Shrouded—Strip Form Polarized/Latching,  
Single-Row, .100 [2.54] Centerline (Continued)**

No. of Pos.	Dimensions		Housing Quantities Per Strip Segment	Strip Form Pin Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire			Strip Form Pin Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire			Unloaded Housings
	A	B		Plating A	Plating B	Plating C	Plating A	Plating B	Plating C	
2	2.360 [59.94]	.295 [7.49]	8	5-103949-1	5-103948-1	5-103947-1	5-103946-1	5-103945-1	5-103944-1	103653-1
3	1.980 [50.29]	.395 [10.03]	5	5-103949-2	5-103948-2	5-103947-2	5-103946-2	5-103945-2	5-103944-2	103653-2
4	1.980 [50.29]	.495 [12.57]	4	5-103949-3	5-103948-3	5-103947-3	5-103946-3	5-103945-3	5-103944-3	103653-3
5	2.380 [60.45]	.595 [15.11]	4	5-103949-4	5-103948-4	5-103947-4	5-103946-4	5-103945-4	5-103944-4	103653-4
6	1.390 [35.31]	.695 [17.65]	2	5-103949-5	5-103948-5	5-103947-5	5-103946-5	5-103945-5	5-103944-5	103653-5
7	2.390 [60.71]	.795 [20.19]	3	5-103949-6	5-103948-6	5-103947-6	5-103946-6	5-103945-6	5-103944-6	103653-6
8	1.790 [45.47]	.895 [22.73]	2	5-103949-7	5-103948-7	5-103947-7	5-103946-7	5-103945-7	5-103944-7	103653-7
9	1.990 [50.57]	.995 [25.27]	2	5-103949-8	5-103948-8	5-103947-8	5-103946-8	5-103945-8	5-103944-8	103653-8
10	2.190 [55.63]	1.095 [27.81]	2	5-103949-9	5-103948-9	5-103947-9	5-103946-9	5-103945-9	5-103944-9	103653-9
11	2.390 [60.71]	1.195 [30.35]	2	6-103949-0	6-103948-0	6-103947-0	6-103946-0	6-103945-0	6-103944-0	1-103653-0
12	2.590 [65.79]	1.295 [32.89]	2	6-103949-1	6-103948-1	6-103947-1	6-103946-1	6-103945-1	6-103944-1	1-103653-1

2  
PCB and Wire Connectors

**MTE Pin Assemblies, Shrouded—Individual Form Polarized/Latching,  
Single-Row, .100 [2.54] Centerline**

No. of Pos.	Dimensions B	Individual Pin Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire			Individual Pin Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire			Unloaded Housings
		Plating A	Plating B	Plating C	Plating A	Plating B	Plating C	
13	1.395 [35.43]	6-103894-2	6-103658-2	6-103659-2	6-103893-2	6-103660-2	6-103661-2	1-103653-2
14	1.495 [37.97]	6-103894-3	6-103658-3	6-103659-3	6-103893-3	6-103660-3	6-103661-3	1-103653-3
15	1.595 [40.51]	6-103894-4	6-103658-4	6-103659-4	6-103893-4	6-103660-4	6-103661-4	1-103653-4
16	1.695 [43.05]	6-103894-5	6-103658-5	6-103659-5	6-103893-5	6-103660-5	6-103661-5	1-103653-5
17	1.795 [45.59]	6-103894-6	6-103658-6	6-103659-6	6-103893-6	6-103660-6	6-103661-6	1-103653-6
18	1.895 [48.13]	6-103894-7	6-103658-7	6-103659-7	6-103893-7	6-103660-7	6-103661-7	1-103653-7
19	1.995 [50.67]	6-103894-8	6-103658-8	6-103659-8	6-103893-8	6-103660-8	6-103661-8	1-103653-8
20	2.095 [53.21]	6-103894-9	6-103658-9	6-103659-9	6-103893-9	6-103660-9	6-103661-9	1-103653-9
21	2.195 [55.75]	7-103894-0	7-103658-0	7-103659-0	7-103893-0	7-103660-0	7-103661-0	2-103653-0
22	2.295 [58.29]	7-103894-1	7-103658-1	7-103659-1	7-103893-1	7-103660-1	7-103661-1	2-103653-1
23	2.395 [60.83]	7-103894-2	7-103658-2	7-103659-2	7-103893-2	7-103660-2	7-103661-2	2-103653-2
24	2.495 [63.37]	7-103894-3	7-103658-3	7-103659-3	7-103893-3	7-103660-3	7-103661-3	2-103653-3
25	2.595 [65.91]	7-103894-4	7-103658-4	7-103659-4	7-103893-4	7-103660-4	7-103661-4	2-103653-4

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

**MTE Pin Assemblies—Guide Ribs, Single-Row, .100 [2.54] Centerline**



Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

**Material and Finish:**

**Housing**—Black thermoplastic, 94V-0 rated

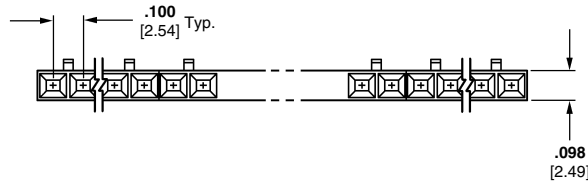
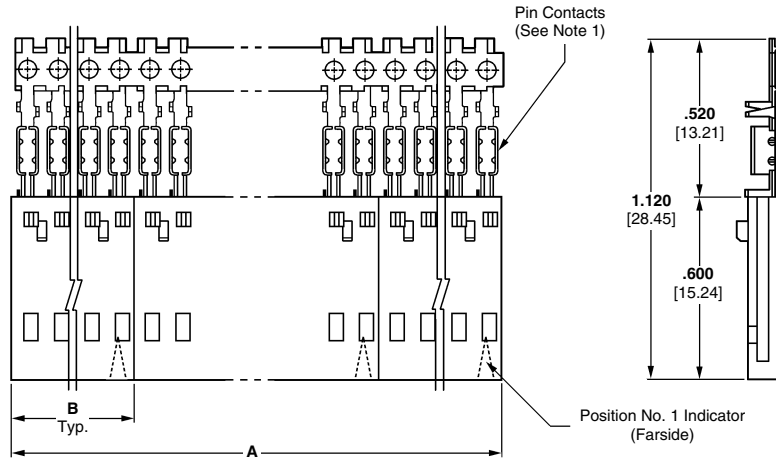
**Contacts**—Phosphor Bronze, plated as follows:

**Plating A**—Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B**—Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating C**—.000100 [0.00254] bright tin over .000050 [0.00127] nickel on entire contact

**Note:** Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max.



**Related Product Data:**

**Product Specification**  
108-25034

**Application Specification**  
114-25026

Apply wire IDC termination only  
Pistolgrip Head - Handle options  
PN 58336-1

Seat pre-crimped contacts into housing  
Pistolgrip Head - Handle options  
PN 58569-1

Extraction Tool  
PN 843477-1

**Loose Piece Contacts:**

**Hand Tool / Die**

For accessories and other options please visit the hand tool page of our tooling web site (address below) and use the search function and the online hand tool catalogue.

Or alternatively call your local contact for personal assistance.



(Images are representative only.)

**To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)**

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

**MTE Pin Assemblies—Strip Form with Guide Ribs,  
Single-Row, .100 [2.54] Centerline (Continued)**

No. of Pos.	Dimensions		Housing Quantities Per Strip Segment	Strip Form Pin Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire			Strip Form Pin Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire			Unloaded Housings
	A	B		Plating A	Plating B	Plating C	Plating A	Plating B	Plating C	
2	1.980 [50.29]	0.198 [5.03]	10	5-103955-1	5-103954-1	5-103953-1	5-103952-1	5-103951-1	5-103950-1	104503-1
3	1.490 [37.85]	0.298 [7.57]	5	5-103955-2	5-103954-2	5-103953-2	5-103952-2	5-103951-2	5-103950-2	104503-2
4	1.990 [50.55]	0.398 [10.11]	5	5-103955-3	5-103954-3	5-103953-3	5-103952-3	5-103951-3	5-103950-3	104503-3
5	1.990 [50.55]	0.498 [12.65]	4	5-103955-4	5-103954-4	5-103953-4	5-103952-4	5-103951-4	5-103950-4	104503-4
6	2.390 [60.71]	0.598 [15.19]	4	5-103955-5	5-103954-5	5-103953-5	5-103952-5	5-103951-5	5-103950-5	104503-5
7	1.400 [35.56]	0.698 [17.73]	2	5-103955-6	5-103954-6	5-103953-6	5-103952-6	5-103951-6	5-103950-6	104503-6
8	1.600 [40.64]	0.798 [20.27]	2	5-103955-7	5-103954-7	5-103953-7	5-103952-7	5-103951-7	5-103950-7	104503-7
9	1.800 [45.72]	0.898 [22.81]	2	5-103955-8	5-103954-8	5-103953-8	5-103952-8	5-103951-8	5-103950-8	104503-8
10	2.000 [50.80]	0.998 [25.35]	2	5-103955-9	5-103954-9	5-103953-9	5-103952-9	5-103951-9	5-103950-9	104503-9
11	2.200 [55.88]	1.098 [27.89]	2	6-103955-0	6-103954-0	6-103953-0	6-103952-0	6-103951-0	6-103950-0	1-104503-0
12	2.400 [60.96]	1.198 [30.43]	2	6-103955-1	6-103954-1	6-103953-1	6-103952-1	6-103951-1	6-103950-1	1-104503-1

2  
PCB and Wire Connectors

**MTE Pin Assemblies—Individual Form with Guide Ribs,  
Single-Row, .100 [2.54] Centerline**

No. of Pos.	Dimensions B	Individual Pin Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire			Individual Pin Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire			Unloaded Housings
		Plating A	Plating B	Plating C	Plating A	Plating B	Plating C	
13	1.398 [35.51]	6-103896-2	6-103657-2	6-103656-2	6-103895-2	6-103655-2	6-103654-2	1-104503-2
14	1.498 [38.05]	6-103896-3	6-103657-3	6-103656-3	6-103895-3	6-103655-3	6-103654-3	1-104503-3
15	1.598 [40.59]	6-103896-4	6-103657-4	6-103656-4	6-103895-4	6-103655-4	6-103654-4	1-104503-4
16	1.698 [43.13]	6-103896-5	6-103657-5	6-103656-5	6-103895-5	6-103655-5	6-103654-5	1-104503-5
17	1.798 [45.67]	6-103896-6	6-103657-6	6-103656-6	6-103895-6	6-103655-6	6-103654-6	1-104503-6
18	1.898 [48.20]	6-103896-7	6-103657-7	6-103656-7	6-103895-7	6-103655-7	6-103654-7	1-104503-7
19	1.998 [50.75]	6-103896-8	6-103657-8	6-103656-8	6-103895-8	6-103655-8	6-103654-8	1-104503-8
20	2.098 [53.29]	6-103896-9	6-103657-9	6-103656-9	6-103895-9	6-103655-9	6-103654-9	1-104503-9
21	2.198 [55.83]	7-103896-0	7-103657-0	7-103656-0	7-103895-0	7-103655-0	7-103654-0	2-104503-0
22	2.298 [58.37]	7-103896-1	7-103657-1	7-103656-1	7-103895-1	7-103655-1	7-103654-1	2-104503-1
23	2.398 [60.91]	7-103896-2	7-103657-2	7-103656-2	7-103895-2	7-103655-2	7-103654-2	2-104503-2
24	2.498 [63.45]	7-103896-3	7-103657-3	7-103656-3	7-103895-3	7-103655-3	7-103654-3	2-104503-3
25	2.598 [65.99]	7-103896-4	7-103657-4	7-103656-4	7-103895-4	7-103655-4	7-103654-4	2-104503-4

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

**Coupling Shrouds for MTE Receptacle Assemblies with Guide Ribs**

**Single-Row**

**Material:**

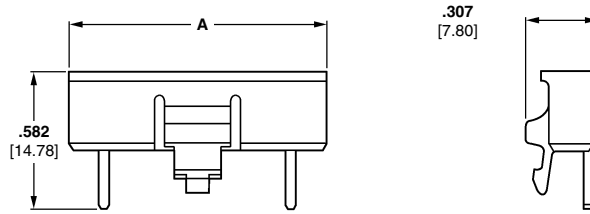
Black thermoplastic, 94V-0 rated

**Product Specification**

108-25034

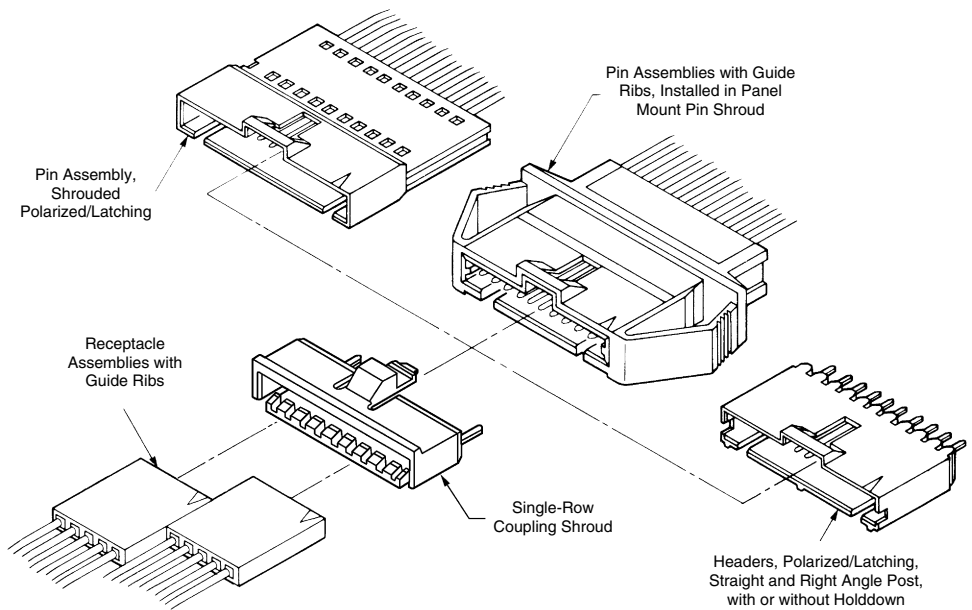
**Application Specification**

114-25026



No. of Pos.	Dimension A	Single-Row Coupling Shroud
4	.485 [12.32]	103680-1
5	.585 [14.86]	103680-2
6	.685 [17.40]	103680-3
7	.785 [19.94]	103680-4
8	.885 [22.48]	103680-5
9	.985 [25.02]	103680-6
10	1.085 [27.56]	103680-7
11	1.185 [30.10]	103680-8
12	1.285 [32.64]	103680-9
13	1.385 [35.18]	1-103680-0
14	1.485 [37.72]	1-103680-1

No. of Pos.	Dimension A	Single-Row Coupling Shroud
15	1.585 [40.26]	1-103680-2
16	1.685 [42.80]	1-103680-3
17	1.785 [45.34]	1-103680-4
18	1.885 [47.88]	1-103680-5
19	1.985 [50.42]	1-103680-6
20	2.085 [52.96]	1-103680-7
21	2.185 [55.50]	1-103680-8
22	2.285 [58.04]	1-103680-9
23	2.385 [60.58]	2-103680-0
24	2.485 [63.12]	2-103680-1
25	2.585 [65.66]	2-103680-2



**Typical Application of Single-Row Coupling Shroud and Mating AMPMODU MTE Products**

**Coupling Shrouds for MTE Receptacle Assemblies with Guide Ribs (Continued)**

**Double-Row**

**Material:**

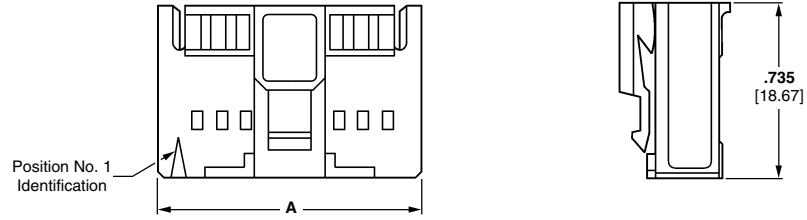
Black thermoplastic, 94V-0 rated

**Product Specification**

108-25034

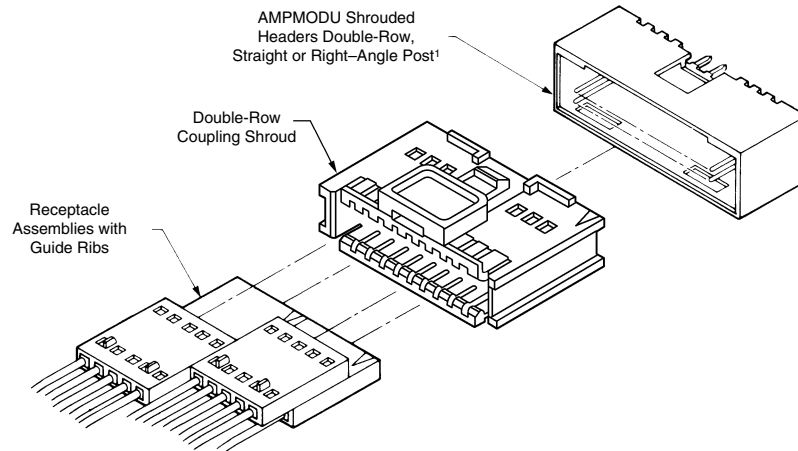
**Application Specification**

114-25026



No. of Pos.	Dimension A	Double-Row Coupling Shroud
8	.585 [14.86]	103681-1
10	.685 [17.40]	103681-2
12	.785 [19.94]	103681-3
14	.885 [22.48]	103681-4
16	.985 [25.02]	103681-5
18	1.085 [27.56]	104500-1
20	1.185 [30.10]	104500-2
22	1.285 [32.64]	104500-3
24	1.385 [35.18]	104500-4
26	1.485 [37.72]	104500-5
28	1.585 [40.26]	104500-6
30	1.685 [42.80]	104500-7
32	1.785 [45.34]	104500-8
34	1.885 [47.88]	104500-9
40	2.185 [55.50]	1-104500-0
50	2.685 [68.20]	1-104500-1

2  
PCB and Wire Connectors



¹Mating AMPMODU Double-Row Shrouded Headers must have .318 [8.08] mating post length and .150 [3.81] dimension from centerline of last post to inside of end shroud wall.

**Typical Application of Double-Row Coupling Shroud and Mating AMPMODU Products**

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com



**Panel Mount Pin Shrouds for MTE Pin Assemblies  
with Guide Ribs, Single-Row**

**Material:**

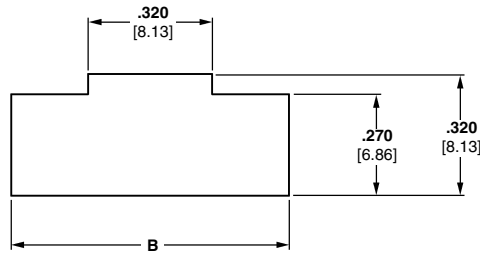
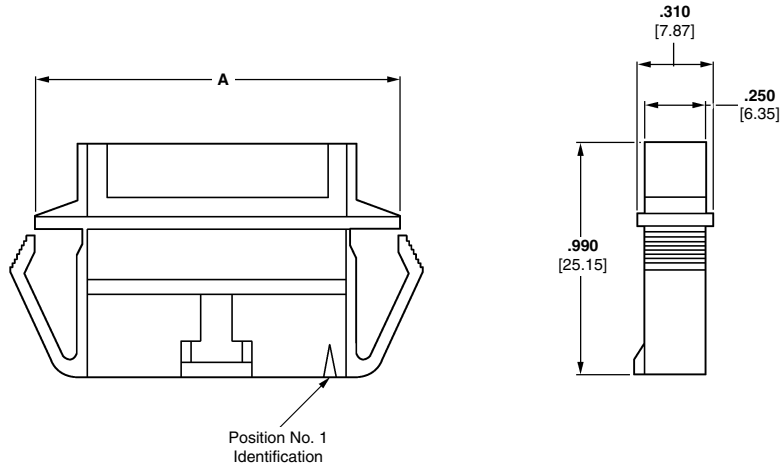
Black thermoplastic, 94V-0 rated

**Product Specification**

108-25034

**Application Specification**

114-25026



No. of Pos.	Dimensions		Panel Mount Pin Shroud
	A	B	
2	.735 [18.67]	.625 [15.88]	103682-1
3	.835 [21.21]	.725 [18.42]	103682-2
4	.935 [23.75]	.825 [20.96]	103682-3
5	1.035 [26.29]	.925 [23.50]	103682-4
6	1.135 [28.83]	1.025 [26.04]	103682-5
7	1.235 [31.37]	1.125 [28.58]	103682-6
8	1.335 [33.91]	1.225 [31.12]	103682-7
9	1.435 [36.45]	1.325 [33.66]	103682-8
10	1.535 [38.99]	1.425 [36.20]	103682-9
11	1.635 [41.53]	1.525 [38.74]	1-103682-0
12	1.735 [44.07]	1.625 [41.28]	1-103682-1
13	1.835 [46.61]	1.725 [43.82]	1-103682-2

No. of Pos.	Dimensions		Panel Mount Pin Shroud
	A	B	
14	1.935 [49.15]	1.825 [46.36]	1-103682-3
15	2.035 [51.69]	1.925 [48.90]	1-103682-4
16	2.135 [54.23]	2.025 [51.44]	1-103682-5
17	2.235 [56.77]	2.125 [53.98]	1-103682-6
18	2.335 [59.31]	2.225 [56.52]	1-103682-7
19	2.435 [61.85]	2.325 [59.06]	1-103682-8
20	2.535 [64.39]	2.425 [61.60]	1-103682-9
21	2.635 [66.93]	2.525 [64.14]	2-103682-0
22	2.735 [69.47]	2.625 [66.68]	2-103682-1
23	2.835 [72.01]	2.725 [69.22]	2-103682-2
24	2.935 [74.55]	2.825 [71.76]	2-103682-3
25	3.035 [77.09]	2.925 [74.30]	2-103682-4

**Panel Mount Pin Shrouds for MTE Pin Assemblies with Guide Ribs, Single-Row (Continued)**

**Material:**

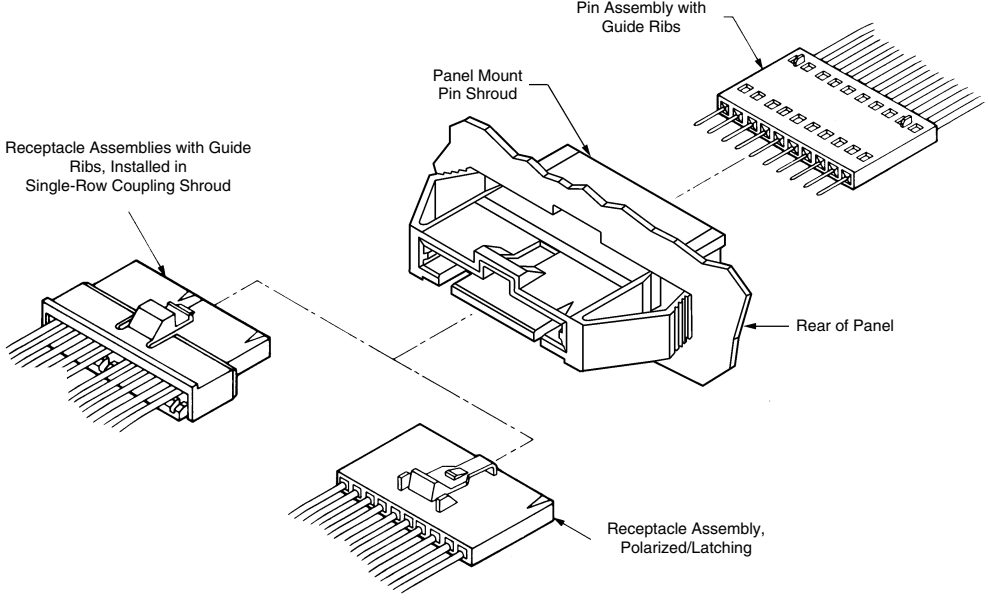
Black thermoplastic, 94V-0 rated

**Product Specification**

108-25034

**Application Specification**

114-25026



2  
PCB and Wire Connectors

**Typical Application of Panel Mount Pin Shroud and Mating AMPMODU Products**

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

**MTE Headers, Shrouded Polarized/Latching,  
Single-Row .100 [2.54] Centerline**

**.025 [0.64] Square  
Straight Post (With or  
Without Swaged Tail)**

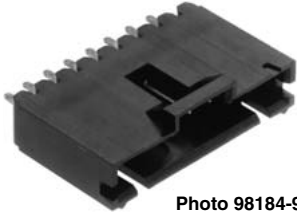
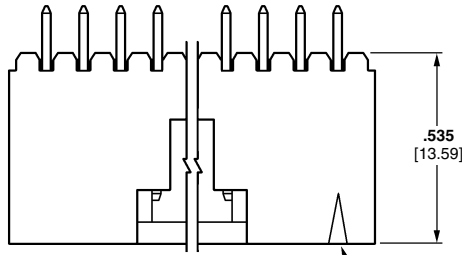


Photo 98184-9



Position No. 1 Indicator



Swaged Retention Tail  
(See Note)

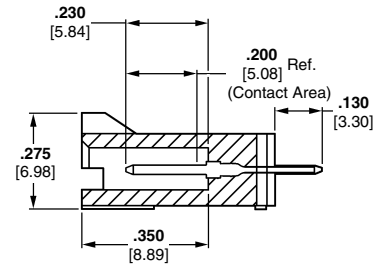
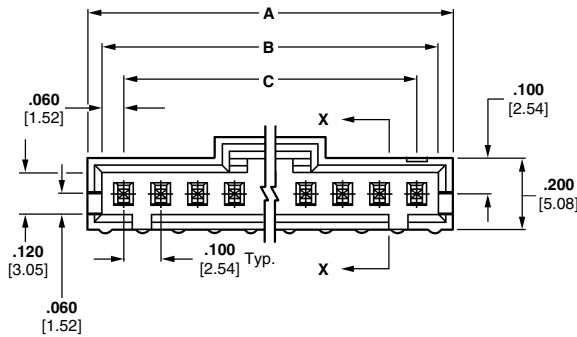
**Material and Finish:**

**Housing**—Black thermoplastic,  
94V-0 rated

**Posts**—Copper alloy, plated as follows:

**Plating A**—Duplex plated .000030  
[0.00076] gold on contact area, .000100  
[0.00254] min. tin on solder area, with  
entire post underplated .000050  
[0.00127] nickel

**Plating C**—.000100 [0.00254] tin over  
.000050 [0.00127] nickel on entire post



Section X-X

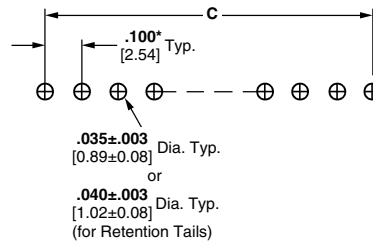
**Related Product Data:**

**Product Specification**

108-25034

**Application Specification**

114-25026



**Recommended PC Board Hole Layout**

\*±.003 [±0.08]; tolerances not to accumulate within one connector pattern.

**Note:** Swaged retention tails are provided in a minimum of two locations per header.

**MTE Headers, Shrouded Polarized/Latching,  
Single-Row .100 [2.54] Centerline (Continued)**

No. of Pos.	Dimensions			Polarized/Latching Header With Swage		Polarized/Latching Header Without Swage	
	A	B	C	Plating A	Plating C	Plating A	Plating C
2	.300 [7.62]	.220 [5.59]	.100 [2.54]	5-103908-1	5-103669-1	5-103735-1	5-103639-1
3	.400 [10.16]	.320 [8.13]	.200 [5.08]	5-103908-2	5-103669-2	5-103735-2	5-103639-2
4	.500 [12.70]	.420 [10.67]	.300 [7.62]	5-103908-3	5-103669-3	5-103735-3	5-103639-3
5	.600 [15.24]	.520 [13.21]	.400 [10.16]	5-103908-4	5-103669-4	5-103735-4	5-103639-4
6	.700 [17.78]	.620 [15.75]	.500 [12.70]	5-103908-5	5-103669-5	5-103735-5	5-103639-5
7	.800 [20.32]	.720 [18.29]	.600 [15.24]	5-103908-6	5-103669-6	5-103735-6	5-103639-6
8	.900 [22.86]	.820 [20.83]	.700 [17.78]	5-103908-7	5-103669-7	5-103735-7	5-103639-7
9	1.000 [25.40]	.920 [23.37]	.800 [20.32]	5-103908-8	5-103669-8	5-103735-8	5-103639-8
10	1.100 [27.94]	1.020 [25.91]	.900 [22.86]	5-103908-9	5-103669-9	5-103735-9	5-103639-9
11	1.200 [30.48]	1.120 [28.45]	1.000 [25.40]	6-103908-0	6-103669-0	6-103735-0	6-103639-0
12	1.300 [33.02]	1.220 [30.99]	1.100 [27.94]	6-103908-1	6-103669-1	6-103735-1	6-103639-1
13	1.400 [35.56]	1.320 [33.53]	1.200 [30.48]	6-103908-2	6-103669-2	6-103735-2	6-103639-2
14	1.500 [38.10]	1.420 [36.07]	1.300 [33.02]	6-103908-3	6-103669-3	6-103735-3	6-103639-3
15	1.600 [40.64]	1.520 [38.61]	1.400 [35.56]	6-103908-4	6-103669-4	6-103735-4	6-103639-4
16	1.700 [43.18]	1.620 [41.15]	1.500 [38.10]	6-103908-5	6-103669-5	6-103735-5	6-103639-5
17	1.800 [45.72]	1.720 [43.69]	1.600 [40.64]	6-103908-6	6-103669-6	6-103735-6	6-103639-6
18	1.900 [48.26]	1.820 [46.23]	1.700 [43.18]	6-103908-7	6-103669-7	6-103735-7	6-103639-7
19	2.000 [50.80]	1.920 [48.77]	1.800 [45.72]	6-103908-8	6-103669-8	6-103735-8	6-103639-8
20	2.100 [53.34]	2.020 [51.31]	1.900 [48.26]	6-103908-9	6-103669-9	6-103735-9	6-103639-9
21	2.200 [55.88]	2.120 [53.85]	2.000 [50.80]	7-103908-0	7-103669-0	7-103735-0	7-103639-0
22	2.300 [58.42]	2.220 [56.39]	2.100 [53.34]	7-103908-1	7-103669-1	7-103735-1	7-103639-1
23	2.400 [60.96]	2.320 [58.93]	2.200 [55.88]	7-103908-2	7-103669-2	7-103735-2	7-103639-2
24	2.500 [63.50]	2.420 [61.47]	2.300 [58.42]	7-103908-3	7-103669-3	7-103735-3	7-103639-3
25	2.600 [66.04]	2.520 [64.01]	2.400 [60.96]	7-103908-4	7-103669-4	7-103735-4	7-103639-4

Notes: 1. Selectively loaded headers are available, consult Tyco Electronics.  
2. Use Keying Tool No. 91417-1 to remove post for keying.

2  
PCB and Wire Connectors



(Images are representative only.)

**To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)**

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

[www.tycoelectronics.com](http://www.tycoelectronics.com)

**MTE Headers, Shrouded Latching, Single-Row .100 [2.54] Centerline**

**.025 [0.64] Square Right-Angle Post**



**Material and Finish:**

**Housing**—Black thermoplastic, 94V-0 rated

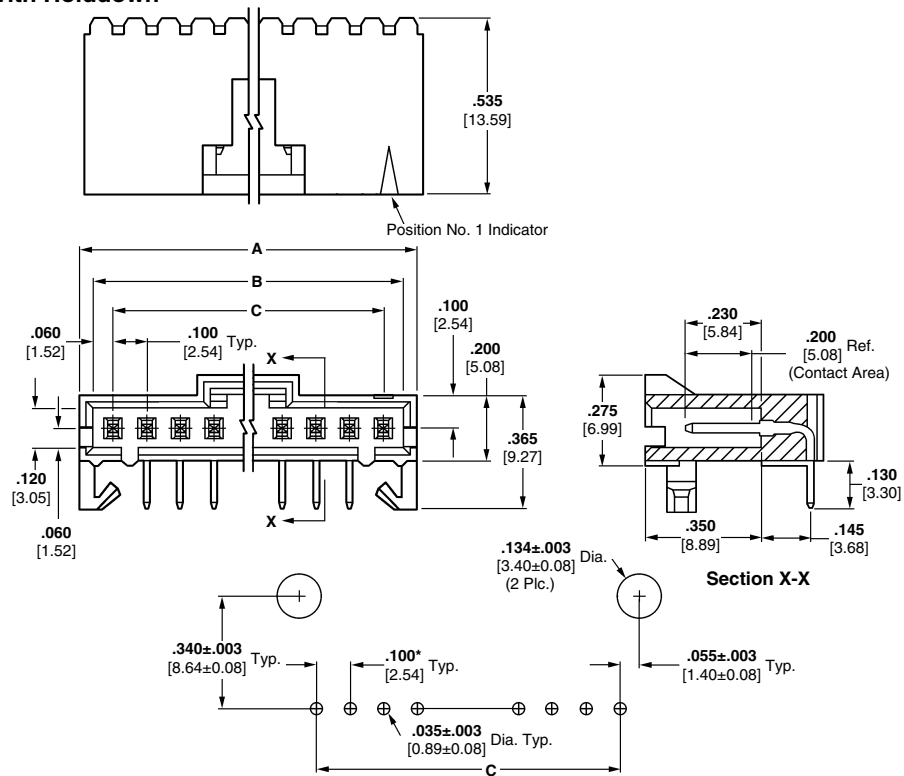
**Posts**—Copper alloy, plated as follows:

**Plating A**—Duplex plated .000030 [0.00076] gold on contact area, .000100 [0.00254] min. tin on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating B**—Duplex plated .000015 [0.00038] gold on contact area, .000100 [0.00254] min. tin on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating C**—.000100 [0.00254] tin over .000050 [0.00127] nickel on entire post

**With Holddown**

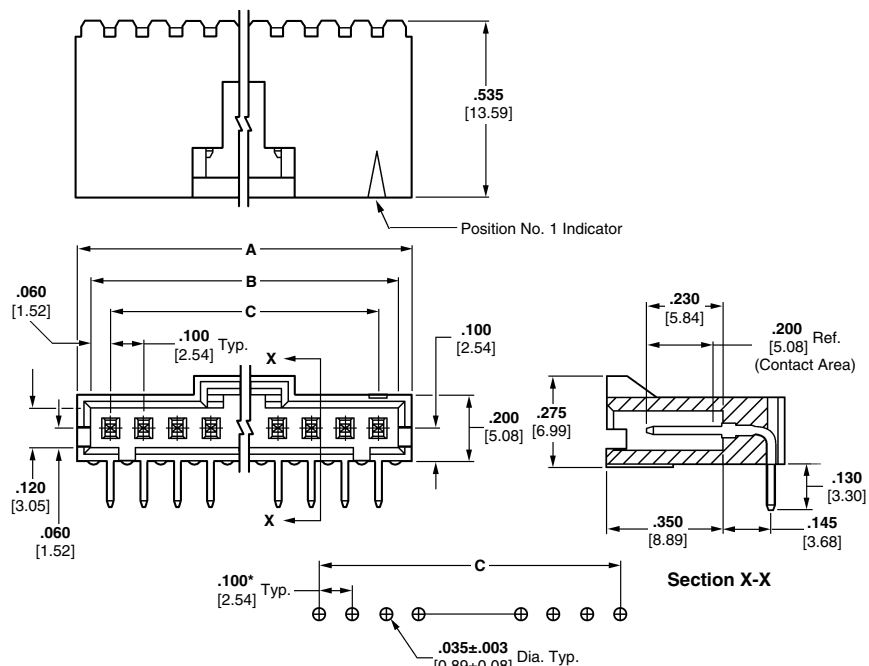


**Recommended PC Board Hole Layout**  
(PC board thickness (for Holddown Feature) is .062±.008 [1.57±0.20])

\*±.003 [±0.08]; tolerance not to accumulate within one connector pattern.



**Without Holddown**



**Recommended PC Board Hole Layout**

\*±.003 [±0.08]; tolerance not to accumulate within one connector pattern.

**Related Product Data:**

**Product Specification**

108-25034

**Application Specification**

114-25026

**MTE Headers, Shrouded Latching, Single-Row .100 [2.54] Centerline (Continued)**

No. of Pos.	Dimensions			Latching Header With Hold Down			Latching Header Without Hold Down		
	A	B	C	Plating A	Plating B	Plating C	Plating A	Plating B	Plating C
2	.300 [7.62]	.220 [5.59]	.100 [2.54]	5-103904-1	5-103673-1	5-103672-1	5-104935-1	5-103635-1	5-103634-1
3	.400 [10.16]	.320 [8.13]	.200 [5.08]	5-103904-2	5-103673-2	5-103672-2	5-104935-2	5-103635-2	5-103634-2
4	.500 [12.70]	.420 [10.67]	.300 [7.62]	5-103904-3	5-103673-3	5-103672-3	5-104935-3	5-103635-3	5-103634-3
5	.600 [15.24]	.520 [13.21]	.400 [10.16]	5-103904-4	5-103673-4	5-103672-4	5-104935-4	5-103635-4	5-103634-4
6	.700 [17.78]	.620 [15.75]	.500 [12.70]	5-103904-5	5-103673-5	5-103672-5	5-104935-5	5-103635-5	5-103634-5
7	.800 [20.32]	.720 [18.29]	.600 [15.24]	5-103904-6	5-103673-6	5-103672-6	5-104935-6	5-103635-6	5-103634-6
8	.900 [22.86]	.820 [20.83]	.700 [17.78]	5-103904-7	5-103673-7	5-103672-7	5-104935-7	5-103635-7	5-103634-7
9	1.000 [25.40]	.920 [23.37]	.800 [20.32]	5-103904-8	5-103673-8	5-103672-8	5-104935-8	5-103635-8	5-103634-8
10	1.100 [27.94]	1.020 [25.91]	.900 [22.86]	5-103904-9	5-103673-9	5-103672-9	5-104935-9	5-103635-9	5-103634-9
11	1.200 [30.48]	1.120 [28.45]	1.000 [25.40]	6-103904-0	6-103673-0	6-103672-0	6-104935-0	6-103635-0	6-103634-0
12	1.300 [33.02]	1.220 [30.99]	1.100 [27.94]	6-103904-1	6-103673-1	6-103672-1	6-104935-1	6-103635-1	6-103634-1
13	1.400 [35.56]	1.320 [33.53]	1.200 [30.48]	6-103904-2	6-103673-2	6-103672-2	6-104935-2	6-103635-2	6-103634-2
14	1.500 [38.10]	1.420 [36.07]	1.300 [33.02]	6-103904-3	6-103673-3	6-103672-3	6-104935-3	6-103635-3	6-103634-3
15	1.600 [40.64]	1.520 [38.61]	1.400 [35.56]	6-103904-4	6-103673-4	6-103672-4	6-104935-4	6-103635-4	6-103634-4
16	1.700 [43.18]	1.620 [41.15]	1.500 [38.10]	6-103904-5	6-103673-5	6-103672-5	6-104935-5	6-103635-5	6-103634-5
17	1.800 [45.72]	1.720 [43.69]	1.600 [40.64]	6-103904-6	6-103673-6	6-103672-6	6-104935-6	6-103635-6	6-103634-6
18	1.900 [48.26]	1.820 [46.23]	1.700 [43.18]	6-103904-7	6-103673-7	6-103672-7	6-104935-7	6-103635-7	6-103634-7
19	2.000 [50.80]	1.920 [48.77]	1.800 [45.72]	6-103904-8	6-103673-8	6-103672-8	6-104935-8	6-103635-8	6-103634-8
20	2.100 [53.34]	2.020 [51.31]	1.900 [48.26]	6-103904-9	6-103673-9	6-103672-9	6-104935-9	6-103635-9	6-103634-9
21	2.200 [55.88]	2.120 [53.85]	2.000 [50.80]	7-103904-0	7-103673-0	7-103672-0	7-104935-0	7-103635-0	7-103634-0
22	2.300 [58.42]	2.220 [56.39]	2.100 [53.34]	7-103904-1	7-103673-1	7-103672-1	7-104935-1	7-103635-1	7-103634-1
23	2.400 [60.96]	2.320 [58.93]	2.200 [55.88]	7-103904-2	7-103673-2	7-103672-2	7-104935-2	7-103635-2	7-103634-2
24	2.500 [63.50]	2.420 [61.47]	2.300 [58.42]	7-103904-3	7-103673-3	7-103672-3	7-104935-3	7-103635-3	7-103634-3
25	2.600 [66.04]	2.520 [64.01]	2.400 [60.96]	7-103904-4	7-103673-4	7-103672-4	7-104935-4	7-103635-4	7-103634-4

**Notes:** 1. Selectively loaded headers are available, consult Tyco Electronics.  
2. Use **Keying Tool No. 91417-1** to remove post for keying.

2  
PCB and Wire Connectors



(Images are representative only.)

**To find up to date equipment options and contacts please visit: [www.tooling.tycoelectronics.com/europe](http://www.tooling.tycoelectronics.com/europe)**

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

[www.tycoelectronics.com](http://www.tycoelectronics.com)

**MTE Headers, Shrouded Latching, Single-Row .100 [2.54] Centerline**

**.025 [0.64] Square Straight Post (With Swaged Tails and PC Board Orientation)**

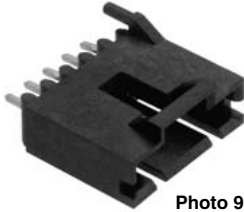


Photo 98184-5

**Material and Finish:**

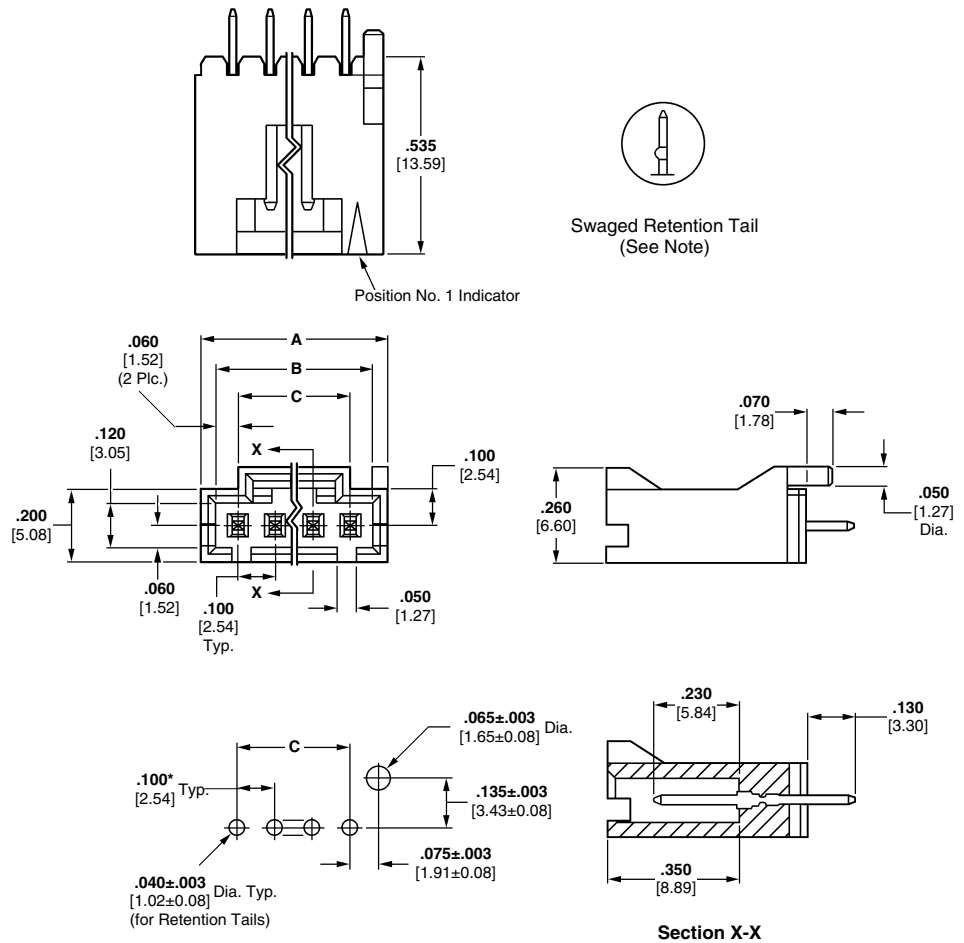
**Housing**—Black thermoplastic, 94V-0 rated

**Posts**—Copper alloy, plated .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel on entire post

**Related Product Data:**

**Product Specification**  
108-25034

**Application Specification**  
114-25026



**Recommended PC Board Hole Layout**

\*±.003 [±0.08]; tolerances not to accumulate within one connector pattern.

**Note:** Swaged retention tails are provided in a minimum of two locations per header.

No. of Pos.	Dimensions			Latching Header
	A	B	C	
2	.300 [7.62]	.220 [5.59]	.100 [2.54]	5-104450-1
3	.400 [10.16]	.320 [8.13]	.200 [5.08]	5-104450-2
4	.500 [12.70]	.420 [10.67]	.300 [7.62]	5-104450-3
5	.600 [15.24]	.520 [13.21]	.400 [10.16]	5-104450-4
6	.700 [17.78]	.620 [15.75]	.500 [12.70]	5-104450-5
7	.800 [20.32]	.720 [18.29]	.600 [15.24]	5-104450-6
8	.900 [22.86]	.820 [20.83]	.700 [17.78]	5-104450-7
9	1.000 [25.40]	.920 [23.37]	.800 [20.32]	5-104450-8
10	1.100 [27.94]	1.020 [25.91]	.900 [22.86]	5-104450-9

**MTE Headers, High-Temp, Shrouded Polarized/Latching, Single-Row .100 [2.54] Centerline**

**.025 [0.64] Square Straight Post (With Swaged Tails and PC Board Orientation)**

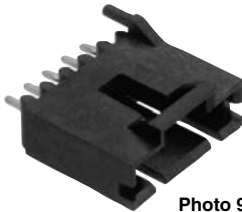


Photo 98184-5

**Material and Finish:**

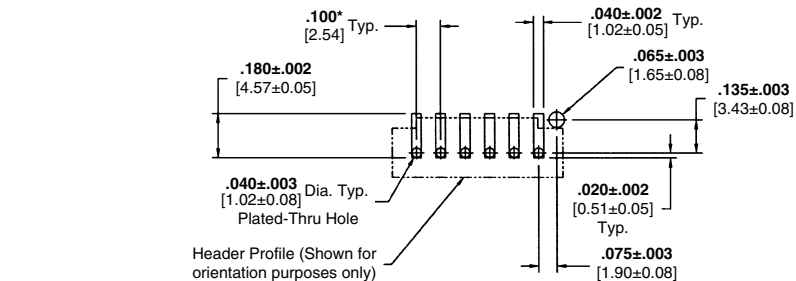
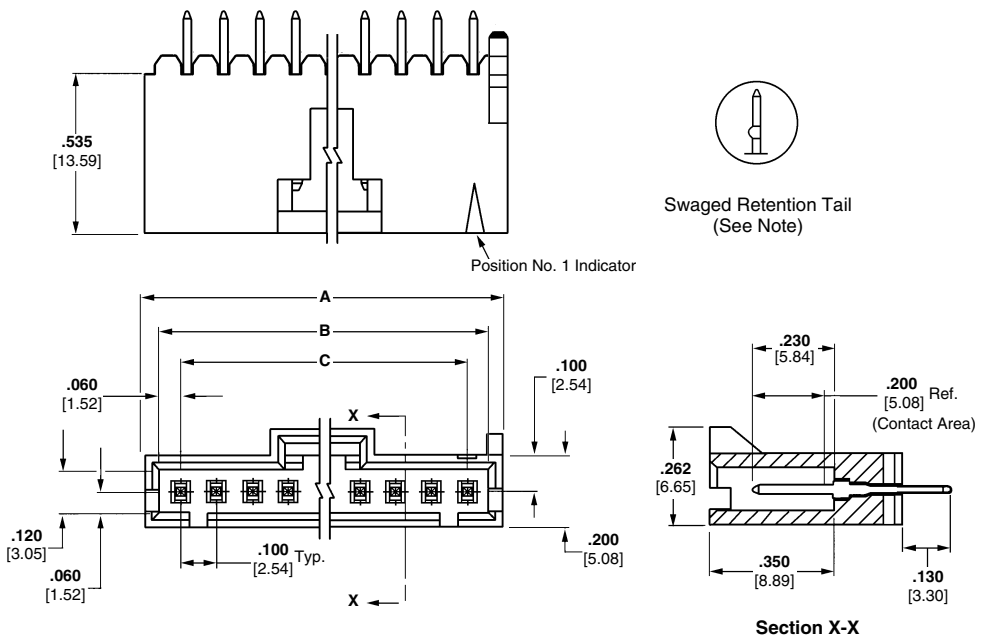
**Housing**—Black thermoplastic, 94V-0 rated

**Posts**—Copper alloy, duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] matte tin on solder tail, with entire post underplated .000050 [0.00127] nickel

**Related Product Data:**

**Product Specification**  
108-25034

**Application Specification**  
114-25026



**Recommended PC Board Hole Layout (Stencil Thickness = .010 [0.25])**

\*±.003 [±0.08] tolerance not to accumulate within one connector pattern

No. of Pos.	Dimensions			Polarized/Latching Header, High-Temp
	A	B	C	
2	.300 [7.62]	.220 [5.59]	.100 [2.54]	5-104809-1
3	.400 [10.16]	.320 [8.13]	.200 [5.08]	5-104809-2
4	.500 [12.70]	.420 [10.67]	.300 [7.62]	5-104809-3
5	.600 [15.24]	.520 [13.21]	.400 [10.16]	5-104809-4
6	.700 [17.78]	.620 [15.75]	.500 [12.70]	5-104809-5
7	.800 [20.32]	.720 [18.29]	.600 [15.24]	5-104809-6
8	.900 [22.86]	.820 [20.83]	.700 [17.78]	5-104809-7
9	1.000 [25.40]	.920 [23.37]	.800 [20.32]	5-104809-8
10	1.100 [27.94]	1.020 [25.91]	.900 [22.86]	5-104809-9
11	1.200 [30.48]	1.120 [28.45]	1.000 [25.40]	6-104809-0
12	1.300 [33.02]	1.220 [30.99]	1.100 [27.94]	6-104809-1

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

2  
PCB and Wire Connectors



**MTE Headers, Shrouded High-Temp, Polarized/Latching (Thru-Hole, SMT Compatible) Single-Row, .100 [2.54] Centerline**

**.025 [0.64] Square Straight Post (With or Without Swaged Tail)**



**Material and Finish:**

**Housing**—Black thermoplastic, high temperature, 94V-0 rated

**Posts**—Copper alloy, duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] matte tin on solder tail, with entire post underplated .000050 [0.00127] nickel

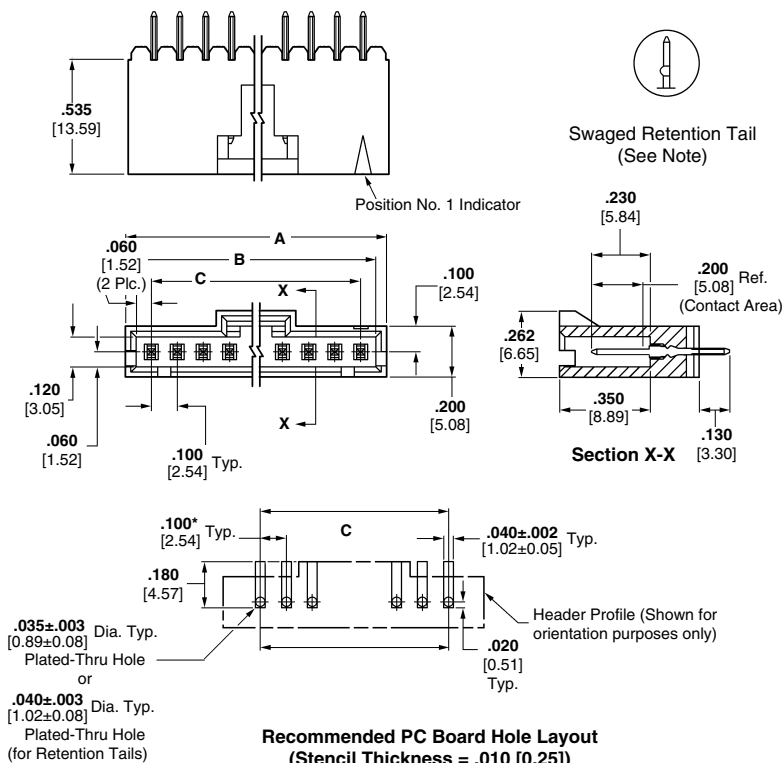
**Related Product Data:**

**Product Specification**

108-25034

**Application Specification**

114-25026



\*±.003 [±0.08]; tolerance not to accumulate within one connector pattern.

**Note:** Swaged retention tails in Holddown versions only. Retention tails are provided in a minimum of two locations per header.

No. of Pos.	Dimensions			Straight Header	
	A	B	C	With Swage	Without Swage
2	.300 [7.62]	.220 [5.59]	.100 [2.54]	5-104362-1	5-104363-1
3	.400 [10.16]	.320 [8.13]	.200 [5.08]	5-104362-2	5-104363-2
4	.500 [12.70]	.420 [10.67]	.300 [7.62]	5-104362-3	5-104363-3
5	.600 [15.24]	.520 [13.21]	.400 [10.16]	5-104362-4	5-104363-4
6	.700 [17.78]	.620 [15.75]	.500 [12.70]	5-104362-5	5-104363-5
7	.800 [20.32]	.720 [18.29]	.600 [15.24]	5-104362-6	5-104363-6
8	.900 [22.86]	.820 [20.83]	.700 [17.78]	5-104362-7	5-104363-7
9	1.000 [25.40]	.920 [23.37]	.800 [20.32]	5-104362-8	5-104363-8
10	1.100 [27.94]	1.020 [25.91]	.900 [22.86]	5-104362-9	5-104363-9
11	1.200 [30.48]	1.120 [28.45]	1.000 [25.40]	6-104362-0	6-104363-0
12	1.300 [33.02]	1.220 [30.99]	1.100 [27.94]	6-104362-1	6-104363-1
13	1.400 [35.56]	1.320 [33.53]	1.200 [30.48]	6-104909-2	6-104910-2
14	1.500 [38.10]	1.420 [36.07]	1.300 [33.02]	6-104909-3	6-104910-3
15	1.600 [40.64]	1.520 [38.61]	1.400 [35.56]	6-104909-4	6-104910-4
16	1.700 [43.18]	1.620 [41.15]	1.500 [38.10]	6-104909-5	6-104910-5
17	1.800 [45.72]	1.720 [43.69]	1.600 [40.64]	6-104909-6	6-104910-6
18	1.900 [48.26]	1.820 [46.23]	1.700 [43.18]	6-104909-7	6-104910-7
19	2.000 [50.80]	1.920 [48.77]	1.800 [45.72]	6-104909-8	6-104910-8
20	2.100 [53.34]	2.020 [51.31]	1.900 [48.26]	6-104909-9	6-104910-9
21	2.200 [55.88]	2.120 [53.85]	2.000 [50.80]	7-104909-0	7-104910-0
22	2.300 [58.42]	2.220 [56.39]	2.100 [53.34]	7-104909-1	7-104910-1
23	2.400 [60.96]	2.320 [58.93]	2.200 [55.88]	7-104909-2	7-104910-2
24	2.500 [63.50]	2.420 [61.47]	2.300 [58.42]	7-104909-3	7-104910-3
25	2.600 [66.04]	2.520 [64.01]	2.400 [60.96]	7-104909-4	7-104910-4

**Note:** Use Keying Tool No. 91417-1 to remove post for keying.

**MTE Headers, Shrouded High-Temp, Polarized/Latching  
(Thru-Hole, SMT Compatible) Single-Row, .100 [2.54] Centerline (Continued)**

**.025 [0.64] Square  
Right-Angle Post (With  
Holddown)**



**Material and Finish:**

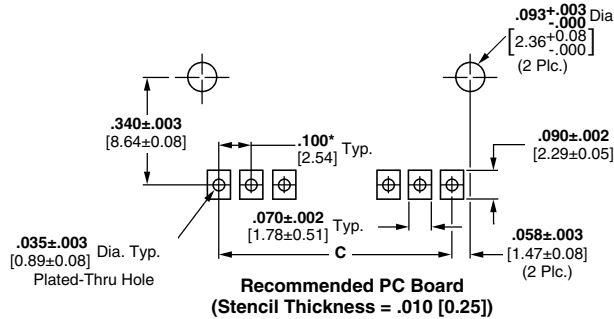
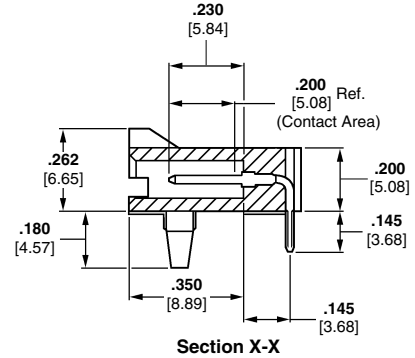
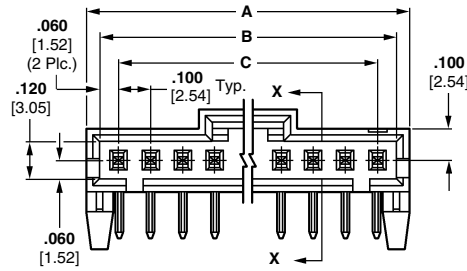
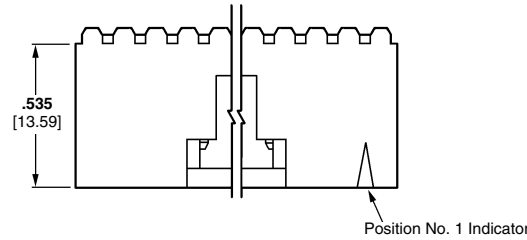
**Housing**—Black thermoplastic, high temperature, 94V-0 rated

**Posts**—Copper alloy, duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] matte tin on solder tail, with entire post underplated .000050 [0.00127] nickel

**Related Product Data:**

**Product Specification**  
108-25034

**Application Specification**  
114-25026



\*±.003 [±0.08]; tolerance is not to accumulate within one connector pattern.

No. of Positions	Dimensions			Right-Angle Header with Hold Down
	A	B	C	
2	.300 [7.62]	.220 [5.59]	.100 [2.54]	5-104361-1
3	.400 [10.16]	.320 [8.13]	.200 [5.08]	5-104361-2
4	.500 [12.70]	.420 [10.67]	.300 [7.62]	5-104361-3
5	.600 [15.24]	.520 [13.21]	.400 [10.16]	5-104361-4
6	.700 [17.78]	.620 [15.75]	.500 [12.70]	5-104361-5
7	.800 [20.32]	.720 [18.29]	.600 [15.24]	5-104361-6
8	.900 [22.86]	.820 [20.83]	.700 [17.78]	5-104361-7
9	1.000 [25.40]	.920 [23.37]	.800 [20.32]	5-104361-8
10	1.100 [27.94]	1.020 [25.91]	.900 [22.86]	5-104361-9
11	1.200 [30.48]	1.120 [28.44]	1.000 [25.40]	6-104361-0
12	1.300 [33.02]	1.220 [30.99]	1.100 [27.94]	6-104361-1
13	1.400 [35.56]	1.320 [33.53]	1.200 [30.48]	6-104361-2

No. of Positions	Dimensions			Right-Angle Header with Hold Down
	A	B	C	
14	1.500 [38.10]	1.420 [36.07]	1.300 [33.02]	6-104361-3
15	1.600 [40.64]	1.520 [38.61]	1.400 [35.56]	6-104361-4
16	1.700 [43.18]	1.620 [41.15]	1.500 [38.10]	6-104361-5
17	1.800 [45.72]	1.720 [43.69]	1.600 [40.64]	6-104361-6
18	1.900 [48.26]	1.820 [46.23]	1.700 [43.18]	6-104361-7
19	2.000 [50.80]	1.920 [48.77]	1.800 [45.72]	6-104361-8
20	2.100 [53.34]	2.020 [51.31]	1.900 [48.26]	6-104361-9
21	2.200 [55.88]	2.120 [53.85]	2.000 [50.80]	7-104361-0
22	2.300 [58.42]	2.220 [56.39]	2.100 [53.34]	7-104361-1
23	2.400 [60.96]	2.320 [58.93]	2.200 [55.88]	7-104361-2
24	2.500 [63.50]	2.420 [61.47]	2.300 [58.42]	7-104361-3
25	2.600 [66.04]	2.520 [64.01]	2.400 [60.96]	7-104361-4

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

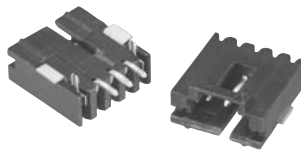
Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com

**MTE Headers, Right-Angle, Polarized/Latching, Surface Mount**



**Material and Finish:**

**Housing**—High temperature thermoplastic, Color - Black

**Posts**—Copper Alloy, plated as follows:

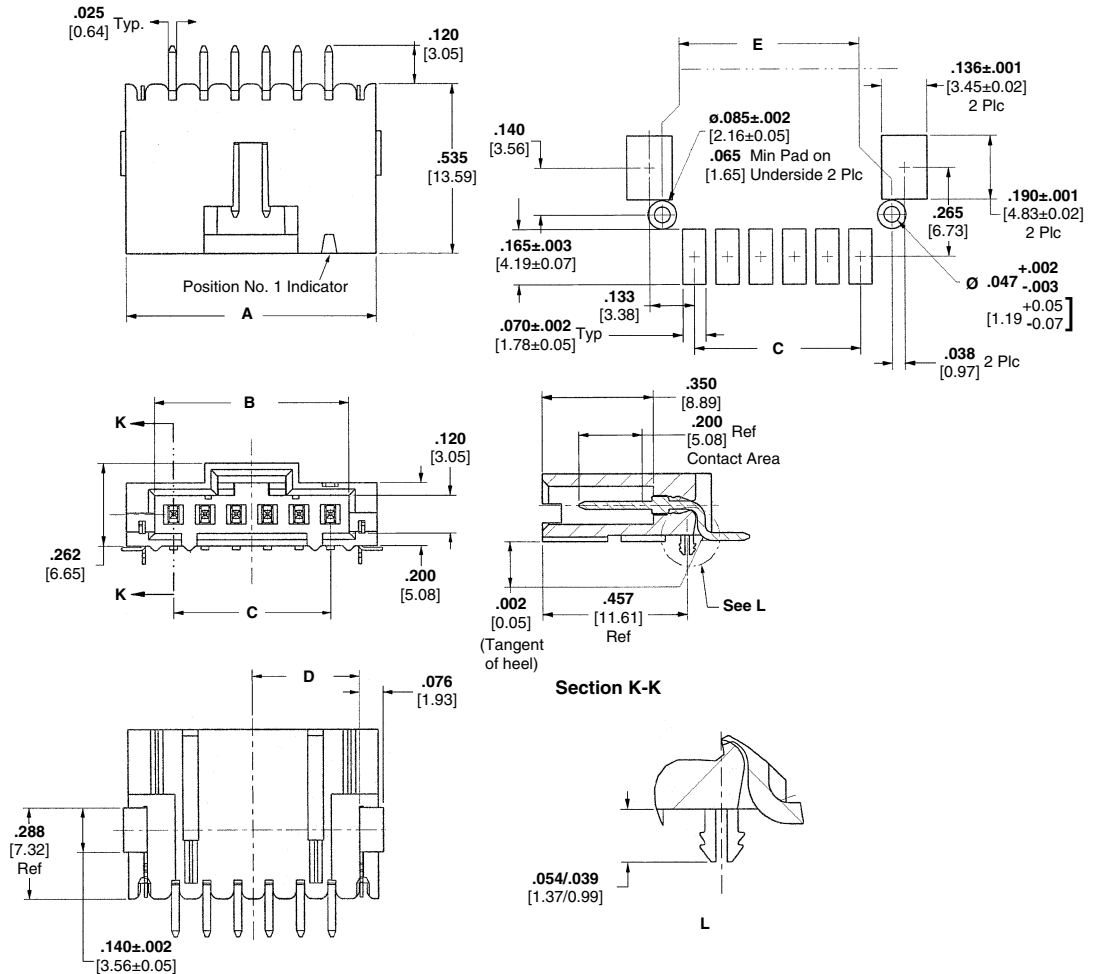
**Plating A**—Duplex plated .000030 [.00076] gold on contact area, .000100 [.00254] min. tin on solder area, with entire post underplated .000050 [.00127] nickel.

**Plating B**—Duplex plated .000015 [.00038] gold on contact area, .000100 [.00254] min. tin on solder area, with entire post underplated .000050 [.00127] nickel.

**Plating C**—.000100 [.00254] tin over .000050 [.00127] nickel on entire post

**Recommended PC Board Layout**

(Refer to MTE Application Spec. 114-25026 for Stencil Aperture Layout Using .006 [0.152] or .008 [0.203] Stencil Thickness)



**Related Product Data:**

**Product Specification**

108-25034

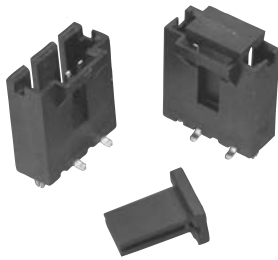
**Application Specification**

114-25026

No. of Pos.	Dimensions					Right-Angle Latching SMT Headers		
	A	B	C	D	E	Plating A	Plating B	Plating C
2	.400 [10.16]	.220 [5.59]	.100 [2.54]	.140 [3.56]	.290 [7.37]	5-147323-1	5-147278-1	5-147324-1
3	.500 [12.70]	.320 [8.13]	.200 [5.08]	.190 [4.83]	.390 [9.91]	5-147323-2	5-147278-2	5-147324-2
4	.600 [15.24]	.420 [10.67]	.300 [7.62]	.240 [6.10]	.490 [12.45]	5-147323-3	5-147278-3	5-147324-3
5	.700 [17.78]	.520 [13.21]	.400 [10.16]	.290 [7.37]	.590 [14.99]	5-147323-4	5-147278-4	5-147324-4
6	.800 [20.32]	.620 [15.75]	.500 [12.70]	.340 [8.64]	.690 [17.53]	5-147323-5	5-147278-5	5-147324-5
7	.900 [22.86]	.720 [18.29]	.600 [15.24]	.390 [9.91]	.790 [20.07]	5-147323-6	5-147278-6	5-147324-6
8	1.000 [25.40]	.820 [20.83]	.700 [17.78]	.440 [11.18]	.890 [22.61]	5-147323-7	5-147278-7	5-147324-7
9	1.100 [27.94]	.920 [23.37]	.800 [20.32]	.490 [12.45]	.990 [25.15]	5-147323-8	5-147278-8	5-147324-8
10	1.200 [30.48]	1.020 [25.91]	.900 [22.86]	.540 [13.72]	1.090 [27.69]	5-147323-9	5-147278-9	5-147324-9
11	1.300 [33.02]	1.120 [28.45]	1.000 [25.40]	.590 [14.99]	1.190 [30.23]	6-147323-0	6-147278-0	6-147324-0
12	1.400 [35.56]	1.220 [30.99]	1.100 [27.94]	.640 [16.26]	1.290 [32.77]	6-147323-1	6-147278-1	6-147324-1
13	1.500 [38.10]	1.320 [33.53]	1.200 [30.48]	.690 [17.53]	1.390 [35.31]	6-147323-2	6-147278-2	6-147324-2
14	1.600 [40.64]	1.420 [36.07]	1.300 [33.02]	.740 [18.80]	1.490 [37.85]	6-147323-3	6-147278-3	6-147324-3
15	1.700 [43.18]	1.520 [38.61]	1.400 [35.56]	.790 [20.07]	1.590 [40.39]	6-147323-4	6-147278-4	6-147324-4
16	1.800 [45.72]	1.620 [41.15]	1.500 [38.10]	.840 [21.34]	1.690 [42.93]	6-147323-5	6-147278-5	6-147324-5
17	1.900 [48.26]	1.720 [43.69]	1.600 [40.64]	.890 [22.61]	1.790 [45.47]	6-147323-6	6-147278-6	6-147324-6
18	2.000 [50.80]	1.820 [46.23]	1.700 [43.18]	.940 [23.88]	1.890 [48.01]	6-147323-7	6-147278-7	6-147324-7
19	2.100 [53.34]	1.920 [48.77]	1.800 [45.72]	.990 [25.15]	1.990 [50.55]	6-147323-8	6-147278-8	6-147324-8
20	2.200 [55.88]	2.020 [51.31]	1.900 [48.26]	1.040 [26.42]	2.090 [53.09]	6-147323-9	6-147278-9	6-147324-9
21	2.300 [58.42]	2.120 [53.85]	2.000 [50.80]	1.090 [27.69]	2.190 [55.63]	7-147323-0	7-147278-0	7-147324-0
22	2.400 [60.96]	2.220 [56.39]	2.100 [53.34]	1.140 [28.96]	2.290 [58.17]	7-147323-1	7-147278-1	7-147324-1
23	2.500 [63.50]	2.320 [58.93]	2.200 [55.88]	1.190 [30.23]	2.390 [60.71]	7-147323-2	7-147278-2	7-147324-2
24	2.600 [66.04]	2.420 [61.47]	2.300 [58.42]	1.240 [31.50]	2.490 [63.25]	7-147323-3	7-147278-3	7-147324-3
25	2.700 [68.58]	2.520 [64.01]	2.400 [60.96]	1.290 [32.77]	2.590 [65.79]	7-147323-4	7-147278-4	7-147324-4

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

**MTE Headers, Vertical, Polarized/Latching, Surface Mount**



**Material and Finish:**

**Housing**—High temperature thermoplastic, Color - Black, 94V-0 rated

**Posts**—Brass, plated as follows:

**Plating A**—Duplex plated .000030 [.00076] gold on contact area, .000100 [.00254] min. tin on solder area, with entire post underplated .000050 [.00127] nickel.

**Plating B**—Duplex plated .000015 [.00038] gold on contact area, .000100 [.00254] min. tin on solder area, with entire post underplated .000050 [.00127] nickel.

**Plating C**—.000100 [.00254] tin over .000050 [.00127] nickel on entire contact/post

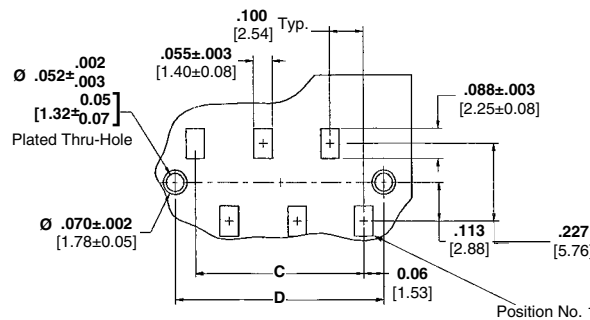
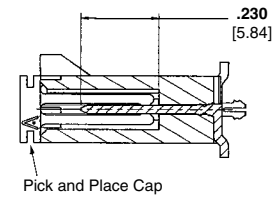
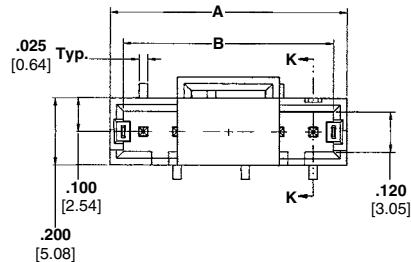
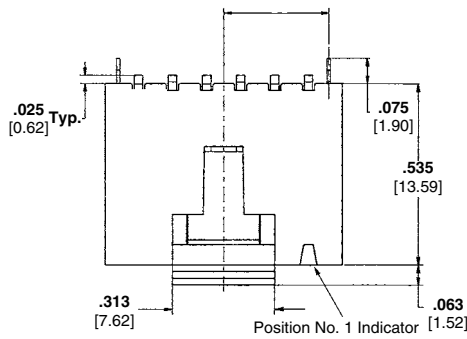
**Recommended PC Board Layout**

(Refer to MTE Application Spec. 114-25026 for Stencil Aperture Layout using .006 [0.152] or .008 [0.203] stencil thickness

**Related Product Data:**

**Product Specification**  
108-25034

**Application Specification**  
114-25026



No. of Pos.	Dimensions					Vertical SMT Headers		
	A	B	C	D	E	Plating A	Plating B	Plating C
2	.300[7.62]	.220[5.59]	.100[2.54]	.220[5.60]	.110[2.80]	5-1375583-1	5-1375582-1	5-1375549-1
3	.400[10.16]	.320[8.13]	.200[5.08]	.320[8.14]	.160[4.07]	5-1375583-2	5-1375582-2	5-1375549-2
4	.500[12.70]	.420[10.67]	.300[7.62]	.420[10.68]	.210[5.34]	5-1375583-3	5-1375582-3	5-1375549-3
5	.600[15.24]	.520[13.21]	.400[10.16]	.520[13.22]	.260[6.61]	5-1375583-4	5-1375582-4	5-1375549-4
6	.700[17.78]	.620[15.75]	.500[12.70]	.620[15.76]	.310[7.88]	5-1375583-5	5-1375582-5	5-1375549-5
7	.800[20.32]	.720[18.29]	.600[15.24]	.720[18.30]	.360[9.15]	5-1375583-6	5-1375582-6	5-1375549-6
8	.900[22.86]	.820[20.83]	.700[17.78]	.820[20.84]	.410[10.42]	5-1375583-7	5-1375582-7	5-1375549-7
9	1.000[25.40]	.920[23.37]	.800[20.32]	.920[23.38]	.460[11.69]	5-1375583-8	5-1375582-8	5-1375549-8
10	1.100[27.94]	1.020[25.91]	.900[22.86]	1.020[25.92]	.510[12.96]	5-1375583-9	5-1375582-9	5-1375549-9
11	1.200[30.48]	1.120[28.45]	1.000[25.40]	1.120[28.46]	.560[14.23]	6-1375583-0	6-1375582-0	6-1375549-0
12	1.300[33.02]	1.220[30.99]	1.100[27.94]	1.220[31.00]	.610[15.50]	6-1375583-1	6-1375582-1	6-1375549-1
13	1.400[35.56]	1.320[33.53]	1.200[30.48]	1.320[33.54]	.660[16.77]	6-1375583-2	6-1375582-2	6-1375549-2
14	1.500[38.10]	1.420[36.07]	1.300[33.02]	1.420[36.08]	.710[18.04]	6-1375583-3	6-1375582-3	6-1375549-3
15	1.600[40.64]	1.520[38.61]	1.400[35.56]	1.520[38.62]	.760[19.31]	6-1375583-4	6-1375582-4	6-1375549-4
16	1.700[43.18]	1.620[41.15]	1.500[38.10]	1.620[41.16]	.810[20.58]	6-1375583-5	6-1375582-5	6-1375549-5
17	1.800[45.72]	1.720[43.69]	1.600[40.64]	1.720[43.70]	.860[21.85]	6-1375583-6	6-1375582-6	6-1375549-6
18	1.900[48.26]	1.820[46.23]	1.700[43.18]	1.820[46.24]	.910[23.12]	6-1375583-7	6-1375582-7	6-1375549-7
19	2.000[50.80]	1.920[48.77]	1.800[45.72]	1.920[48.78]	.960[24.39]	6-1375583-8	6-1375582-8	6-1375549-8
20	2.100[53.34]	2.020[51.31]	1.900[48.26]	2.020[51.32]	1.010[25.66]	6-1375583-9	6-1375582-9	6-1375549-9
21	2.200[55.88]	2.120[53.85]	2.000[50.80]	2.120[53.86]	1.060[26.93]	7-1375583-0	7-1375582-0	7-1375549-0
22	2.300[58.42]	2.220[56.39]	2.100[53.34]	2.220[56.40]	1.110[28.20]	7-1375583-1	7-1375582-1	7-1375549-1
23	2.400[60.96]	2.320[58.93]	2.200[55.88]	2.320[58.94]	1.160[29.47]	7-1375583-2	7-1375582-2	7-1375549-2
24	2.500[63.50]	2.420[61.47]	2.300[58.42]	2.420[61.48]	1.210[30.74]	7-1375583-3	7-1375582-3	7-1375549-3
25	2.600[66.04]	2.520[64.01]	2.400[60.96]	2.520[64.02]	1.260[32.01]	7-1375583-4	7-1375582-4	7-1375549-4

**Note:** Part numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant; ● Indicates "5 of 6 compliant" (lead in solderable interface only).

Dimensions are shown for reference purposes only.  
Conversion Rate:  
25.4mm = 1 inch

Dimensions are in inches and millimetres unless otherwise specified. Values in brackets are metric equivalents.

All Specifications subject to change.  
Consult Tyco Electronics for latest Specifications.

www.tycoelectronics.com