

Customer Information Sheet

IF IN DOUBT - ASK

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NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

SPECIFICATIONS:

MATERIAL:

MOULDING: GLASS FILLED PPS, UL94V-0, BLACK

COAX CONTACT:

BODY, SLEEVE, INNER CONTACT, END PLUG = COPPER ALLOY

LATCHING COLLAR = BERYLLIUM COPPER

INSULATOR = PTFE

JACKSCREW, NUT = STAINLESS STEEL

FINISH:

COAX CONTACT

BODY, SLEEVE, INNER CONTACT, END PLUG = GOLD

LATCHING COLLAR: = NICKEL

ELECTRICAL:

INSULATION RESISTANCE = 100MΩ MIN

COAX CONTACT:

FREQUENCY RANGE = 6GHz

IMPEDANCE = 50Ω

V.S.W.R = 1.05 + (0.04 x FREQUENCY) GHz MAX

CONTACT RESISTANCE = 6mΩ MAX

INSULATION RESISTANCE = 10⁶MΩ @250V AC

OPERATING VOLTAGE = 180V AC @ 500mA

MAXIMUM VOLTAGE = 1000V AC

MECHANICAL:

DURABILITY = 500 OPERATIONS

COAX CONTACT:

INSERTION FORCE = 8N MAX

WITHDRAWAL FORCE = 0.5N MIN

ENVIRONMENTAL:

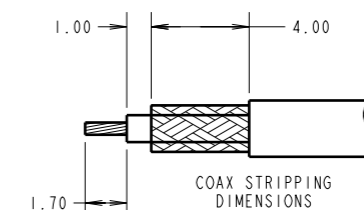
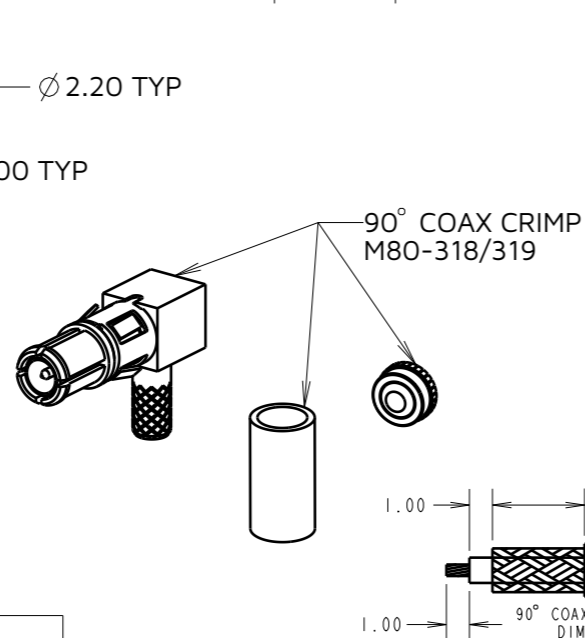
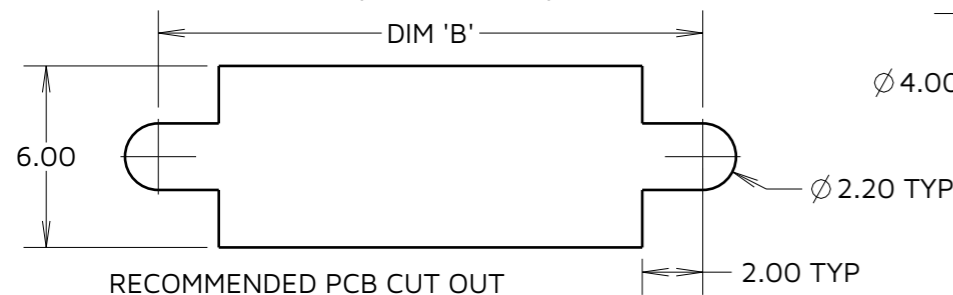
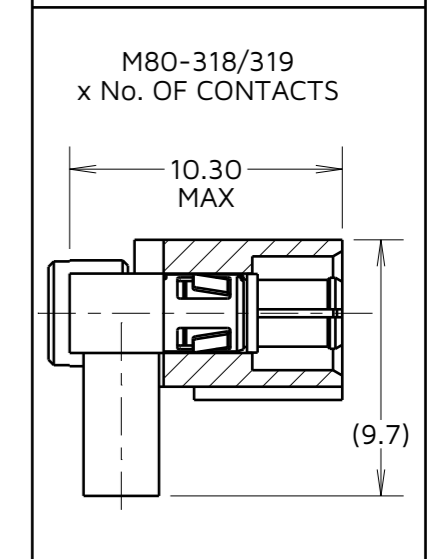
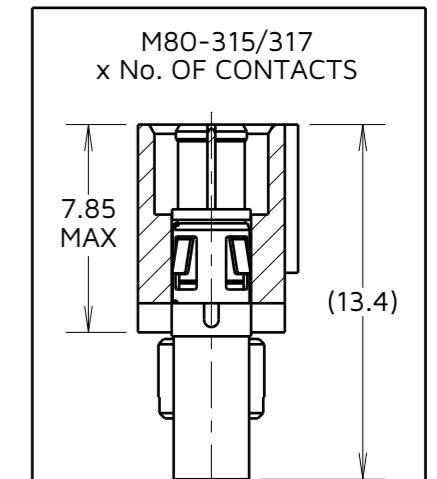
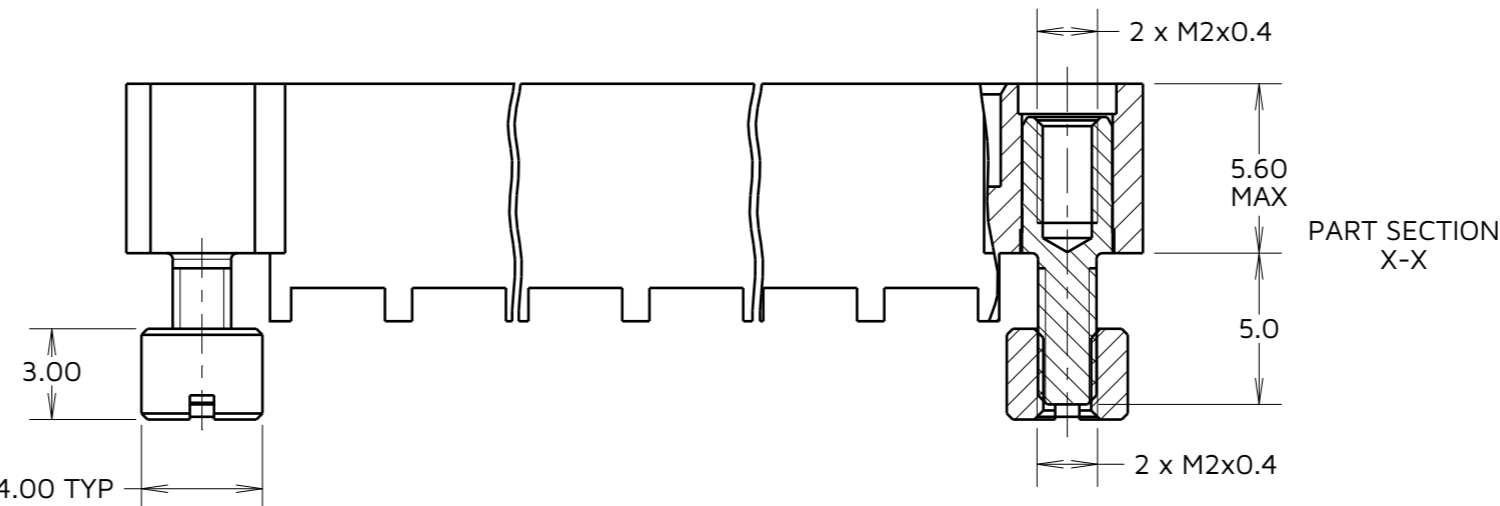
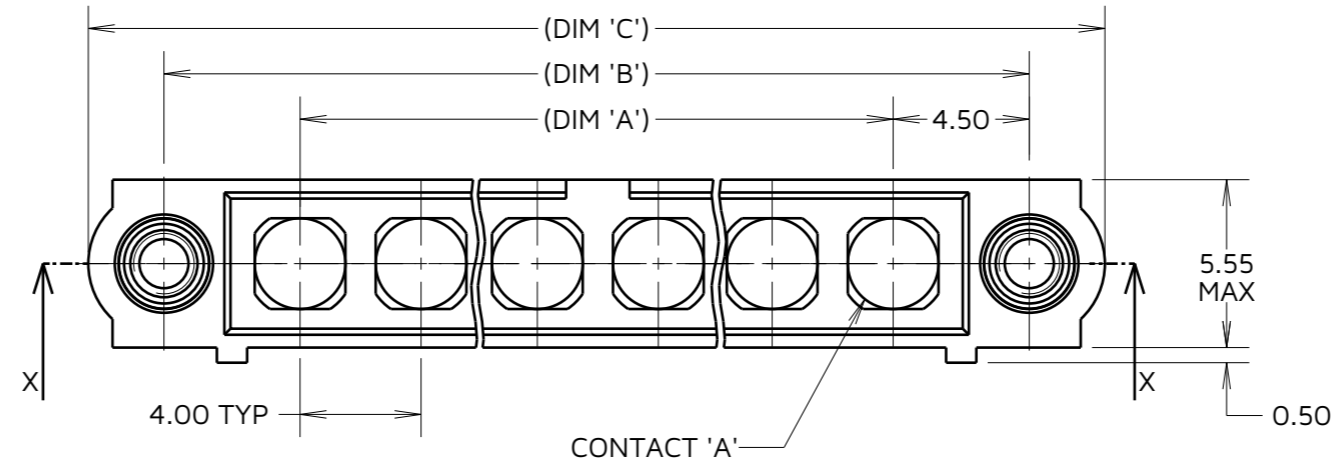
TEMPERATURE RANGE = -55°C TO +125°C

PACKING:

BAG

FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION CO05XX (LATEST ISSUE)

COAX CRIMP AND SOLDER CONTACTS ONLY



ORDER CODE: (COAX CRIMP/SOLDER CONTACTS)
M80-5000000M3-XX-XXX-00-000

TOTAL No. OF CONTACTS
 02 TO 12

SPECIAL CONTACTS (CRIMP)

- 315 = COAX CONTACT 2.0mm CRIMP M80-315
- 317 = COAX CONTACT 2.7mm CRIMP M80-317
- 318 = COAX CONTACT 2.0mm HORZ' CRIMP M80-318
- 319 = COAX CONTACT 2.7mm HORZ' CRIMP M80-319

OBSOLETE
M80-5000000M3-02-315-00-000 - 14-Jul-2023

NOTES:

1. CONNECTORS ARE SUPPLIED WITH CONTACTS AND NUTS LOOSE.
2. COAX CONTACT IS SUPPLIED AS A KIT OF PARTS: BODY, MAIN INSULATOR, INNER CONTACT AND LATCHING COLLAR ARE PRE-ASSEMBLED AND SLEEVE AND INSULATED END PLUG ASSEMBLY ARE SEPARATE.
3. FOR EXTRA COAX CONTACTS, USE PART NUMBERS M80-315/317/318/319.
4. CONTACT EXTRACTION TOOL = Z80-290.
5. RECOMMENDED HAND CRIMP TOOL FOR INNER COAX CONTACT = Z80-292 WITH POSITIONER Z80-291. RECOMMENDED HAND CRIMP TOOL AND DIE SET FOR SLEEVE = Z80-293.
6. INSTRUCTION SHEETS ARE AVAILABLE.

RTP	7	10.07.23	32655
NAME	ISS.	DATE	CN/CO
APPROVED: R.PORTLOCK			
CHECKED: F.CHRISPINE			
DRAWN: R.ADDE			
ASSEMBLY DRG:			

DIMENSION	CALCULATION
DIM 'A'	4 x No. OF CONTACTS - 4.00
DIM 'B'	4 x No. OF CONTACTS + 5.00
DIM 'C'	4 x No. OF CONTACTS + 10.00
EXAMPLE: CONNECTOR WITH 08 COAX CONTACTS, M80-5000000M3-08-315-00-000 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm	

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TOLERANCES
 X = ±1mm
 X.X = ±0.50mm
 X.XX = ±0.20mm
 X.XXX = ±0.01mm
 ANGLES = ±5°
 UNLESS STATED

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MATERIAL:
 SEE ABOVE

TITLE: DATAMATE MIX-TEK MALE ASSEMBLY WITH BOARD MOUNT J/SCREW

DRAWING NUMBER: M80-5000000M3-XX-XXX-00-000 SHT 4 OF 6

Customer Information Sheet

IF IN DOUBT - ASK

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NOT TO SCALE

THIRD ANGLE PROJECTION

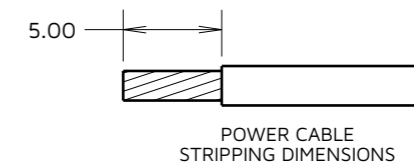
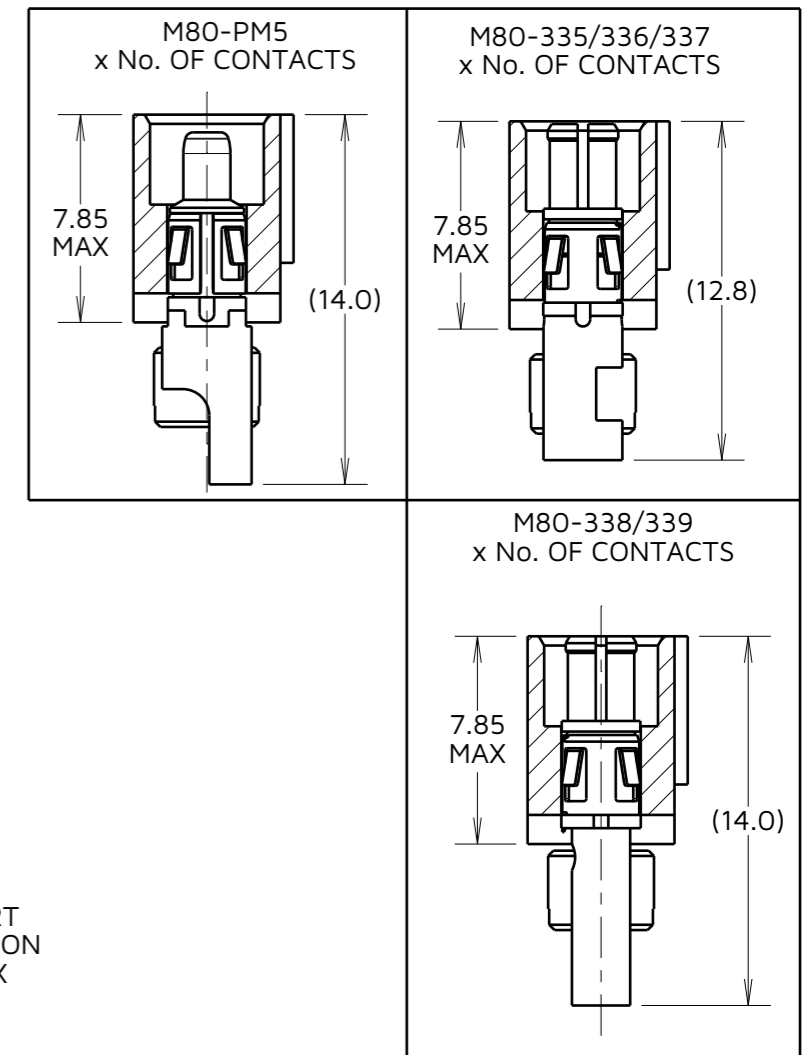
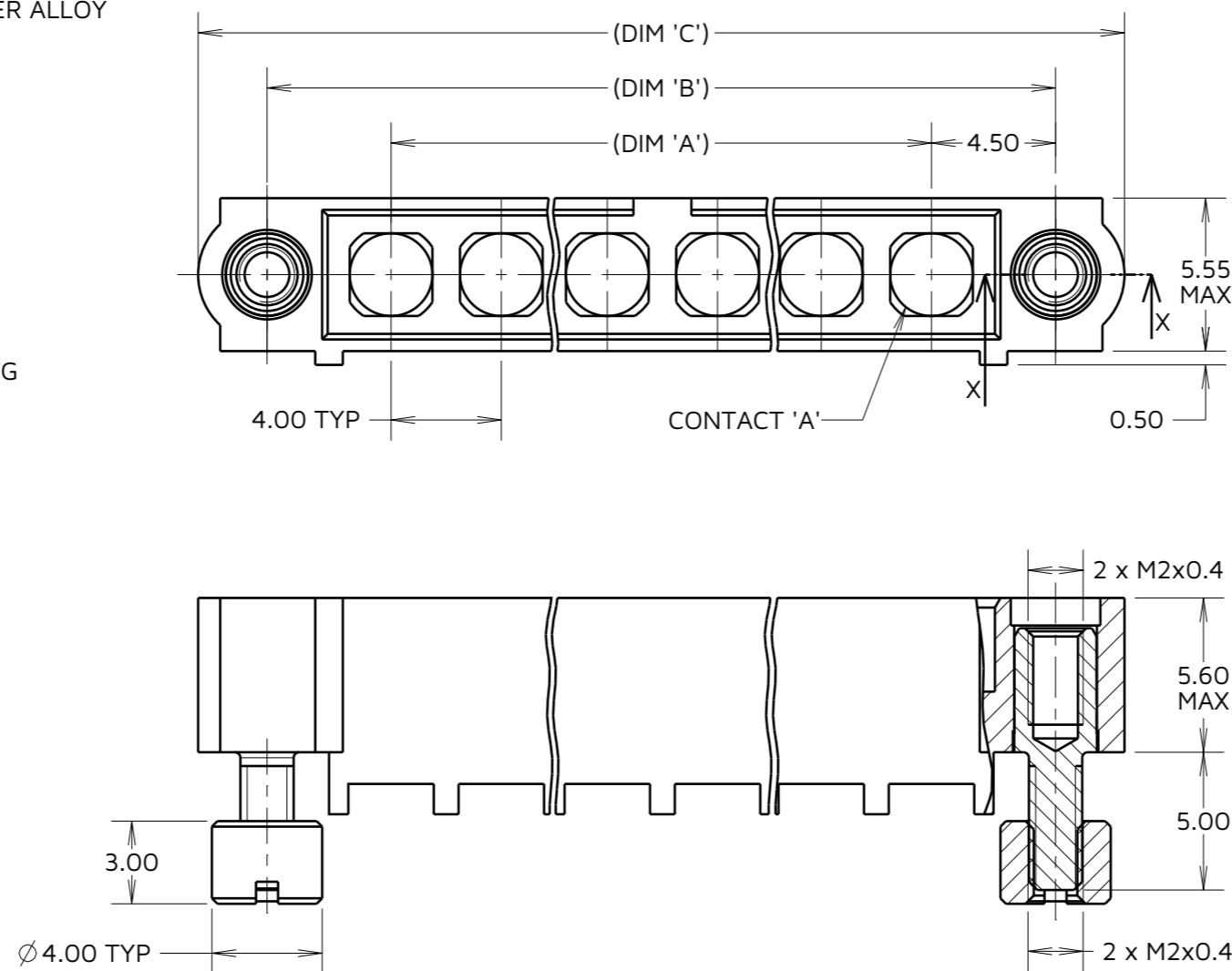
ALL DIMENSIONS IN mm

SPECIFICATIONS:

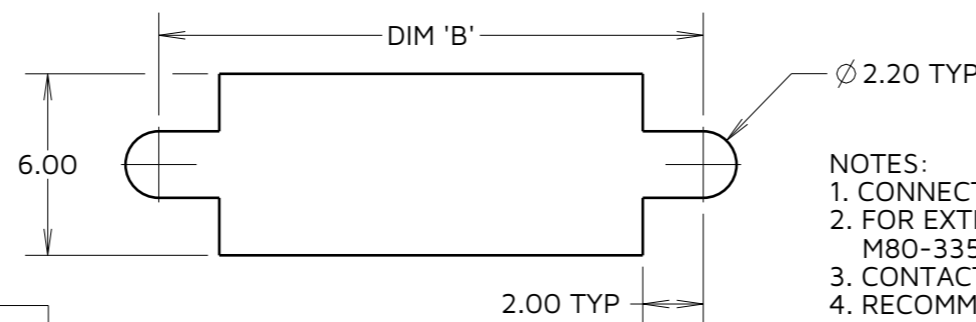
MATERIAL:
 MOULDING: GLASS FILLED PPS, UL94V-0, BLACK
POWER CONTACT:
 BODY, SLEEVE, INNER CONTACT, END PLUG = COPPER ALLOY
 LATCHING COLLAR = BERYLLIUM COPPER
 INSULATOR = PTFE
 101LOK RETAINER = STAINLESS STEEL
FINISH:
POWER CONTACT:
 BODY, SLEEVE, INNER CONTACT, END PLUG = GOLD
 LATCHING COLLAR = NICKEL
ELECTRICAL:
 WORKING VOLTAGE = 800V AC/DC
 VOLTAGE PROOF = 1200V AC/DC
 INSULATION RESISTANCE = 100MΩ MIN
POWER CONTACT:
 CONTACT RESISTANCE = 6mΩ MAX
 CURRENT RATING = M80-335 = 20A MAX WITH 12AWG
 M80-336 = 15A MAX WITH 14AWG
 M80-337 = 10A MAX WITH 16AWG
 M80-338 = 8A MAX WITH 18AWG
 M80-339 = 5A MAX WITH 20AWG
 M80-PM5 = 40A MAX WITH 10AWG
 CONTACT AS SPECIFIED

MECHANICAL:
 DURABILITY = 500 OPERATIONS
POWER CONTACT:
 INSERTION FORCE:
 M80-335/336/337/338/339 = 8N MAX
 M80-PM5 = 15N MAX
 WITHDRAWAL FORCE = 0.5N MIN
ENVIRONMENTAL:
 TEMPERATURE RANGE:
 M80-335/336/337/338/339 = -55°C TO +125°C
 M80-PM5 = -55°C TO +150°C
PACKING:
 BAG
 FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)

POWER CRIMP AND SOLDER CONTACTS ONLY



RECOMMENDED PCB CUT OUT



- NOTES:**
- CONNECTORS ARE SUPPLIED WITH CONTACTS AND NUTS LOOSE.
 - FOR EXTRA POWER CONTACTS USE PART NUMBERS: M80-335/336/337/338/339/PM5.
 - CONTACT EXTRACTION TOOL = Z80-290.
 - RECOMMENDED HAND CRIMP TOOL FOR CONTACTS 338/339 = Z80-294 AND POSITIONER Z80-295.
 - INSTRUCTION SHEETS ARE AVAILABLE.

ORDER CODE: (POWER CRIMP/SOLDER CONTACTS)
M80-5000000M3-XX-XXX-00-000

TOTAL No. OF CONTACTS
 02 TO 12

SPECIAL CONTACTS (CRIMP)
 335 = POWER CONTACT 12AWG SOLDER M80-335
 336 = POWER CONTACT 14AWG SOLDER M80-336
 337 = POWER CONTACT 16AWG SOLDER M80-337
 338 = POWER CONTACT 18AWG SOLDER/CRIMP M80-338
 339 = POWER CONTACT 20AWG SOLDER/CRIMP M80-339
 PM5 = POWER CONTACT 10AWG SOLDER M80-PM5

DIMENSION	CALCULATION
DIM 'A'	4 x No. OF CONTACTS - 4.00
DIM 'B'	4 x No. OF CONTACTS + 5.00
DIM 'C'	4 x No. OF CONTACTS + 10.00
EXAMPLE: CONNECTOR WITH 10 POWER CONTACTS, M80-5000000M3-10-335-00-000 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm	

RTP	7	10.07.23	32655
NAME	ISS.	DATE	CN/CO
APPROVED: R.PORTLOCK			
CHECKED: F.CHRISPINE			
DRAWN: R.ADDE			
ASSEMBLY DRG:			

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TOLERANCES
 X. = ±1mm
 X.X = ±0.50mm
 X.XX = ±0.20mm
 X.XXX = ±0.01mm
 ANGLES = ±5°
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MATERIAL:
 SEE ABOVE

TITLE: DATAMATE MIX-TEK MALE ASSEMBLY WITH BOARD MOUNT J/SCREW

DRAWING NUMBER:
 M80-5000000M3-XX-XXX-00-000

SHT
 5 OF 6

Customer Information Sheet

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NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

SPECIFICATIONS:

MATERIAL:
 Moulding: GLASS FILLED PPS, UL94V-0, BLACK
 Power Contact: COPPER ALLOY
 Coax Contact:

Body = COPPER ALLOY
 Inner Contact = COPPER ALLOY
 Insulator = PTFE
 Jackscrew, Nut = STAINLESS STEEL

FINISH:
 Power Contact: GOLD
 Coax Contact: BODY, INNER CONTACT = GOLD

ELECTRICAL:
 Working Voltage = 800V AC/DC
 Voltage Proof = 1200V AC/DC
 Insulation Resistance = 100MΩ MIN

POWER CONTACT:
 Contact Resistance = 6mΩ MAX
 Current Rating:

M80-331/332 = 20A MAX
 M80-PM1/PM2 = 40A MAX

COAX CONTACT:
 Frequency Range = 6GHz
 Impedance = 50Ω
 V.S.W.R = 1.05 + (0.04 x FREQUENCY) GHz MAX
 Contact Resistance = 6mΩ MAX

Insulation Resistance = 10⁶MΩ @250V AC
 Operating Voltage = 180V AC @ 500mA
 Maximum Voltage = 1000V AC

MECHANICAL:
 Durability = 500 OPERATIONS
 Power Contact:

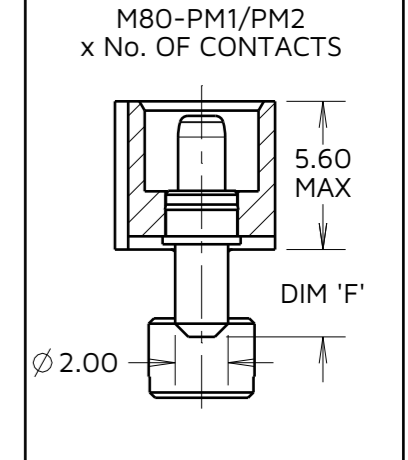
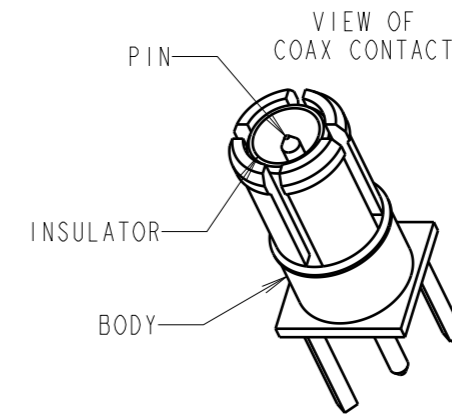
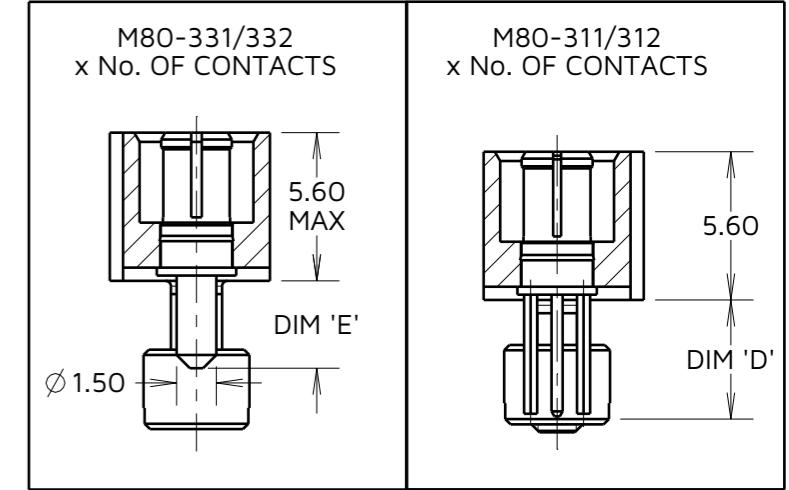
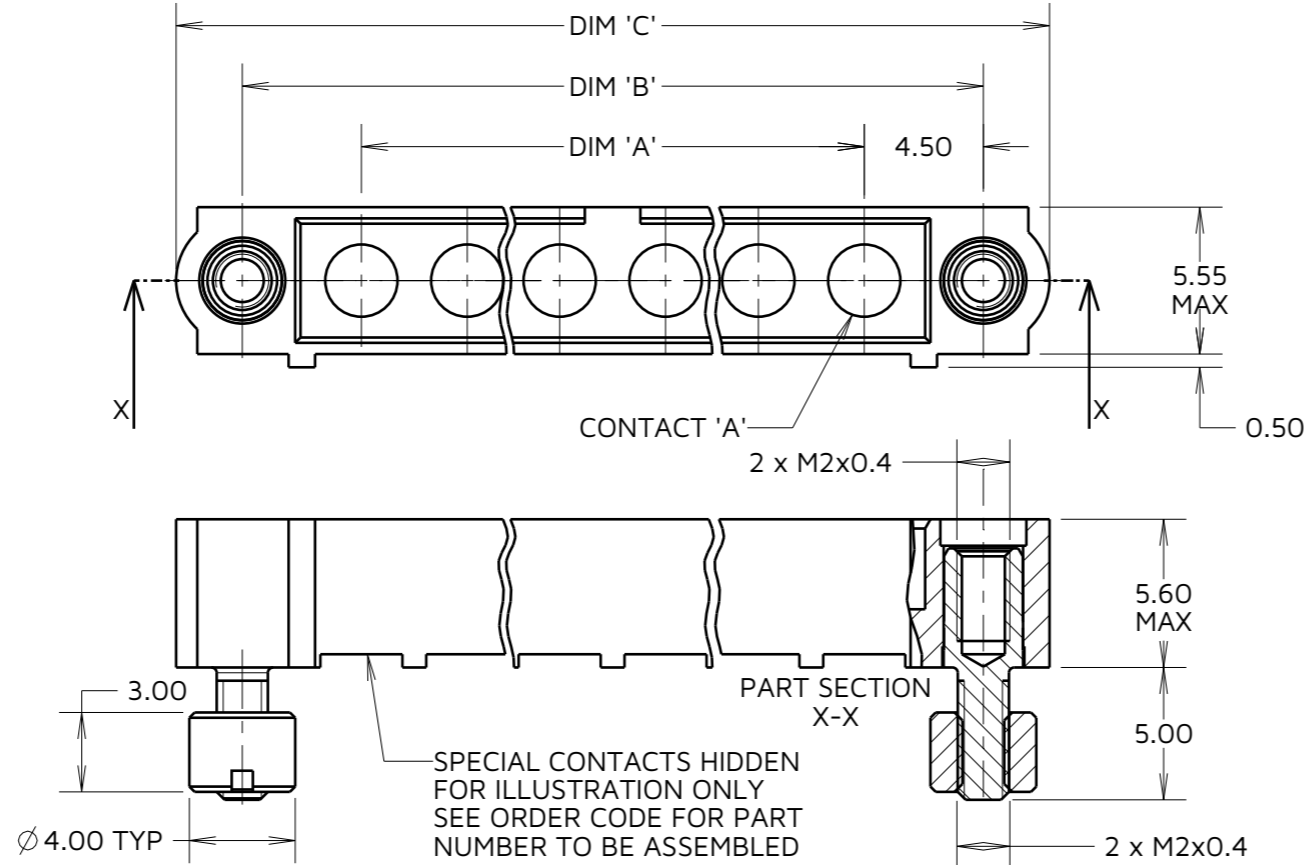
Insertion Force:
 M80-331/332 = 8N MAX
 M80-PM1/PM2 = 15N MAX
 Withdrawal Force = 0.5N MIN

COAX CONTACT:
 Insertion Force = 8N MAX
 Withdrawal Force = 0.5N MIN

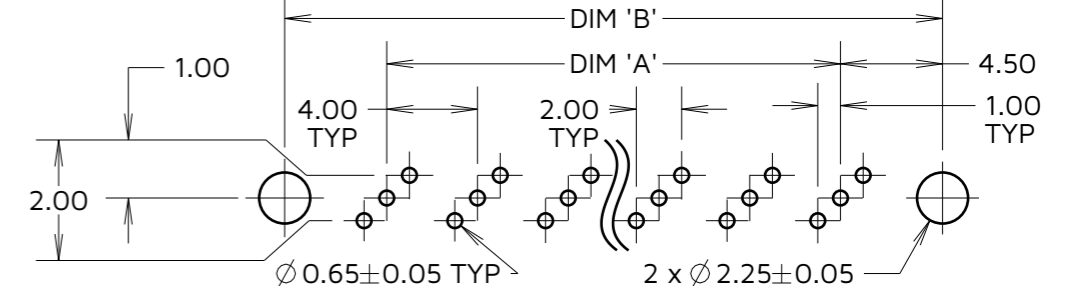
ENVIRONMENTAL:
 Temperature Range:
 M80-311/312/331/332 = -55°C TO +125°C
 M80-PM1/PM2 = -55°C TO +150°C

PACKING:
 Tube
 For complete specification see component specification CO05XX (LATEST ISSUE)

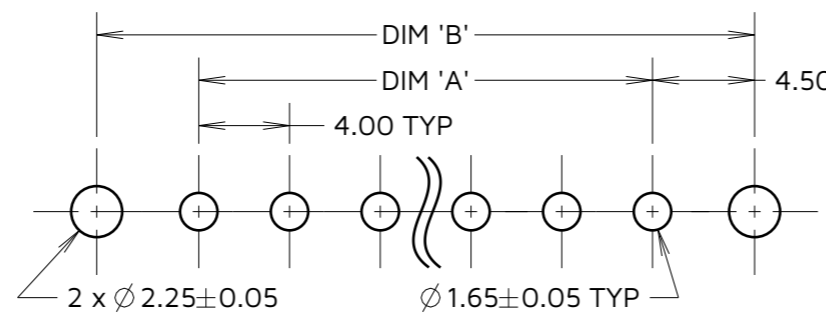
COAX PC TAIL CONTACTS ONLY



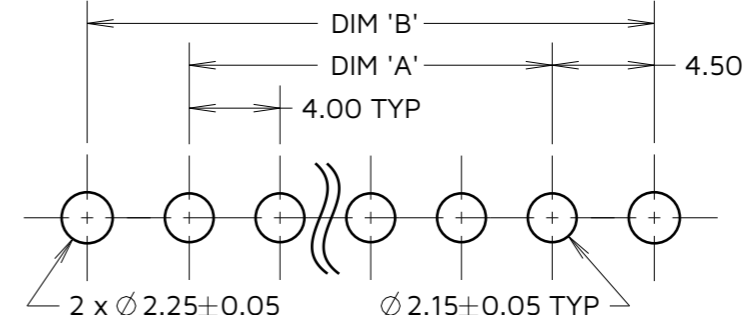
RECOMMENDED PCB LAYOUT FOR COAX CONTACTS: M80-311/312



RECOMMENDED PCB LAYOUT FOR POWER CONTACTS: M80-331/332



RECOMMENDED PCB LAYOUT FOR POWER CONTACTS: M80-PM1/PM2



ORDER CODE: (COAX PC TAIL CONTACTS ONLY)
M80-5000000M3-XX-XXX-00-000

TOTAL No. OF CONTACTS
 02 TO 12

SPECIAL CONTACTS (PC TAIL)

311 = COAX CONTACT 3.0mm PC TAIL M80-311
 312 = COAX CONTACT 4.5mm PC TAIL M80-312
 331 = 20A POWER CONTACT 3.5mm VERT' PC TAIL M80-331
 332 = 20A POWER CONTACT 5.0mm VERT' PC TAIL M80-332
 PM1 = 40A POWER CONTACT 3.5mm VERT' PC TAIL M80-PM1
 PM2 = 40A POWER CONTACT 5.0mm VERT' PC TAIL M80-PM2

DIMENSION	CALCULATION
DIM 'A'	4 x No. OF CONTACTS - 4.00
DIM 'B'	4 x No. OF CONTACTS + 5.00
DIM 'C'	4 x No. OF CONTACTS + 10.00
DIM 'D'	M80-311 = 3.0mm, M80-312 = 4.5mm
DIM 'E'	M80-331 = 3.5mm, M80-332 = 5.0mm
DIM 'F'	M80-PM1 = 3.5mm, M80-PM2 = 5.0mm

EXAMPLE: CONNECTOR WITH 08 COAX CONTACTS,
 M80-5000000M3-08-311-00-000
 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm
 DIM 'D' = 3.0mm

RTP	7	10.07.23	32655
NAME	ISS.	DATE	CN/CO
APPROVED: R.PORTLOCK			
CHECKED: F.CHRISPINE			
DRAWN: R.ADDE			
ASSEMBLY DRG:			

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TOLERANCES
 X. = ±1mm
 X.X = ±0.50mm
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MATERIAL:
 SEE ABOVE

TITLE: DATAMATE MIX-TEK MALE ASSEMBLY WITH BOARD MOUNT J/SCREW

DRAWING NUMBER:
 M80-5000000M3-XX-XXX-00-000

SHT
 6 OF 6

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Harwin:

[M80-5000000M3-04-331-00-000](#) [M80-5000000M3-04-332-00-000](#) [M80-5000000M3-06-332-00-000](#)
[M805000000M302331000](#) [M80-5000000M3-10-332-00-000](#) [M80-5000000M3-08-332-00-000](#) [M80-5000000M3-02-332-](#)
[00-000](#) [M80-5000000M3-02-331-00-000](#) [M80-5000000M3-10-331-00-000](#) [M80-5000000M3-08-PM2-00-000](#) [M80-](#)
[5000000M3-06-PM2-00-000](#) [M80-5000000M3-03-331-00-000](#) [M80-5000000M3-04-PM2-00-000](#) [M80-5000000M3-12-](#)
[332-00-000](#) [M80-5000000M3-12-331-00-000](#) [M80-5000000M3-02-PM2-00-000](#)