

Customer Information Sheet

DRAWING No.: M80-500000M3-XX-XXX-00-000

IF IN DOUBT - ASK

(C)

NOT TO SCALE

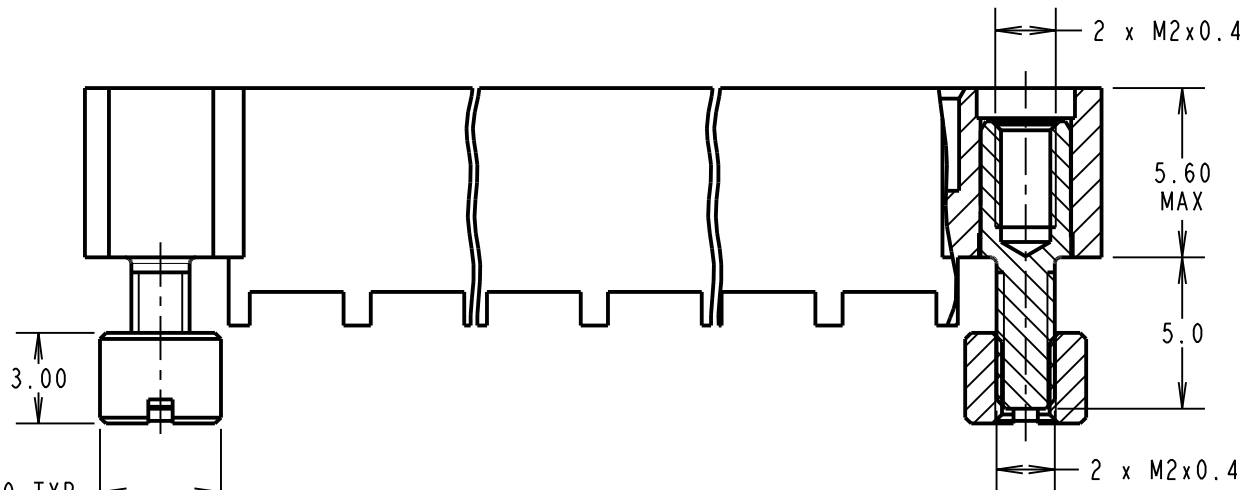
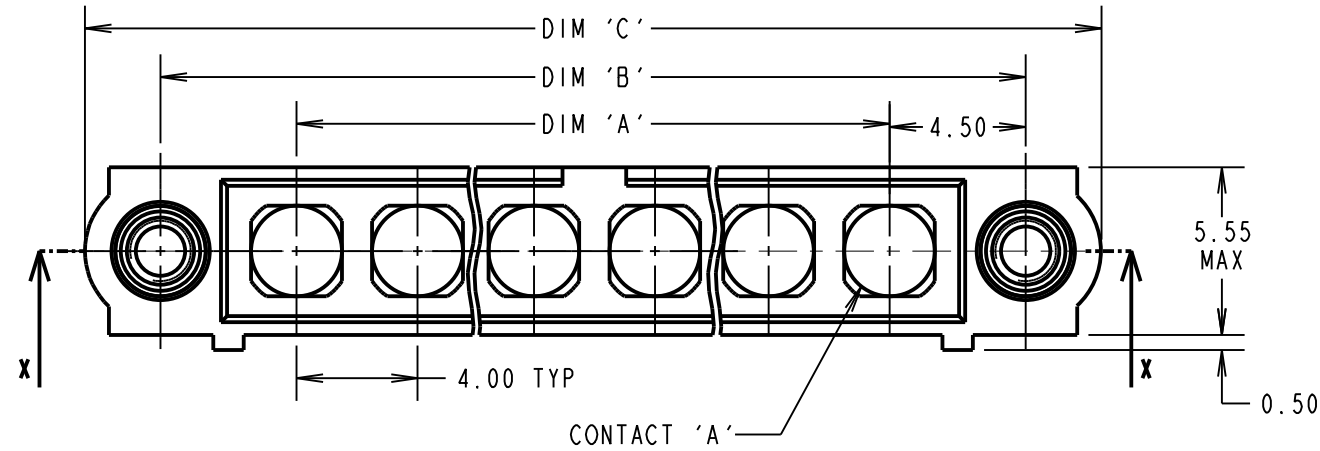
THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

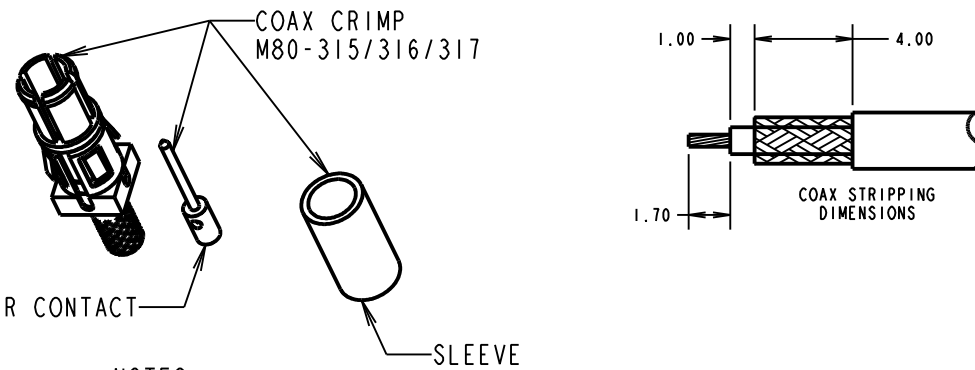
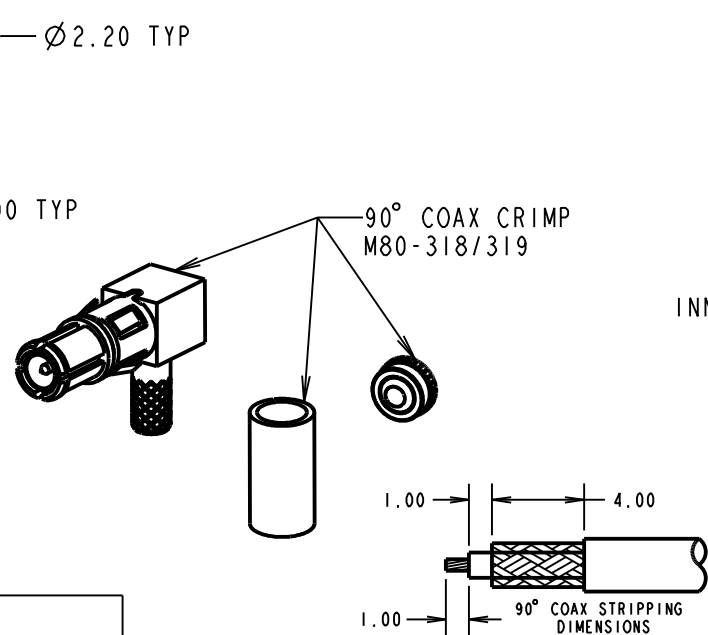
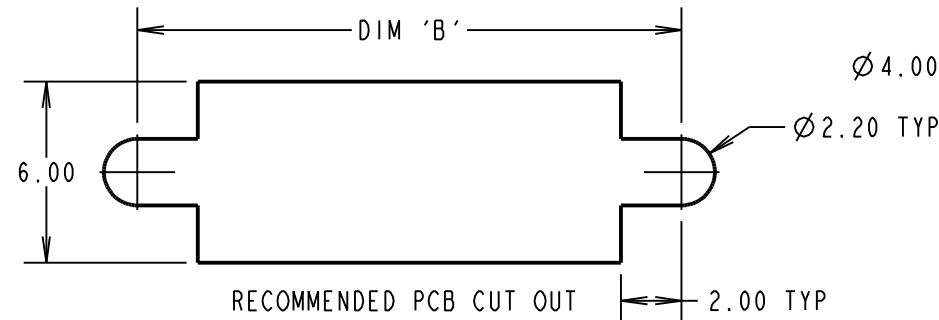
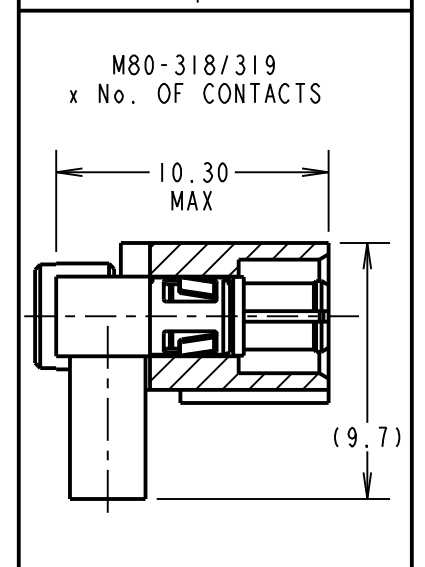
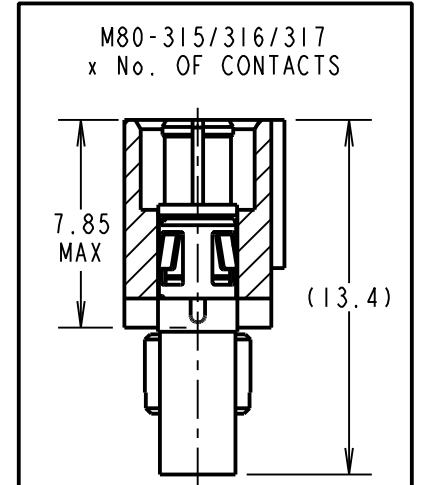
SPECIFICATIONS:

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 C005XX (LATEST ISSUE)

COAX CRIMP AND SOLDER CONTACTS ONLY



PART SECTION X-X



ORDER CODE: (COAX CRIMP/SOLDER CONTACTS)
M80-500000M3-XX-XXX-00-000
 TOTAL No. OF CONTACTS: 02 TO 12
SPECIAL CONTACTS (CRIMP)
 315 = COAX CONTACT 2.0mm CRIMP M80-315
 316 = COAX CONTACT 2.4mm CRIMP M80-316
 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

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, M80-500000M3-08-315-00-000 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm	

- NOTES:**
- CONNECTORS ARE SUPPLIED WITH CONTACTS LOOSE.
 - 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.
 - FOR EXTRA COAX CONTACTS, USE PART NUMBERS M80-315/316/317/318/319.
 - CONTACT EXTRACTION TOOL = Z80-290.
 - 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.
 - INSTRUCTION SHEETS ARE AVAILABLE.

MSP	5	11.08.15	12997
NAME	ISS.	DATE	C/NOTE
APPROVED:		M.PERREN	
CHECKED:		S.BENNETT	
DRAWN:		R.ADDE	
CUSTOMER REF.:			
ASSEMBLY DRG.:			

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TOLERANCES
 X. = ±1mm
 X.X = ±0.50mm
 X.XX = ±0.10mm
 X.XXX = ±0.01mm
 ANGLES = ±5°
 UNLESS STATED

MATERIAL:
 SEE ABOVE
FINISH:
 SEE ABOVE
S/AREA:
 mm²

TITLE: DATAMATE MIX-TEK MALE ASSEMBLY WITH BOARD MOUNT J/SCREW
DRAWING NUMBER: M80-500000M3-XX-XXX-00-000
 SHT 4 OF 6

Customer Information Sheet

DRAWING No.: M80-500000M3-XX-XXX-00-000

IF IN DOUBT - ASK

(C)

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

IOILOK 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

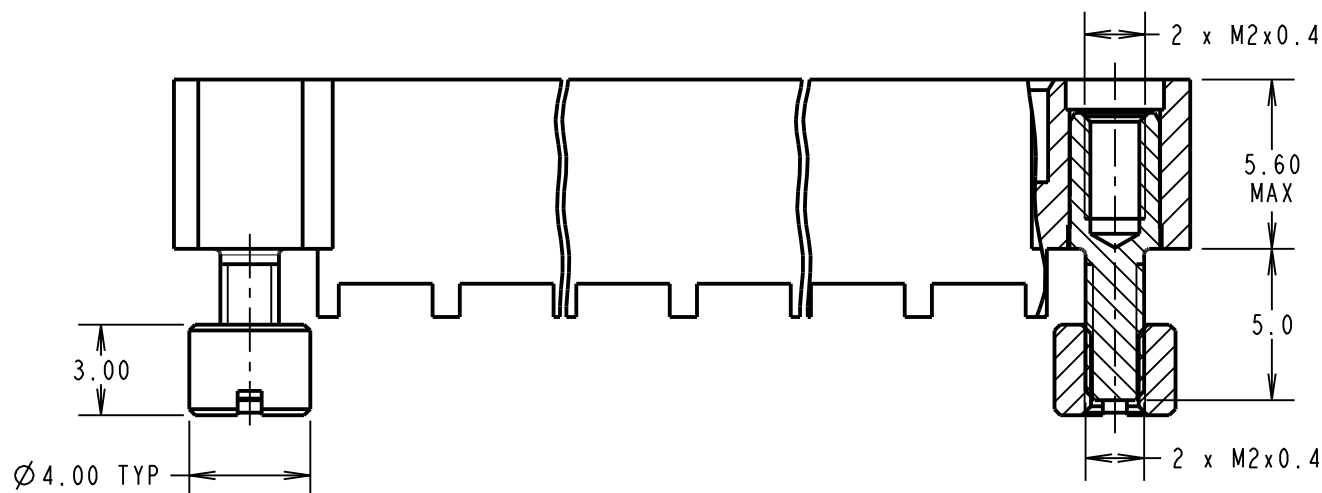
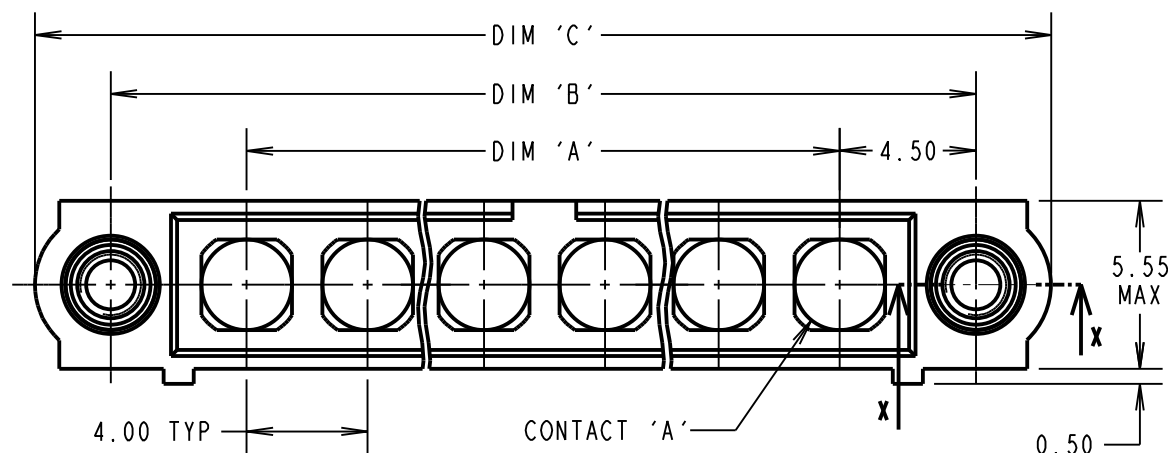
M80-PM5 = -55°C TO +150°C

PACKING:

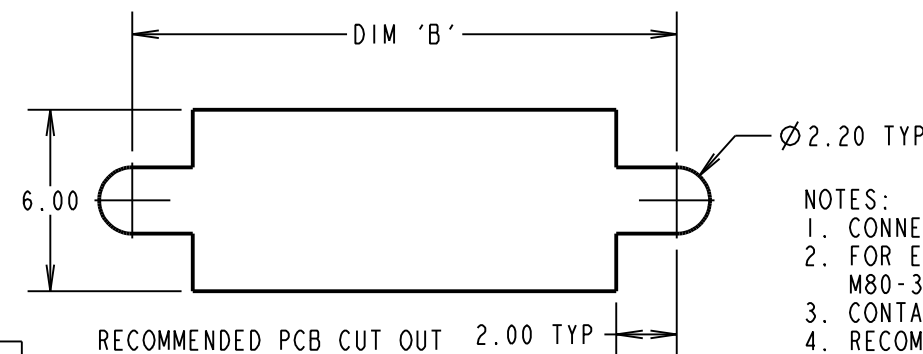
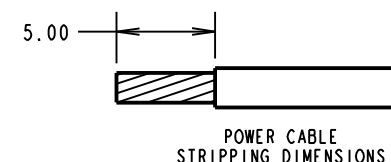
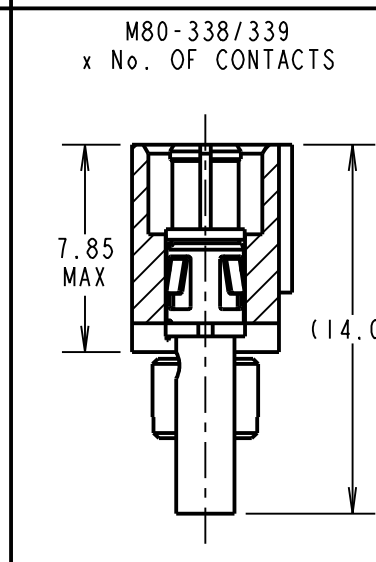
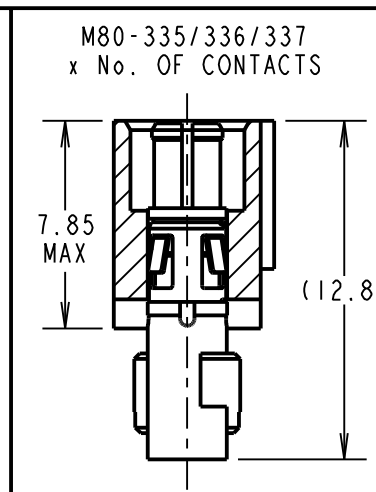
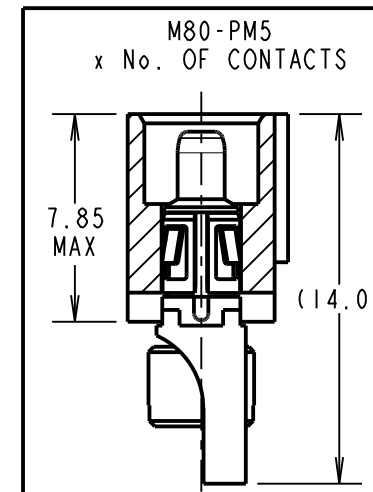
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FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)

POWER CRIMP AND SOLDER CONTACTS ONLY



PART SECTION X-X



NOTES:

- CONNECTORS ARE SUPPLIED WITH CONTACTS 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)

M80-500000M3-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, M80-500000M3-10-335-00-000	
DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm	

MSP	5	11.08.15	12997
NAME	ISS.	DATE	C/NOTE
APPROVED:		M.PERREN	
CHECKED:		S.BENNETT	
DRAWN:		R.ADDE	
CUSTOMER REF.:			
ASSEMBLY DRG:			

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TOLERANCES

X. = ±1mm
X.X = ±0.50mm
X.XX = ±0.10mm
X.XXX = ±0.01mm
ANGLES = ±5°
UNLESS STATED

MATERIAL:

SEE ABOVE

FINISH:

SEE ABOVE

S/AREA:

mm²

TITLE:

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

DRAWING NUMBER:

M80-500000M3-XX-XXX-00-000

SHT
5 OF 6

Customer Information Sheet

DRAWING No.: M80-5000000M3-XX-XXX-00-000

IF IN DOUBT - ASK

(C)

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 = 10⁹MΩ @250V AC
 OPERATING VOLTAGE = 180V AC @ 500mA
 MAXIMUM VOLTAGE = 1000V AC

MECHANICAL:
 DURABILITY = 500 OPERATIONS

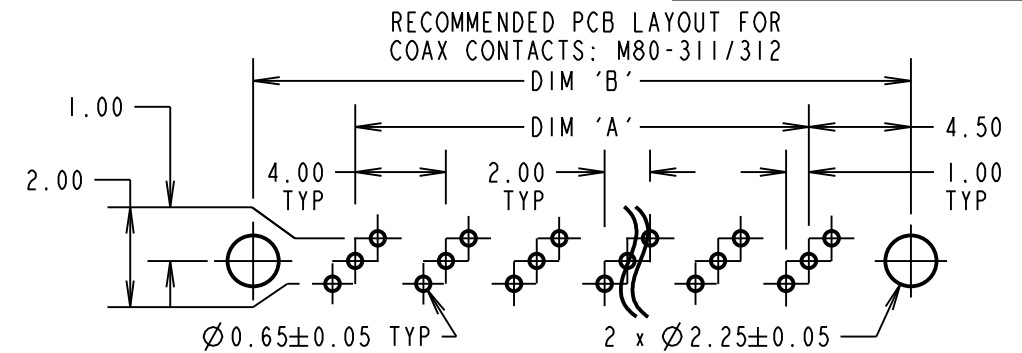
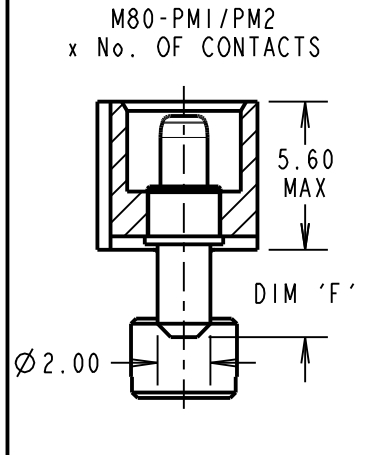
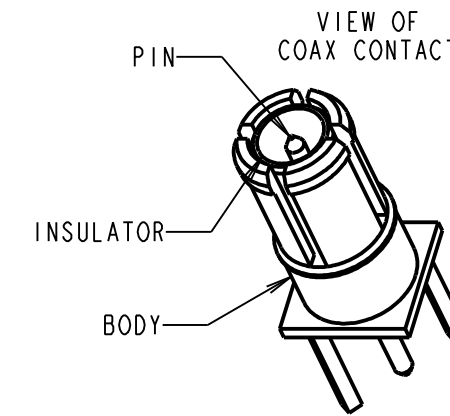
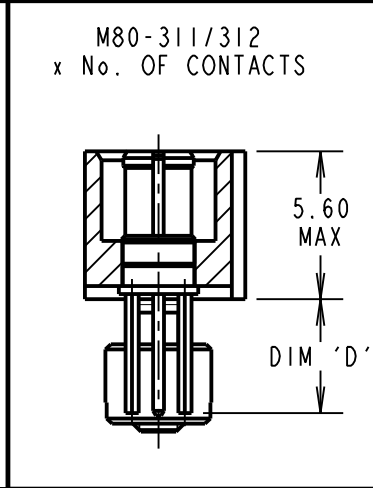
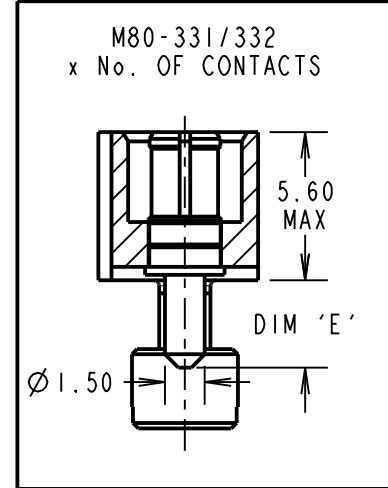
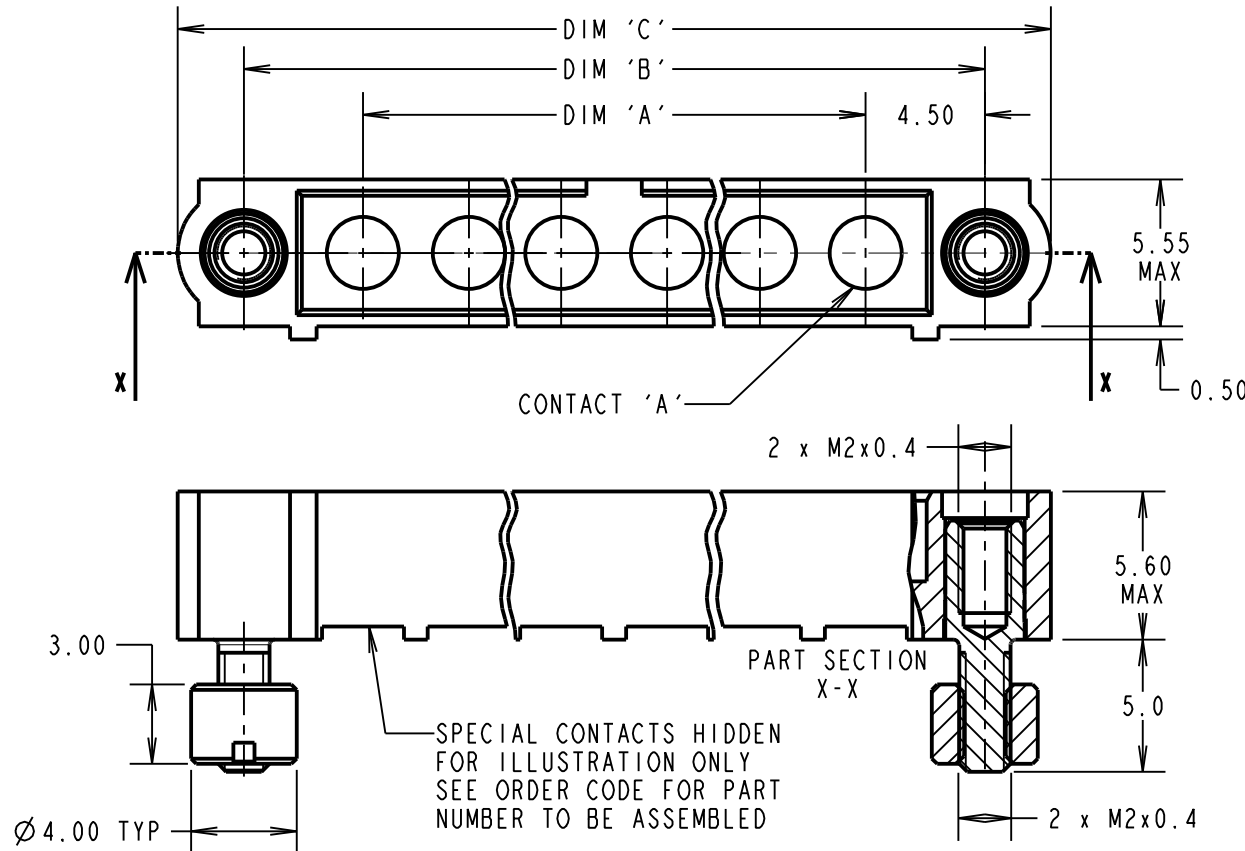
POWER CONTACT:
 INSERTION FORCE:
 M80-331/332 = 8N MAX
 M80-PM1/PM2 = 15N MAX
 WITHDRAWAL FORCE = 0.5N MIN

COAX CONTACT:
 INSERTION FORCE = 8N MAX
 WITHDRAWAL FORCE = 0.5N MIN

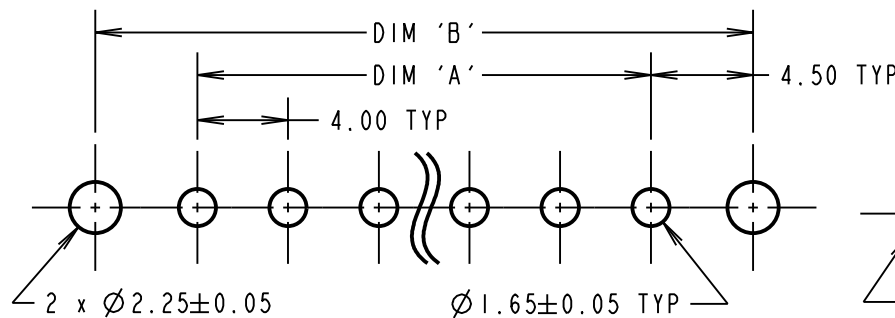
ENVIRONMENTAL:
 TEMPERATURE RANGE:
 M80-311/312/331/332 = -55°C TO +125°C
 M80-PM1/PM2 = -55°C TO +150°C

PACKING:
 TUBE
 FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)

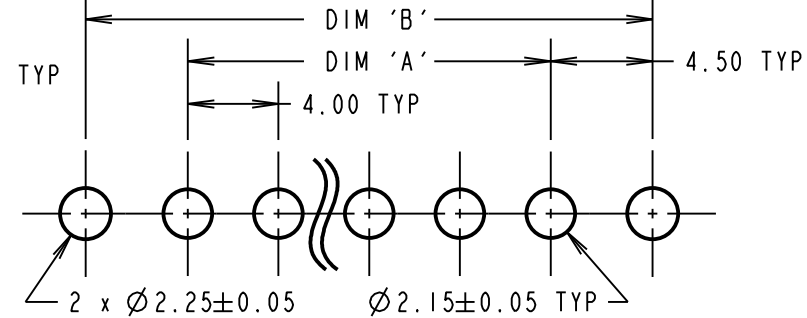
COAX PC TAIL CONTACTS ONLY



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

MSP	5	11.08.15	12997
NAME	ISS.	DATE	C/NOTE
APPROVED:		M.PERREN	
CHECKED:		S.BENNETT	
DRAWN:		R.ADDE	
CUSTOMER REF.:			
ASSEMBLY DRG:			

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 X.X = ±0.50mm
 X.XX = ±0.10mm
 X.XXX = ±0.01mm
 ANGLES = ±5°
 UNLESS STATED

MATERIAL:
 SEE ABOVE
 FINISH: SEE ABOVE
 S/AREA: mm²

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

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[M80-5000000M3-04-331-00-000](#)