

Customer Information Sheet

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

IF IN DOUBT - ASK

©

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

FINISH:
 COAX CONTACT:
 BODY, SLEEVE, INNER CONTACT, END PLUG = GOLD
 LATCHING COLLAR = NICKEL

ELECTRICAL:
 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

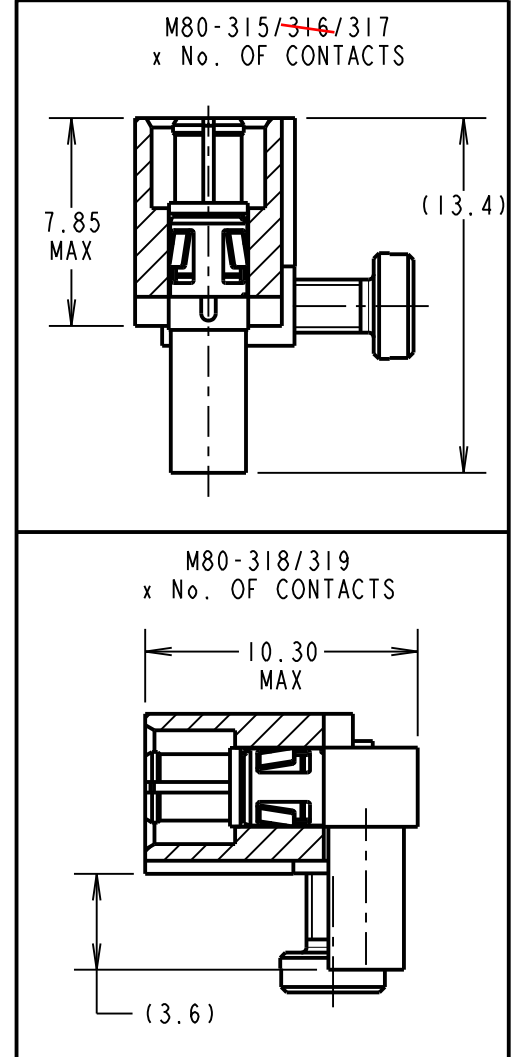
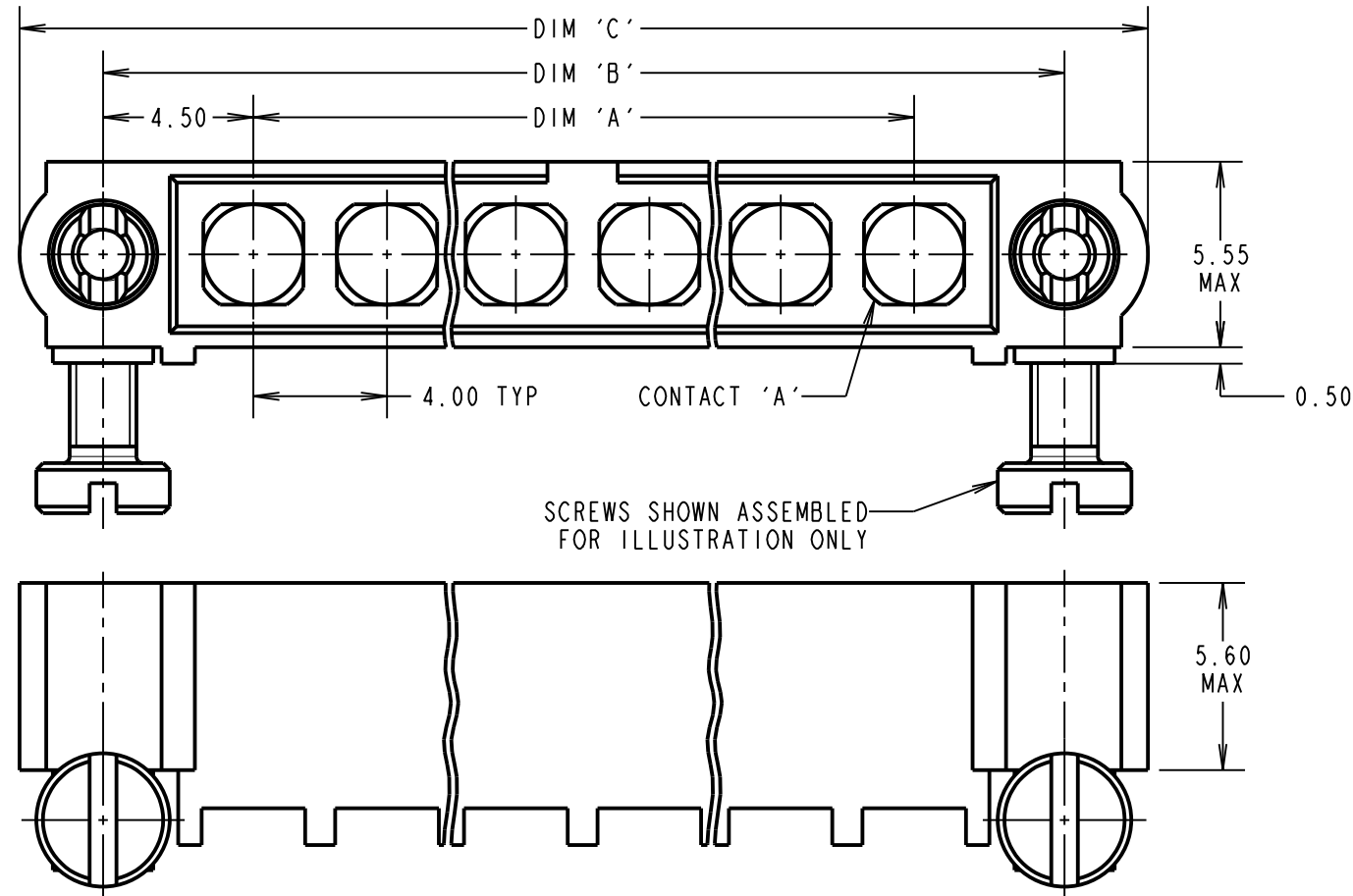
MECHANICAL:
 DURABILITY = 500 OPERATIONS

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

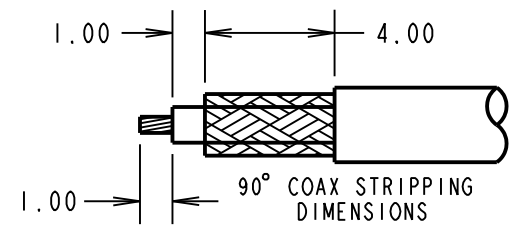
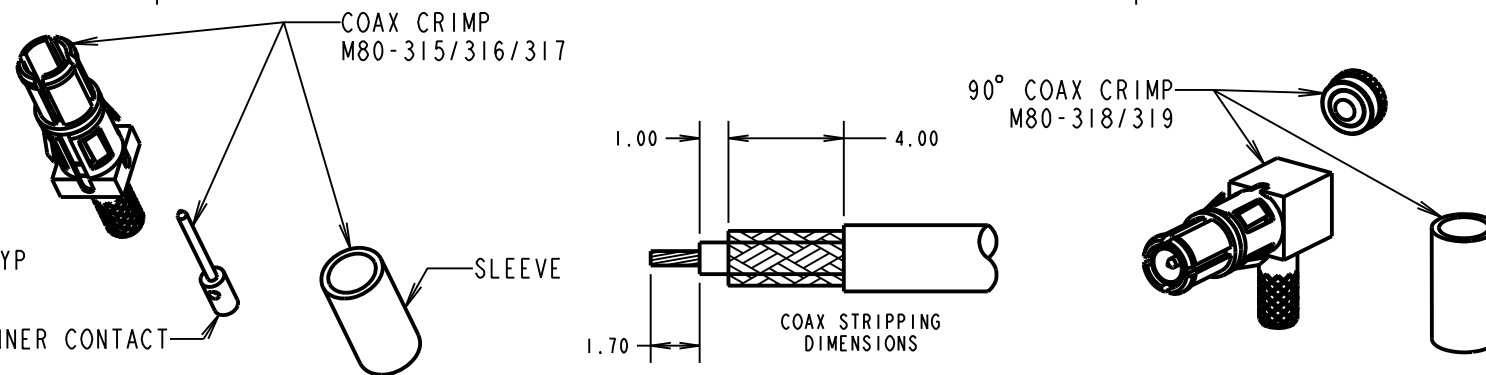
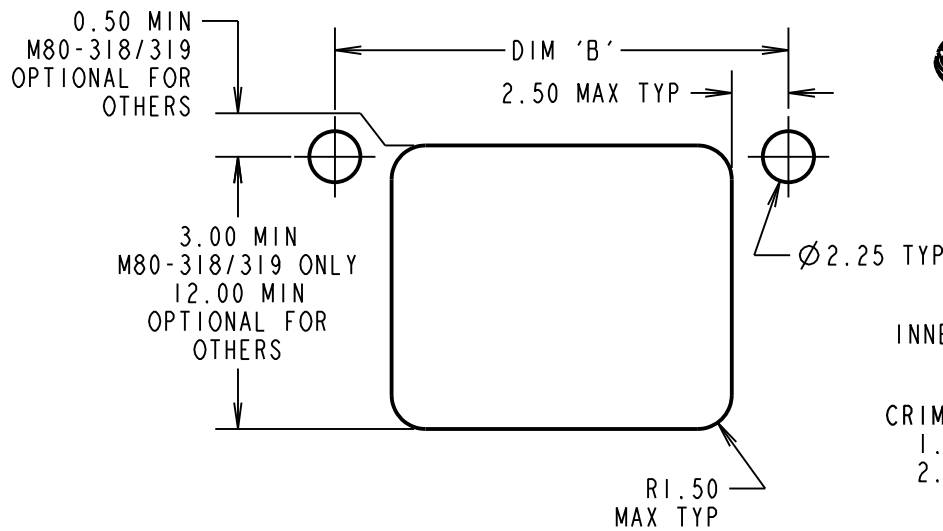
ENVIRONMENTAL:
 TEMPERATURE RANGE = -55°C TO +125°C

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

COAX CRIMP CONTACTS ONLY



RECOMMENDED PCB OR PANEL MOUNT LAYOUT
 TOLERANCE = ±0.05mm



CRIMP/SOLDER 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.
- COAX 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.

ORDER CODE: (COAX CRIMP CONTACTS)
M80-500000MD-XX-XXX-00-000
 TOTAL No. OF CONTACTS _____
 02 TO 12
 SPECIAL CONTACTS _____
 315 = COAX CONTACT 2.00mm CRIMP M80-315
~~316 = COAX CONTACT 2.40mm CRIMP M80-316~~
 317 = COAX CONTACT 2.70mm CRIMP M80-317
 318 = COAX CONTACT 2.00mm HORIZ' CRIMP M80-318
 319 = COAX CONTACT 2.70mm HORIZ' CRIMP M80-319

MGP	2	19.12.19	21540
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SB			
DRAWN: S.BENNETT			
CUSTOMER REF.:			
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 + 10.0

EXAMPLE 1: CONNECTOR WITH 08 COAX CONTACTS,
 M80-500000MD-08-315-00-000
 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.0mm

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		X. = ±1mm X.X = ±0.50mm X.XX = ±0.20mm X.XXX = ±0.01mm ANGLES = ±5° UNLESS STATED	SEE ABOVE	DATAMATE MIX-TEK MALE ASSEMBLY
		FINISH:	S/AREA:	DRAWING NUMBER:
		SEE ABOVE	mm ²	M80-500000MD-XX-XXX-00-000
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Customer Information Sheet

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

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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

FINISH:
POWER CONTACT:
 BODY, SLEEVE, INNER CONTACT, END PLUG = GOLD
 LATCHING COLLAR = NICKEL

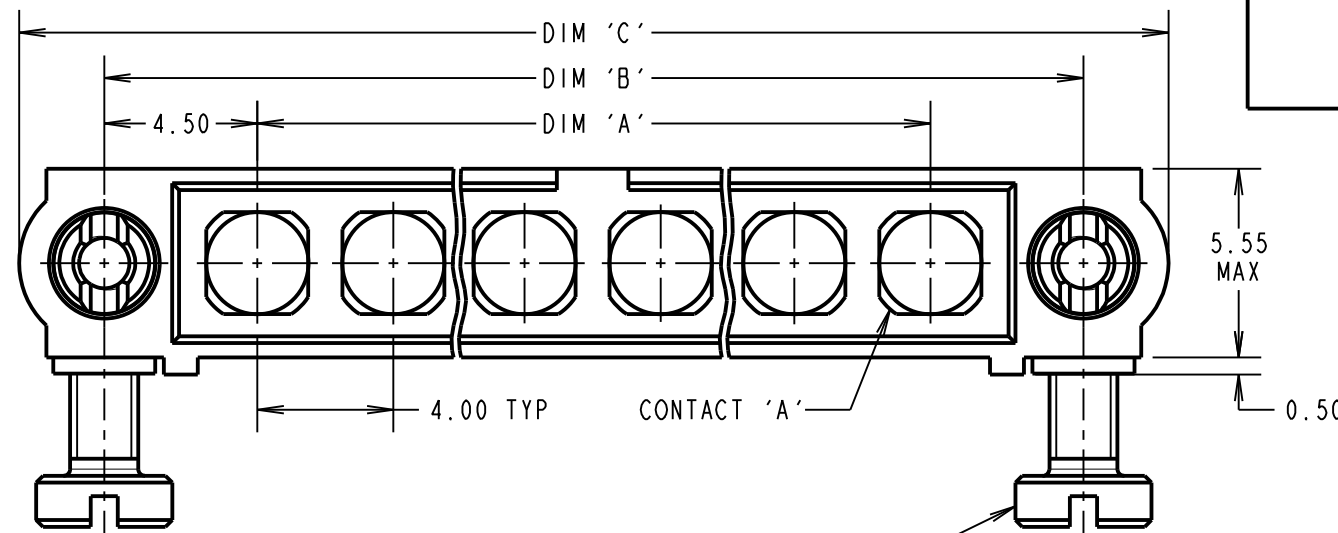
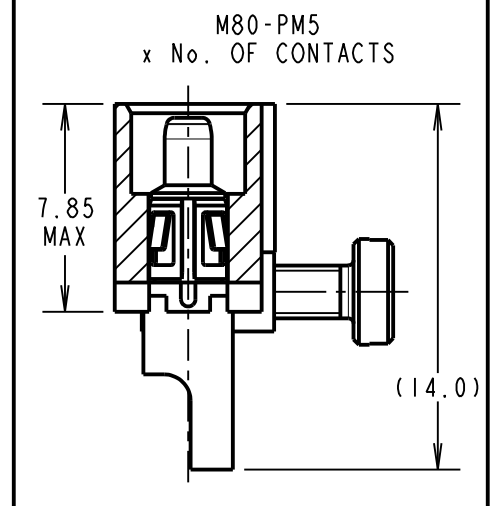
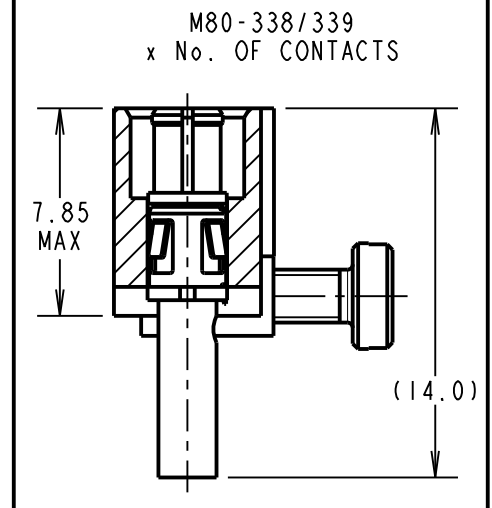
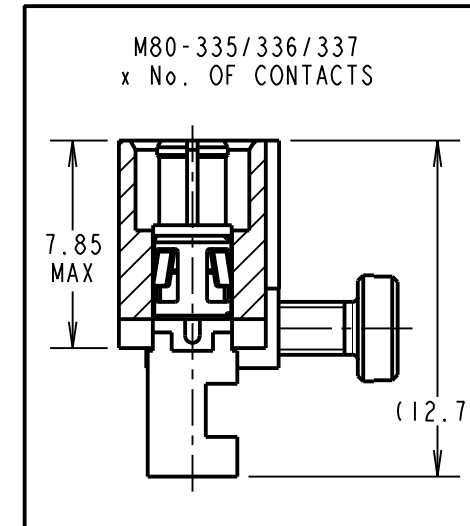
ELECTRICAL:
 WORKING VOLTAGE = 800V AC/DC
 VOLTAGE PROOF = 1200V AC/DC
 INSULATION RESISTANCE = 100MΩ MIN
 CONTACT RESISTANCE = 6mΩ MAX
 CURRENT RATING = M80-335 = 20A MAX WITH 12AWG
 M80-336 = 15A MAX WITH 14AWG
 M80-337 = 10A MAX WITH 16AWG
 M80-338 = 8A MAX WITH 18AWG
 M80-339 = 5A MAX WITH 20AWG
 M80-PM5 = 40A MAX WITH 10AWG
 CONTACT AS SPECIFIED

MECHANICAL:
 DURABILITY = 500 OPERATIONS
 INSERTION FORCE:
 M80-335/336/337/338/339 = 8N MAX
 M80-PM5 = 15N MAX
 WITHDRAWAL FORCE = 0.5N MIN

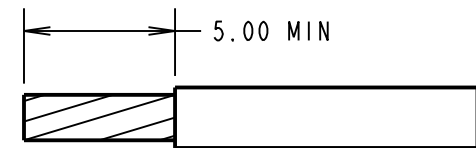
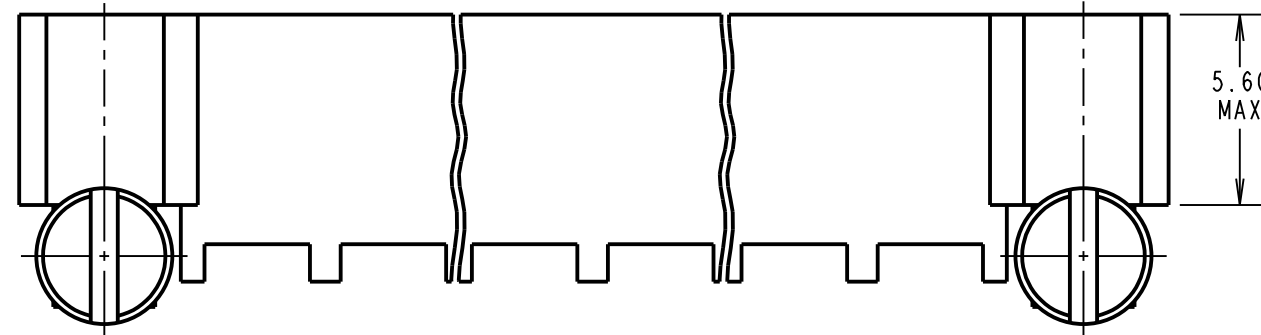
ENVIRONMENTAL:
 TEMPERATURE RANGE:
 M80-335/336/337/338/339 = -55°C TO +125°C
 M80-PM5 = -55°C TO +150°C

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

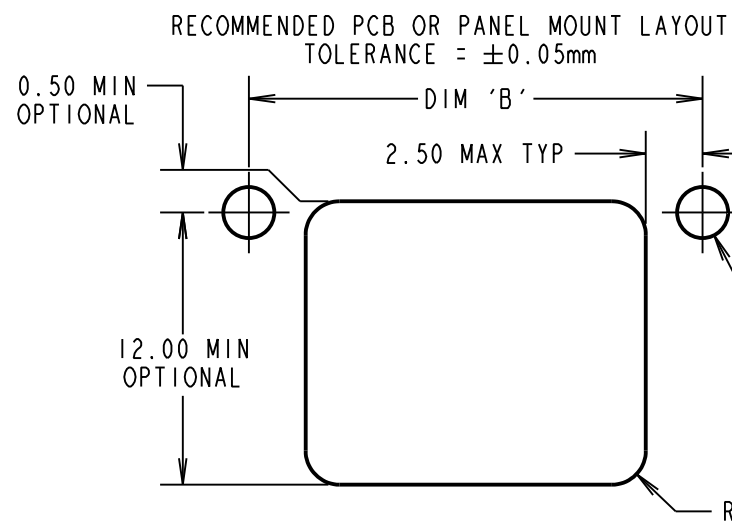
POWER CRIMP & SOLDER CONTACTS ONLY



SCREWS SHOWN ASSEMBLED FOR ILLUSTRATION ONLY



POWER CABLE STRIPPING DIMENSIONS



CRIMP/SOLDER NOTES:

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

ORDER CODE: (POWER CRIMP/SOLDER CONTACTS)
M80-500000MD-XX-XXX-00-000

TOTAL No. OF CONTACTS _____
 02 TO 12

SPECIAL CONTACTS
 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

MGP	2	19.12.19	21540
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SB			
DRAWN: S.BENNETT			
CUSTOMER REF.:			
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 + 10.0

EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS,
 M80-500000MD-10-335-00-000
 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.0mm

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

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

TITLE:
 DATAMATE MIX-TEK
 MALE ASSEMBLY

DRAWING NUMBER:
M80-500000MD-XX-XXX-00-000

SHT
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DRAWING No.: M80-500000MD-XX-XXX-00-000

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THIRD ANGLE PROJECTION

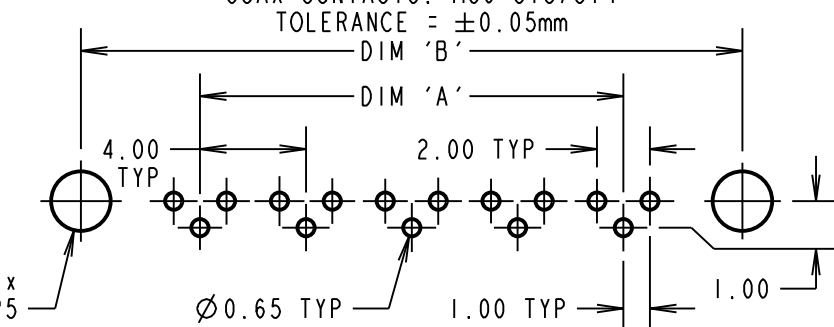
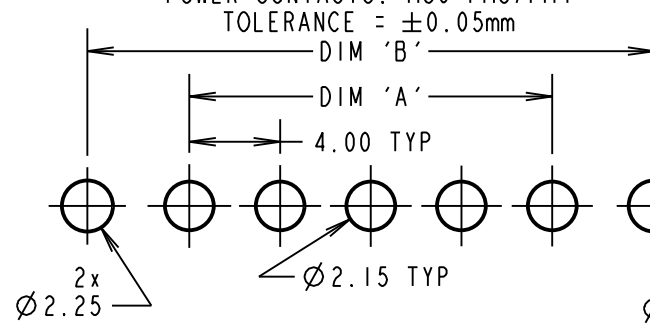
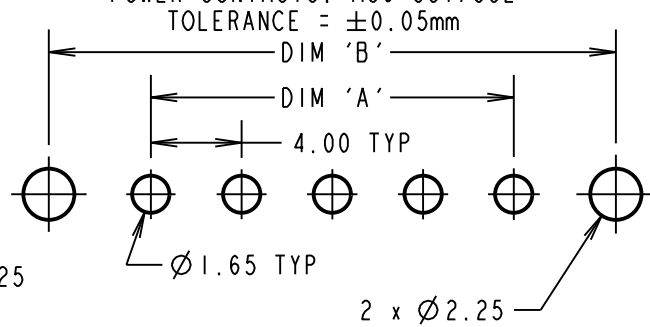
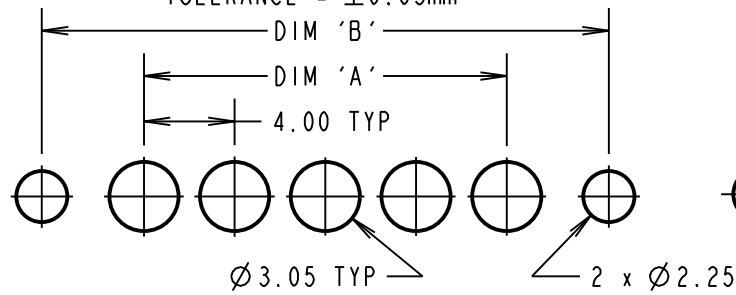
ALL DIMENSIONS IN mm

RECOMMENDED PCB LAYOUT FOR POWER SMT: M80-33A
TOLERANCE = ±0.05mm

RECOMMENDED PCB LAYOUT FOR POWER CONTACTS: M80-331/332
TOLERANCE = ±0.05mm

RECOMMENDED PCB LAYOUT FOR POWER CONTACTS: M80-PM3/PM4
TOLERANCE = ±0.05mm

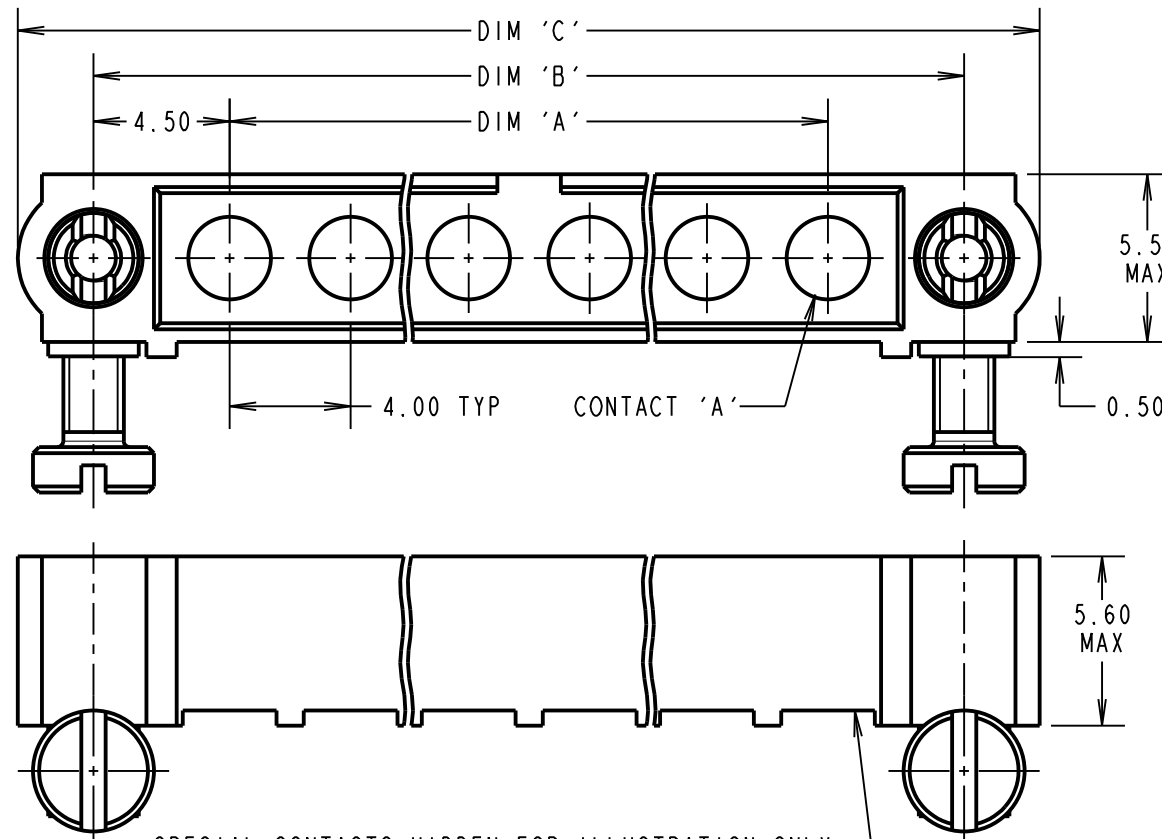
RECOMMENDED PCB LAYOUT FOR COAX CONTACTS: M80-313/314
TOLERANCE = ±0.05mm



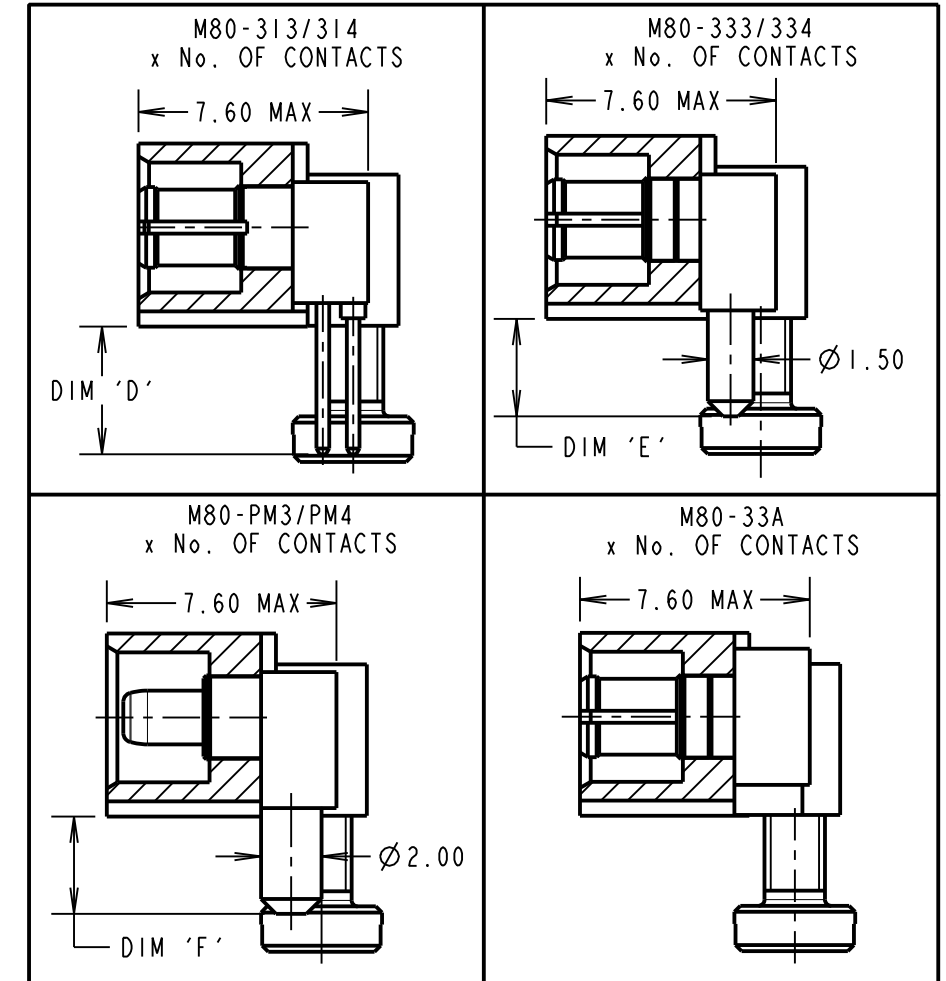
SPECIFICATIONS:

- MATERIAL:**
 Moulding: GLASS FILLED PPS, UL94V-0, BLACK
 Power Contact: COPPER ALLOY
 Coax Contact:
 Body = COPPER ALLOY
 Inner Contact = COPPER ALLOY
 Insulator = PTFE
- FINISH:**
 Power Contact: GOLD
 Coax Contact: BODY, INNER CONTACT = GOLD
- ELECTRICAL:**
 Power Contact:
 Working Voltage = 800V AC/DC
 Voltage Proof = 1200V AC/DC
 Insulation Resistance = 100MΩ MIN
 Contact Resistance = 6mΩ MAX
 Current Rating:
 M80-333/334/33A = 20A MAX
 M80-PM3/PM4 = 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:
 M80-333/334/33A = 8N MAX
 M80-PM3/PM4 = 15N MAX
 Withdrawal Force = 0.5N MIN
 Coax Contact:
 Insertion Force = 8N MAX
 Withdrawal Force = 0.5N MIN
- ENVIRONMENTAL:**
 Temperature Range:
 M80-313/314/333/334/33A = -55°C TO +125°C
 M80-PM3/PM4 = -55°C TO +150°C
- PACKING:**
 TUBE
 FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)

HORIZONTAL PC TAIL & SMT CONTACTS ONLY



SPECIAL CONTACTS HIDDEN FOR ILLUSTRATION ONLY
 SEE ORDER CODE FOR PART No. TO BE ASSEMBLED

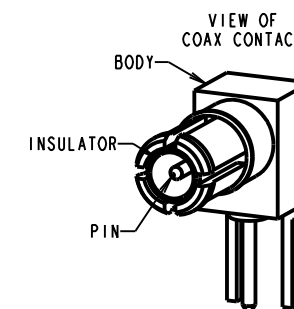


ORDER CODE: (PC TAIL CONTACTS ONLY)
M80-500000MD-XX-XXX-00-000

TOTAL No. OF CONTACTS
 02 TO 12

SPECIAL CONTACTS

- 313 = COAX CONTACT 3.0mm PC TAIL M80-313
- 314 = COAX CONTACT 4.5mm PC TAIL M80-314
- 333 = 20A POWER CONTACT 3.5mm HORZ' PC TAIL M80-333
- 334 = 20A POWER CONTACT 5.0mm HORZ' PC TAIL M80-334
- PM3 = 40A POWER CONTACT 3.5mm HORZ' PC TAIL M80-PM3
- PM4 = 40A POWER CONTACT 5.0mm HORZ' PC TAIL M80-PM4
- 33A = POWER CONTACT HORZ' SMT M80-33A



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 + 10.0
DIM 'D'	M80-313 = 3.0mm, M80-314 = 4.5mm
DIM 'E'	M80-333 = 3.5mm, M80-334 = 5.0mm
DIM 'F'	M80-PM3 = 3.5mm, M80-PM4 = 5.0mm

EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS,
 M80-500000MD-10-333-00-000

DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.0mm
 DIM 'E' = 3.0mm

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

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

TITLE:
 DATAMATE MIX-TEK
 MALE ASSEMBLY

DRAWING NUMBER:
M80-500000MD-XX-XXX-00-000

SHT
 6 OF 6

MGP	2	19.12.19	21540
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SB			
DRAWN: S.BENNETT			
CUSTOMER REF.:			
ASSEMBLY DRG:			