

Customer Information Sheet

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

IF IN DOUBT - ASK

(C)

NOT TO SCALE

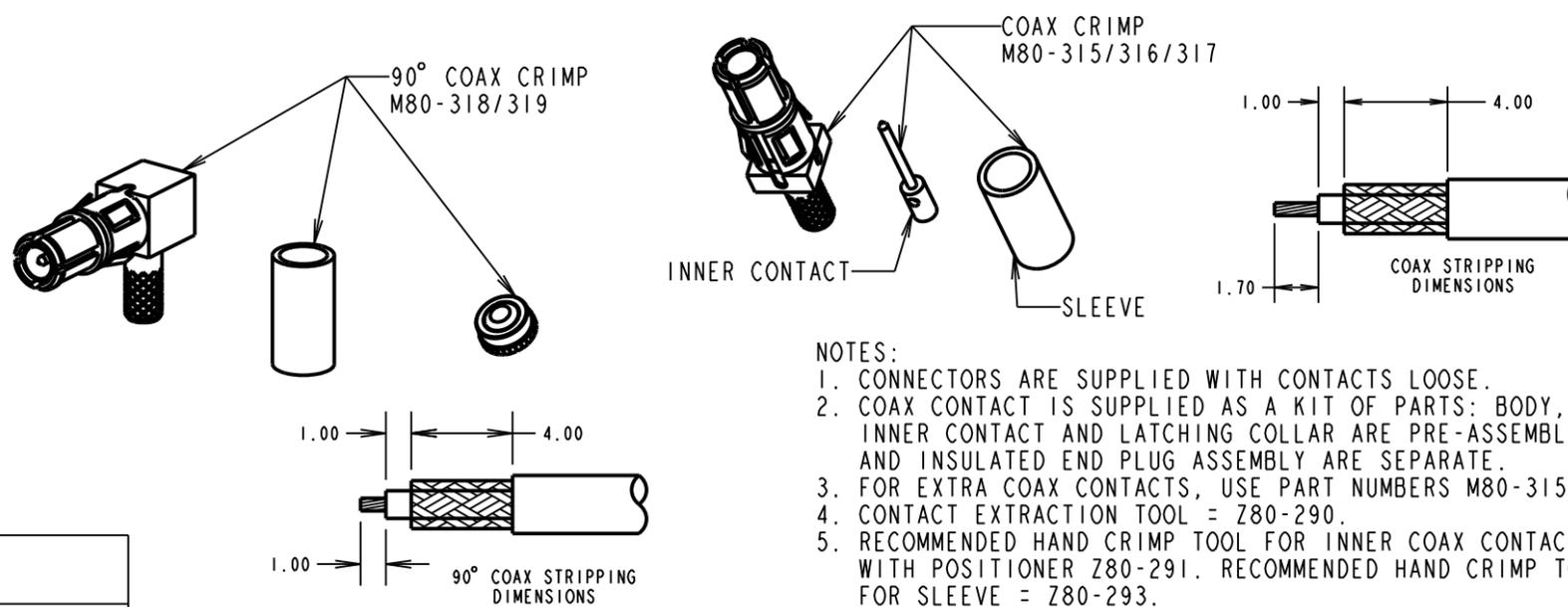
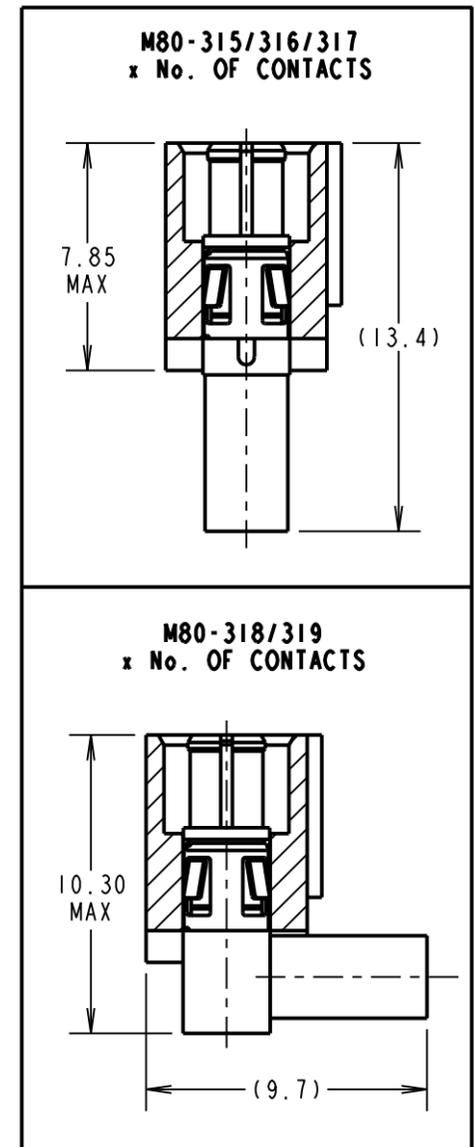
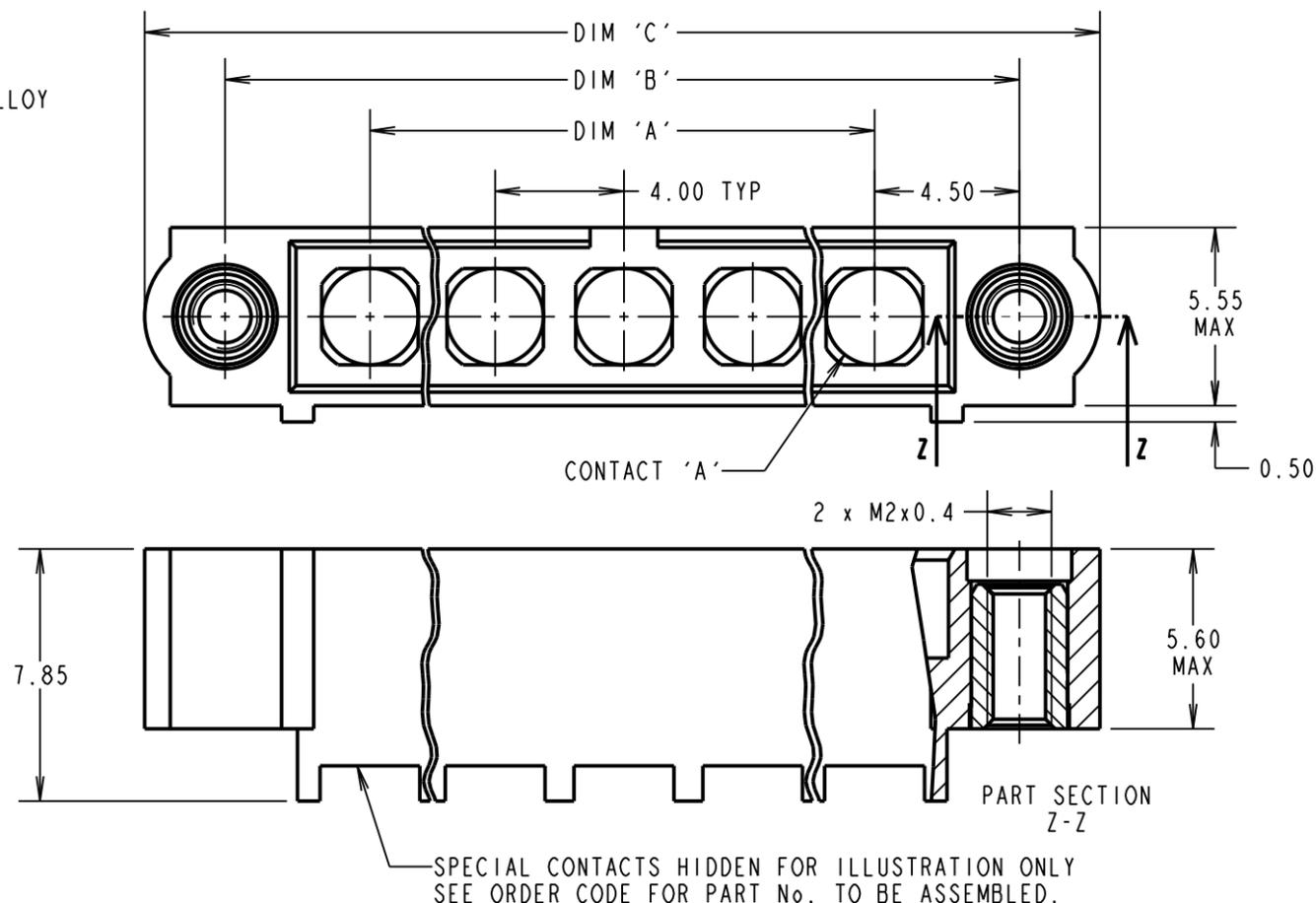
THIRD ANGLE PROJECTION

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 = 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 = 50 Ω
 V.S.W.R = 1.05 + (0.04 x FREQUENCY) GHz MAX
 CONTACT RESISTANCE 6 mΩ 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/SOLDER CONTACTS ONLY



ORDER CODE: (COAX CRIMP/SOLDER CONTACTS)
M80-5000000MI-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

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.

MGP	6	20.03.14	12429
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SB			
DRAWN: R.ADDE			
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 + 10.00

EXAMPLE: CONNECTOR WITH 08 COAX CONTACTS,
 M80-5000000MI-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 = ±0.25mm
 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 JACKSCREW
DRAWING NUMBER: M80-5000000MI-XX-XXX-00-000
 SHT 5 OF 8

Customer Information Sheet

DRAWING No.: M80-500000MI-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 = COPPER ALLOY
 LATCHING COLLAR = BERYLLIUM COPPER
 JACKSCREW: STAINLESS STEEL

FINISH:
 POWER CONTACT:
 8 TO 20A = 0.25µ MIN GOLD OVER NICKEL
 40A = 0.76µ MIN GOLD OVER NICKEL
 LATCHING COLLAR: = NICKEL

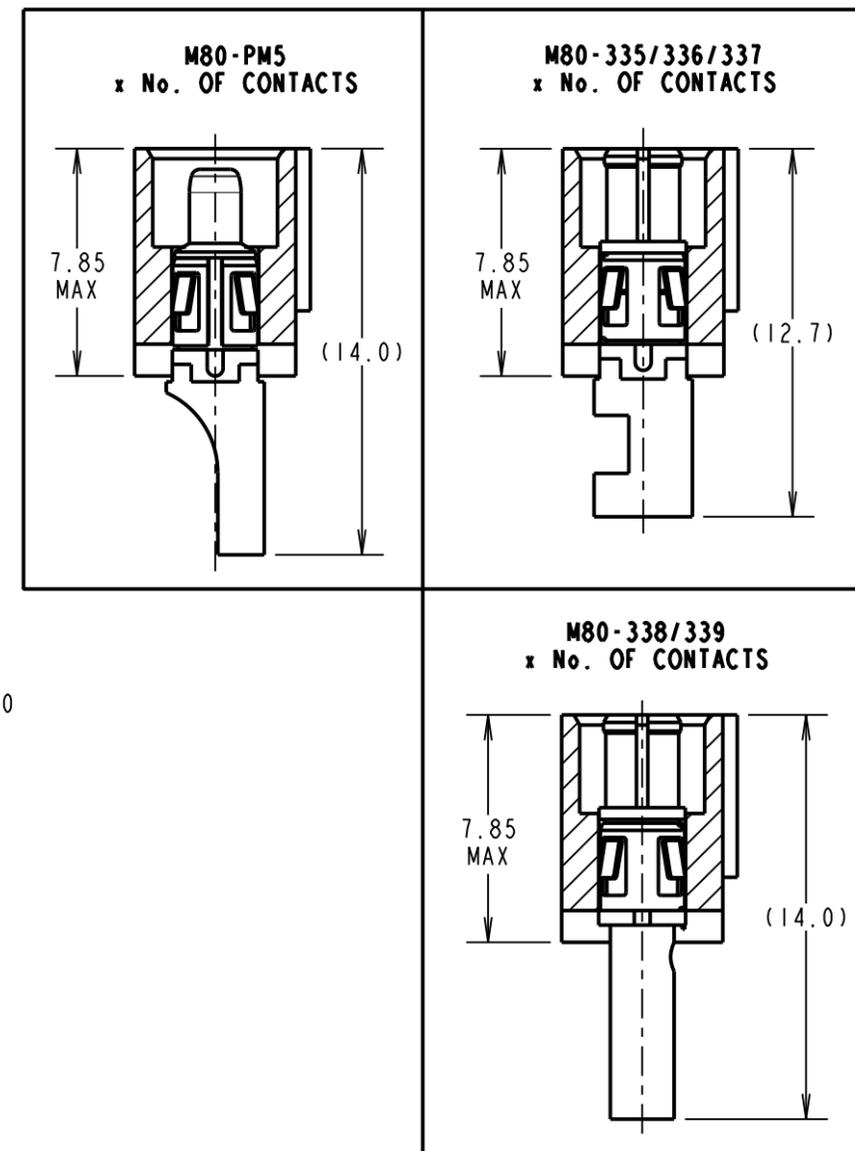
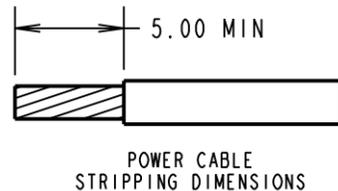
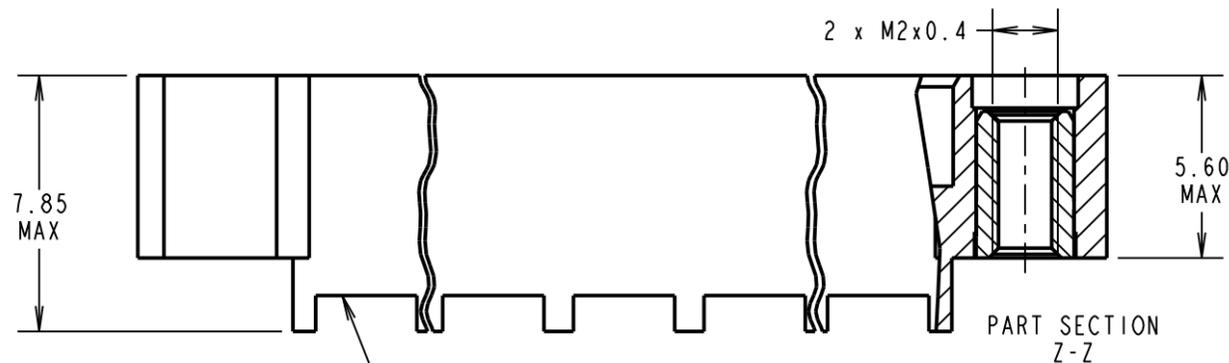
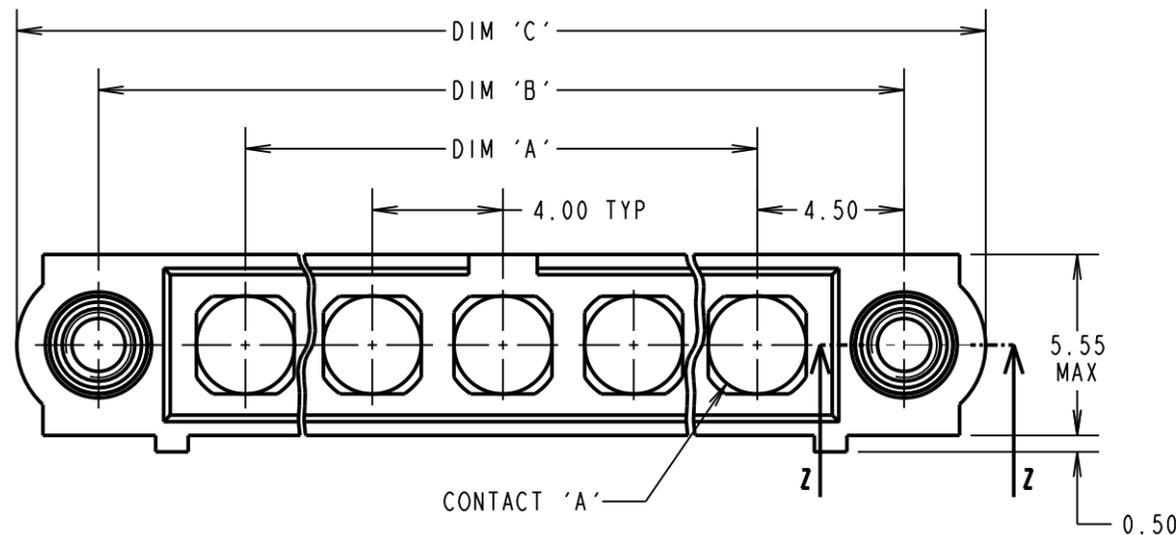
ELECTRICAL:
 WORKING VOLTAGE = 800V AC/DC
 VOLTAGE PROOF = 1200V AC/DC
 INSULATION RESISTANCE = 100MΩ MIN
 POWER CONTACT:

CONTACT RESISTANCE = 6mΩ MAX
CURRENT RATING:
 M80-PM5 = 40A MAX WITH 10AWG,
 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,
 CONTACT AS SPECIFIED.

MECHANICAL:
 DURABILITY = 500 OPERATIONS
 POWER CONTACT:
 INSERTION FORCE:
 8 TO 20A = 8N MAX
 40A = 15N MAX
 WITHDRAWAL FORCE = 0.5N MIN

ENVIRONMENTAL:
 TEMPERATURE RANGE = -55°C TO +150°C
PACKING:
 BAG
 FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)

POWER CRIMP/SOLDER CONTACTS ONLY



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

TOTAL No. OF CONTACTS _____
 02 TO 12

SPECIAL CONTACTS (CRIMP)
 PM5 = POWER CONTACT 10AWG SOLDER M80-PM5
 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

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

NOTES:

- CONNECTORS ARE SUPPLIED WITH CONTACTS LOOSE.
- FOR EXTRA POWER CONTACTS USE PART NUMBERS:
 M80-PF5/335/336/337/338/339.
- CONTACT EXTRACTION TOOL = Z80-290.
- RECOMMENDED HAND CRIMP TOOL FOR CONTACTS 338/339 = Z80-294 AND POSITIONER Z80-295.
- INSTRUCTION SHEETS ARE AVAILABLE.

MGP	6	20.03.14	12429
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SB			
DRAWN: R.ADDE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

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TOLERANCES
 X. = ±1mm
 X.X = ±0.25mm
 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 JACKSCREW
DRAWING NUMBER: M80-500000MI-XX-XXX-00-000
 SHT 6 OF 8

Customer Information Sheet

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

IF IN DOUBT - ASK

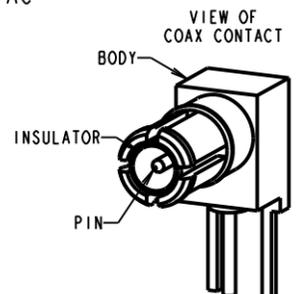
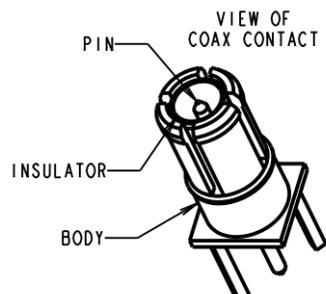
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NOT TO SCALE

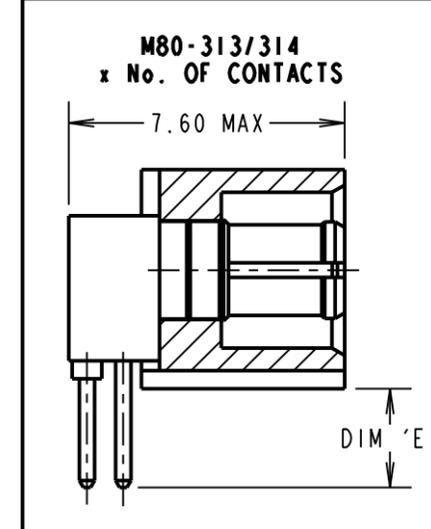
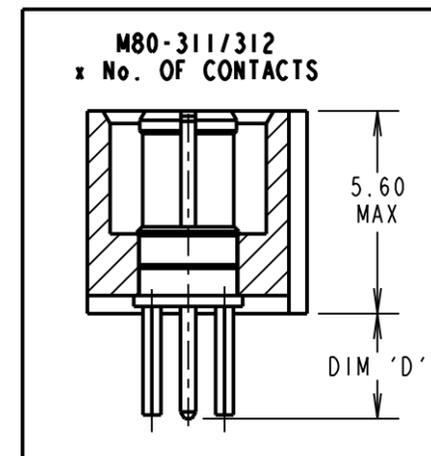
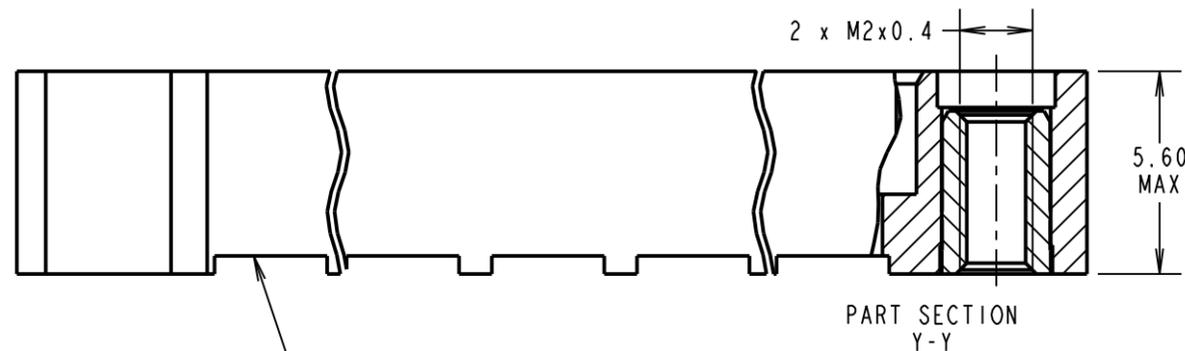
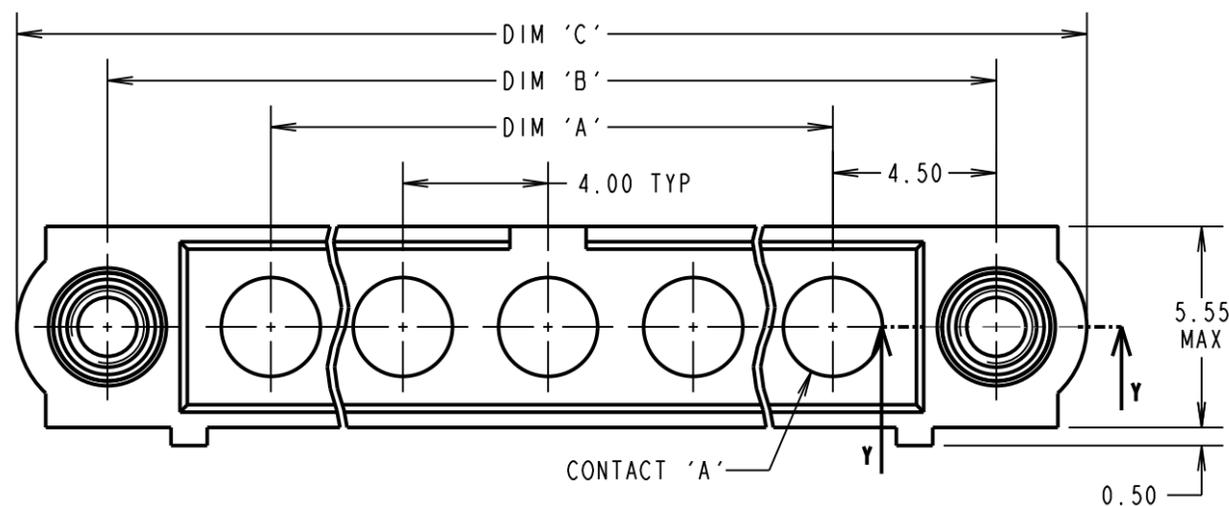
THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

SPECIFICATIONS:
MATERIAL:
 MOULDING: GLASS FILLED PPS, UL94V-0, BLACK
COAX CONTACT:
 BODY, INNER CONTACT, = COPPER ALLOY
 INSULATOR = PTFE
 JACKSCREW: STAINLESS STEEL
FINISH:
 COAX CONTACT:
 BODY, INNER CONTACT, = GOLD
ELECTRICAL:
 INSULATION RESISTANCE = 100MΩ MIN
COAX CONTACT:
 FREQUENCY RANGE = 6GHz
 IMPEDANCE = 50 Ω
 V.S.W.R = 1.05 + (0.04 x FREQUENCY) GHz MAX
 CONTACT RESISTANCE 6 mΩ 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:
 TUBE
 FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)



COAX PC TAIL CONTACTS ONLY



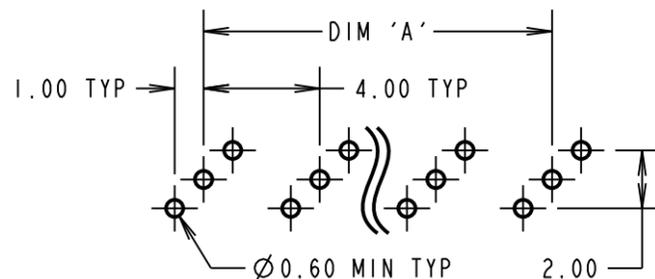
SPECIAL CONTACTS HIDDEN FOR ILLUSTRATION ONLY
 SEE ORDER CODE FOR PART No. TO BE ASSEMBLED

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

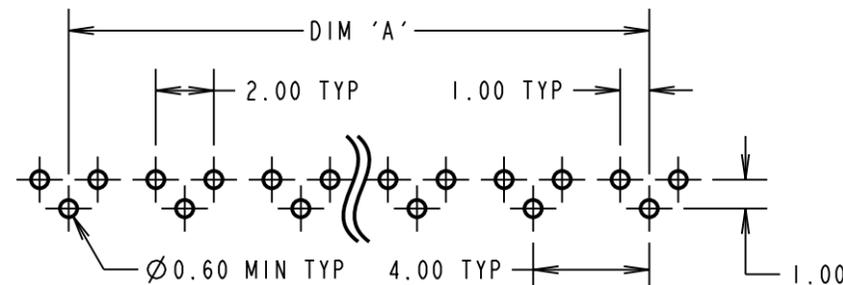
TOTAL No. OF CONTACTS _____
 02 TO 12

SPECIAL CONTACTS (PC TAIL) _____
 311 = COAX CONTACT 3.0mm PC TAIL M80-311
 312 = COAX CONTACT 4.5mm PC TAIL M80-312
 313 = COAX CONTACT 3.0mm HORZ' PC TAIL M80-313
 314 = COAX CONTACT 4.5mm HORZ' PC TAIL M80-314

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



RECOMMENDED PCB LAYOUTS FOR COAX CONTACTS: M80-313/314



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'	M80-313 = 3.0mm, M80-314 = 4.5mm

EXAMPLE: CONNECTOR WITH 08 COAX CONTACTS,
 M80-5000000MI-08-313-00-000
 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm
 DIM 'E' = 3.0mm

MGP	6	20.03.14	12429
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SB			
DRAWN: R. ADDE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

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TOLERANCES
 X. = ±1mm
 X.X = ±0.25mm
 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 JACKSCREW

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

SHT
 7 OF 8

Customer Information Sheet

DRAWING No.: M80-5000000MI-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
 JACKSCREW: STAINLESS STEEL

FINISH:
 POWER CONTACT:
 20A = 0.25µ MIN GOLD OVER NICKEL
 40A = 0.76µ MIN GOLD OVER NICKEL

ELECTRICAL:
 WORKING VOLTAGE = 800V AC/DC
 VOLTAGE PROOF = 1200V AC/DC
 INSULATION RESISTANCE = 100MΩ MIN

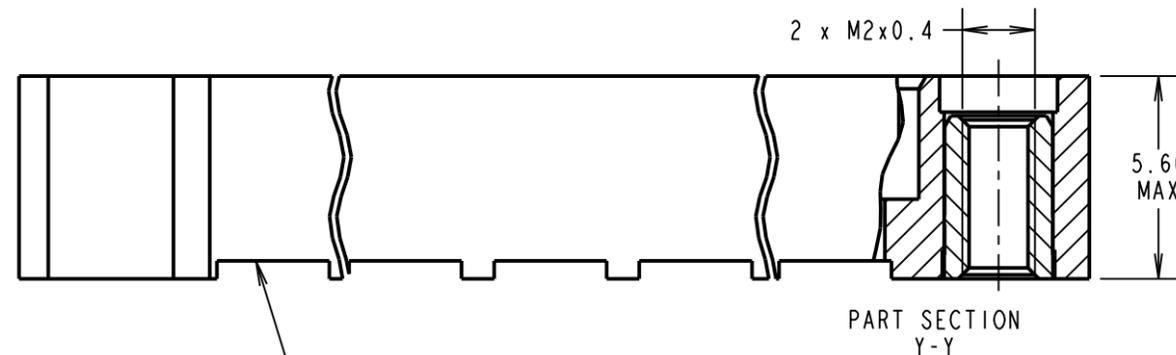
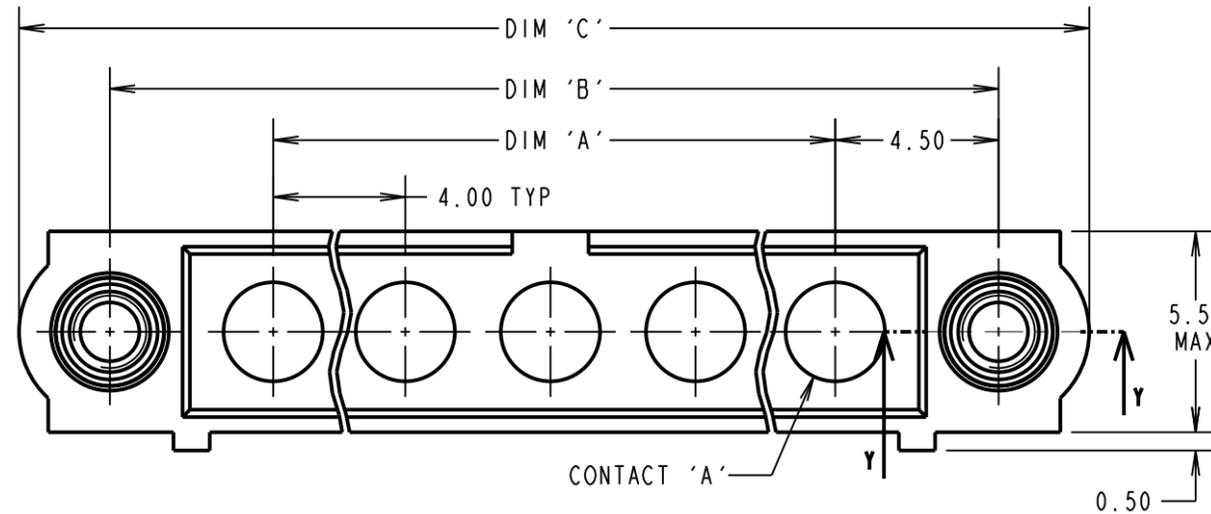
POWER CONTACT:
 CONTACT RESISTANCE 6mΩ MAX
CURRENT RATING:
 M80-331/332/333/334/33A = 20A MAX
 M80-PM1/PM2/PM3/PM4 = 40A MAX

MECHANICAL:
 DURABILITY = 500 OPERATIONS
POWER CONTACT:
 INSERTION FORCE:
 M80-331/332/323/324/33A = 8N MAX
 M80-PM1/PM2/PM3/PM4 = 15N MAX
 WITHDRAWAL FORCE = 0.5N MIN

ENVIRONMENTAL:
 TEMPERATURE RANGE = -55°C TO +150°C

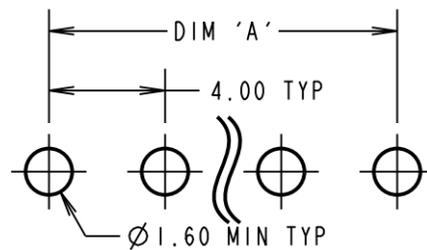
PACKING:
 TUBE
 FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)

POWER PC TAIL AND SMT CONTACTS ONLY

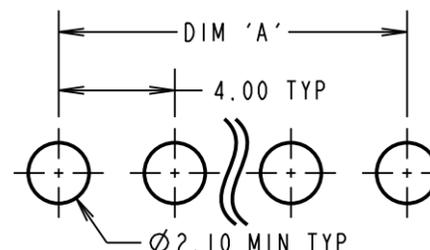


SPECIAL CONTACTS HIDDEN FOR ILLUSTRATION ONLY
 SEE ORDER CODE FOR PART No. TO BE ASSEMBLED

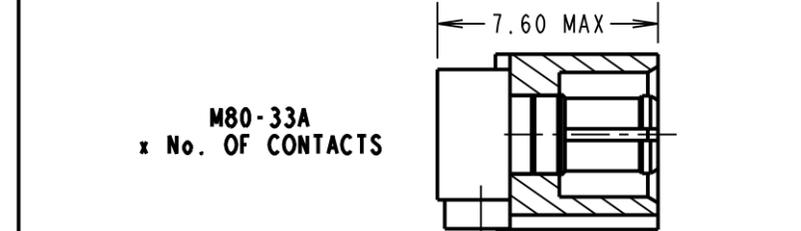
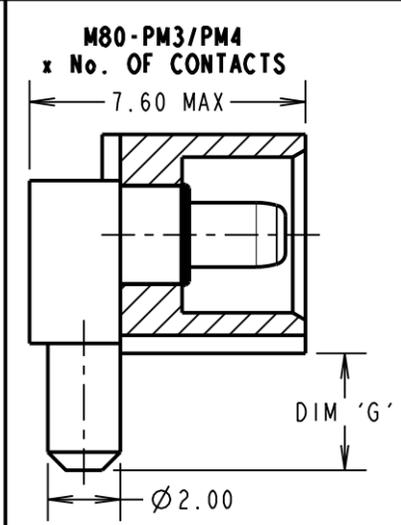
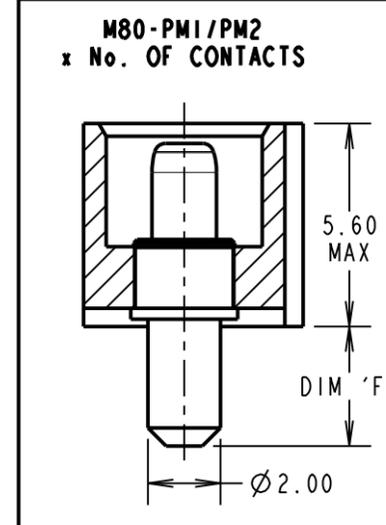
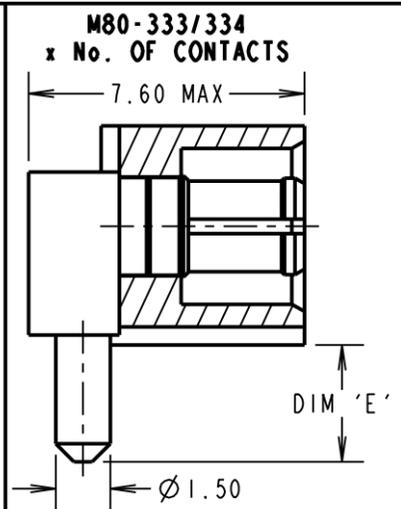
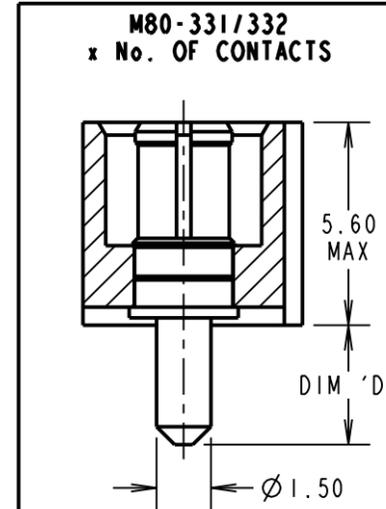
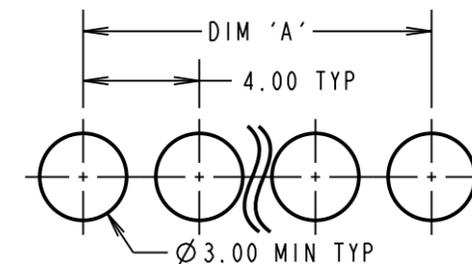
RECOMMENDED PCB LAYOUT FOR
 M80-331/332/333/334
 PC TAIL POWER CONTACTS



RECOMMENDED PCB LAYOUT FOR
 M80-PM1/PM2/PM3/PM4
 PC TAIL POWER CONTACTS



RECOMMENDED PCB LAYOUT FOR
 M80-33A SMT POWER CONTACTS



ORDER CODE:
 (POWER PC TAIL AND SMT CONTACTS ONLY)
M80-5000000MI-XX-XXX-00-000

TOTAL No. OF CONTACTS
 02 TO 12

- SPECIAL CONTACTS (PC TAIL)**
- 331 = 20A POWER CONTACT 3.0mm VERT' PC TAIL M80-331
 - 332 = 20A POWER CONTACT 4.5mm VERT' PC TAIL M80-332
 - 333 = 20A POWER CONTACT 3.0mm HORZ' PC TAIL M80-333
 - 334 = 20A POWER CONTACT 4.5mm HORZ' PC TAIL M80-334
 - 33A = 20A POWER CONTACT HORIZONTAL SMT M80-33A
 - PM1 = 40A POWER CONTACT 3.0mm VERT' PC TAIL M80-PM1
 - PM2 = 40A POWER CONTACT 4.5mm VERT' PC TAIL M80-PM2
 - PM3 = 40A POWER CONTACT 3.0mm HORZ' PC TAIL M80-PM3
 - PM4 = 40A POWER CONTACT 4.5mm HORZ' PC TAIL M80-PM4

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'	M80-331 = 3.5mm, M80-332 = 5.0mm
DIM 'E'	M80-333 = 3.5mm, M80-334 = 5.0mm
DIM 'F'	M80-PM1 = 3.5mm, M80-PM2 = 5.0mm
DIM 'G'	M80-PM3 = 3.5mm, M80-PM4 = 5.0mm

EXAMPLE: CONNECTOR WITH 10 POWER CONTACTS,
 M80-5000000MI-10-334-00-000
 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm
 DIM 'E' = 4.5mm

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TOLERANCES
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 X.X = ±0.25mm
 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 JACKSCREW

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

MGP	6	20.03.14	12429
NAME	ISS.	DATE	C/NOTE

APPROVED: MGP

CHECKED: SB

DRAWN: R.ADDE

CUSTOMER REF.:

ASSEMBLY DRG:

Mouser Electronics

Authorized Distributor

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

[Harwin:](#)

[M80-5000000M1-02-331-00-000](#) [M80-5000000M1-04-331-00-000](#) [M80-5000000M1-06-312-00-000](#)