

Customer Information Sheet

DRAWING No.: M80-50000000-XX-XXX-00-000

SHEET 3 OF 4

IF IN DOUBT - ASK

©

NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

SPECIFICATIONS:

MATERIAL:
 MOULDING: GLASS FILLED PPS, UL94V-0, BLACK
COAX & POWER CONTACT:
 BODY, SLEEVE, INNER CONTACT, END PLUG = COPPER ALLOY
 LATCHING COLLAR = BERYLLIUM COPPER
 INSULATOR = PTFE

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

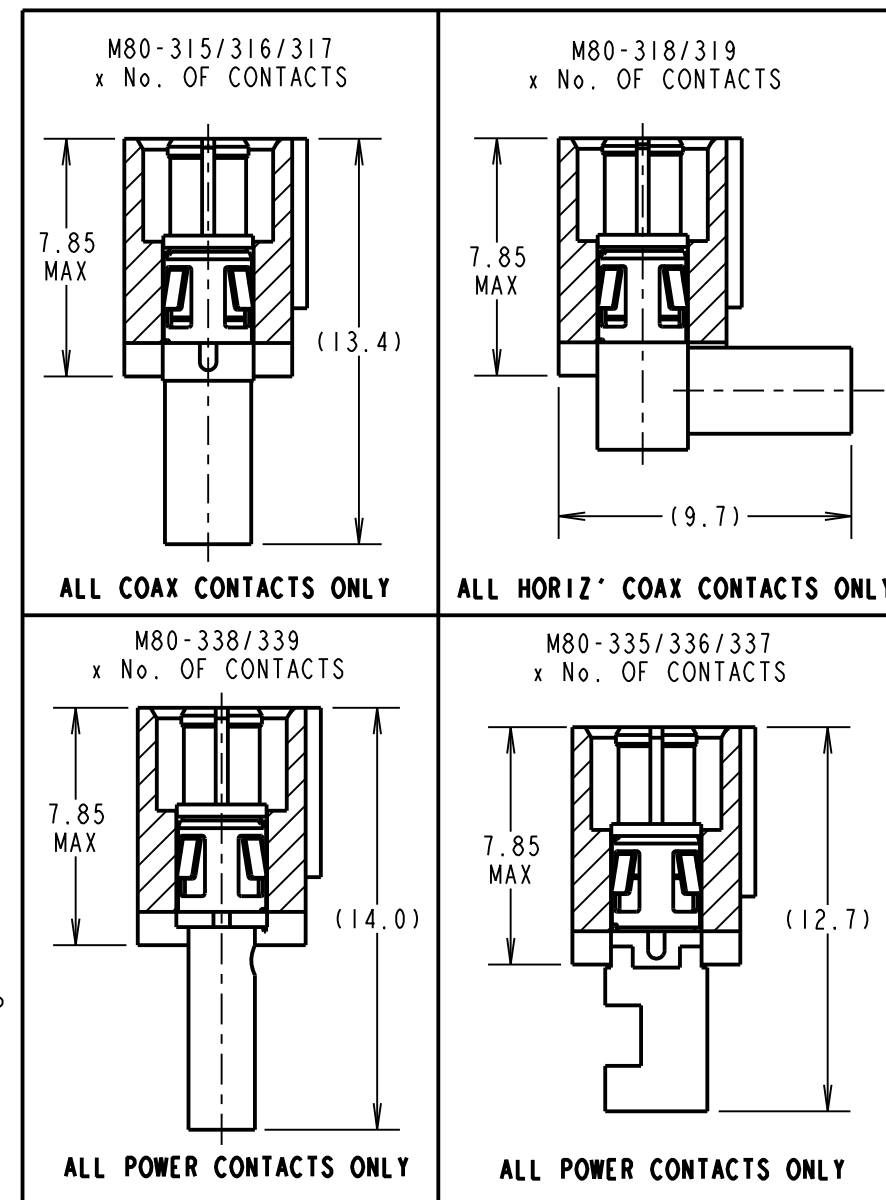
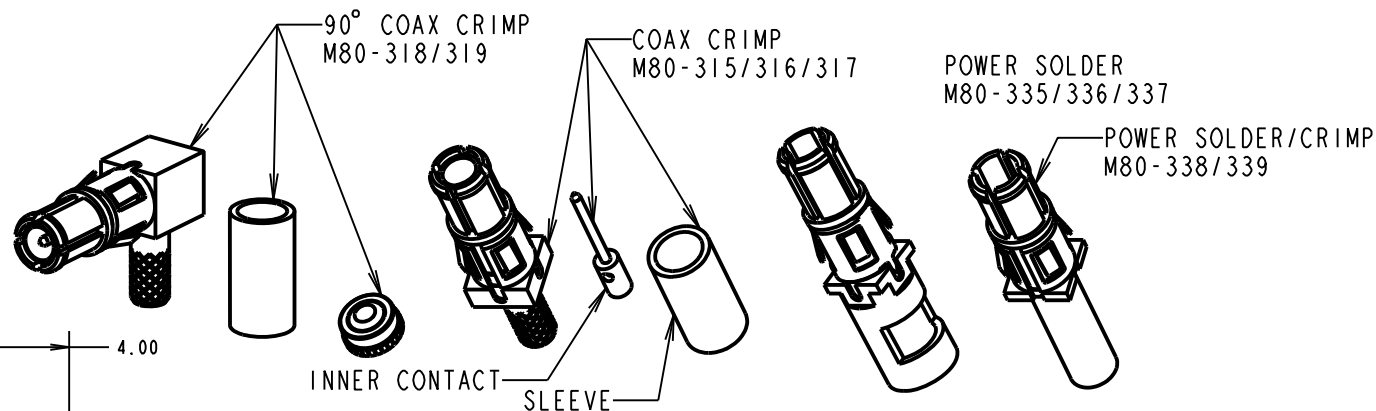
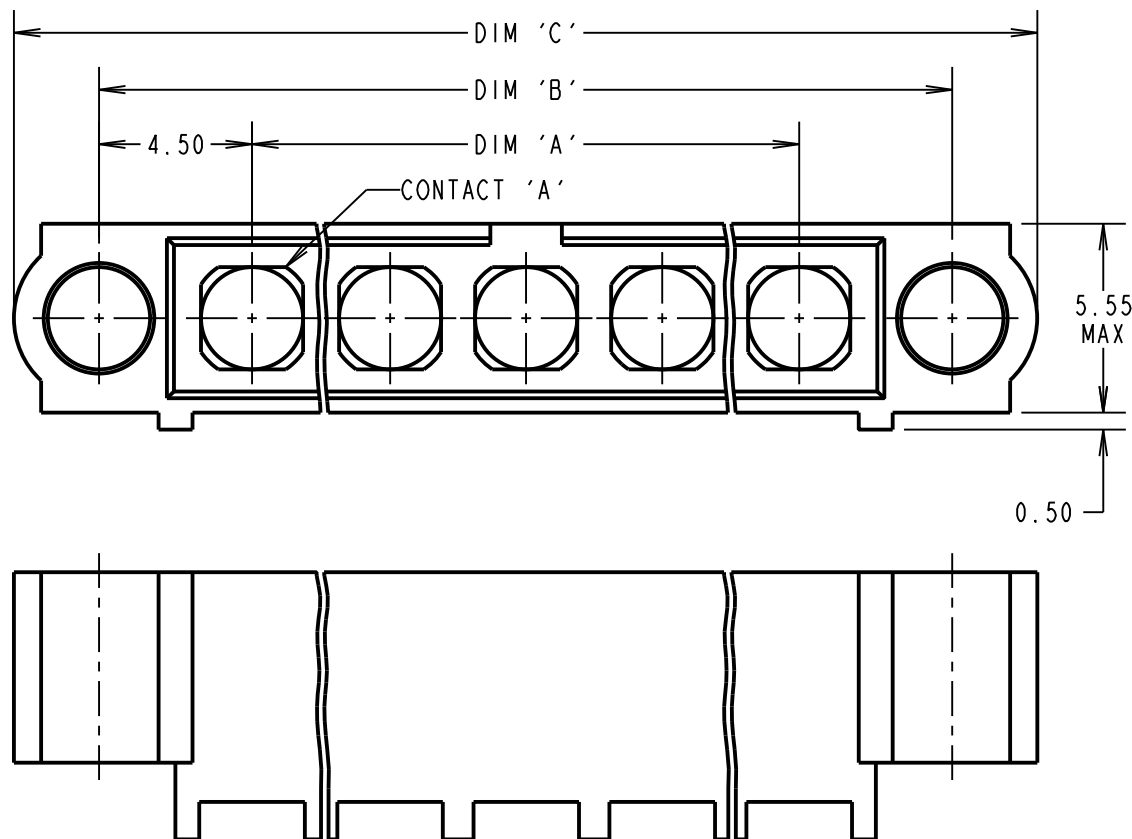
ELECTRICAL:
 WORKING VOLTAGE = 120V AC/DC
 VOLTAGE PROOF = 360V AC/DC
 INSULATION RESISTANCE = 100MΩ MIN

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
 CONTACT AS SPECIFIED

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 & POWER CONTACT:
 INSERTION FORCE = 5N 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)



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 1: CONNECTOR WITH 08 COAX CONTACTS,
 M80-50000000-08-315-00-000
 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm
 DIM 'D' = 3.0mm

EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS,
 M80-50000000-10-335-00-000
 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm
 DIM 'E' = 3.5mm

ORDER CODE: (CRIMP/SOLDER CONTACTS)
M80-50000000-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
 335 = POWER CONTACT 12AWG SOLDER
 336 = POWER CONTACT 14AWG SOLDER
 337 = POWER CONTACT 16AWG SOLDER
 338 = POWER CONTACT 18AWG SOLDER/CRIMP M80-338
 339 = POWER CONTACT 20AWG SOLDER/CRIMP M80-339

- 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.
 - FOR EXTRA POWER CONTACTS USE PART NUMBERS M80-335/336/337/338/339
 - COAX & POWER CONTACT EXTRACTION TOOL = Z80-290
 - POWER CONTACT WIRE, STRIP BY 5.00mm MINIMUM.
 - RECOMMENDED HAND CRIMP TOOL FOR CONTACTS 338/339 = Z80-294 AND POSITIONER Z80-295.
 - RECOMMENDED HAND CRIMP TOOL FOR INNER CONTACT = Z80-292 WITH POSITIONER Z80-291. RECOMMENDED HAND CRIMP TOOL AND DIE SET FOR SLEEVE = Z80-293.
 - INSTRUCTION SHEETS ARE AVAILABLE.

SM	1	11.11.10	11006
NAME	ISS.	DATE	C/NOTE
APPROVED: S. MCCULLAGH			
CHECKED: R. ADDE			
DRAWN: C. PENROSE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

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HARWIN Asia
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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 MIXED TECHNOLOGY MALE ASSEMBLY
 DRAWING NUMBER: M80-50000000-XX-XXX-00-000
 SHT 3 OF 4

Customer Information Sheet

DRAWING No.: M80-50000000-XX-XXX-00-000

SHEET 4 OF 4

IF IN DOUBT - ASK

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NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

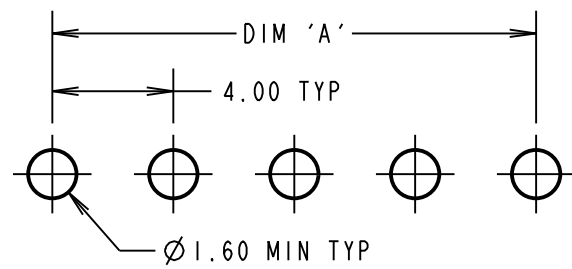
SPECIFICATIONS:

MATERIAL:
 MOULDING: GLASS FILLED PPS, UL94V-0, BLACK
COAX & POWER CONTACT:
 BODY, INNER CONTACT, = COPPER ALLOY
 INSULATOR = PTFE
FINISH:
COAX & POWER CONTACT:
 BODY, INNER CONTACT, = GOLD
ELECTRICAL:
 WORKING VOLTAGE = 120V AC/DC
 VOLTAGE PROOF = 360V AC/DC
 INSULATION RESISTANCE = 100MΩ MIN
POWER CONTACT:
 CONTACT RESISTANCE 6mΩ MAX
 CURRENT RATING = 20A MAX
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
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 MAXIMUM VOLTAGE = 1000V AC
MECHANICAL:
 DURABILITY = 500 OPERATIONS
COAX & POWER CONTACT:
 INSERTION FORCE = 5N 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)

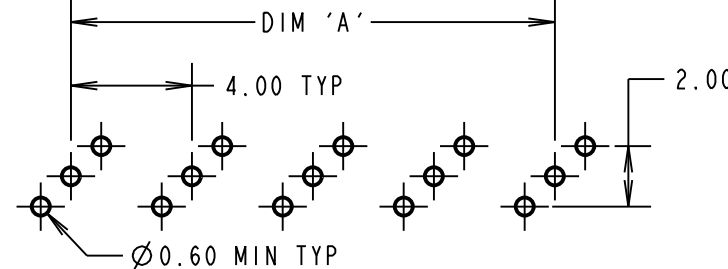
NOTES:
 1. FOR EXAMPLE OF ALL COAX SPECIAL CONTACTS ORDER CODE SEE EXAMPLE 1 IN TABLE.
 2. FOR EXAMPLE OF ALL POWER SPECIAL CONTACTS ORDER CODE SEE EXAMPLE 2 IN TABLE.

RECOMMENDED PCB LAYOUTS FOR ALL COAX CONTACTS ONLY

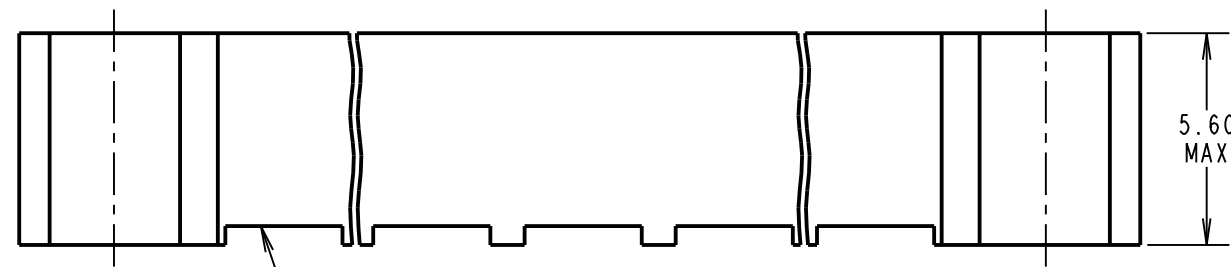
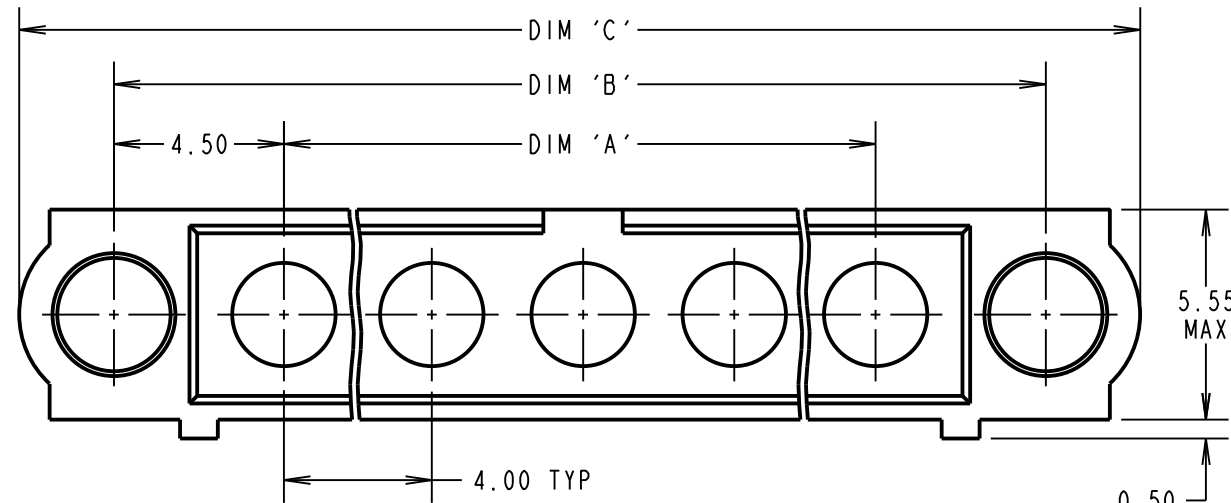
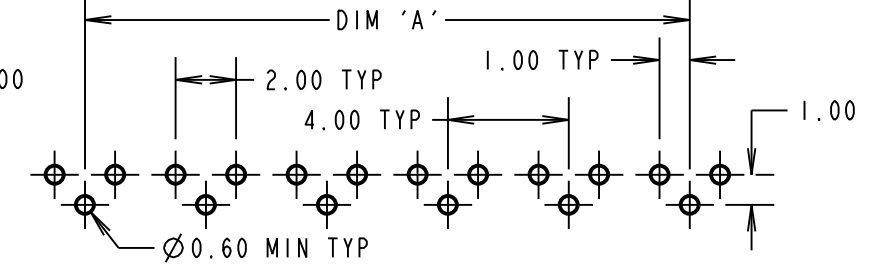
RECOMMENDED PCB LAYOUT FOR ALL POWER ONLY



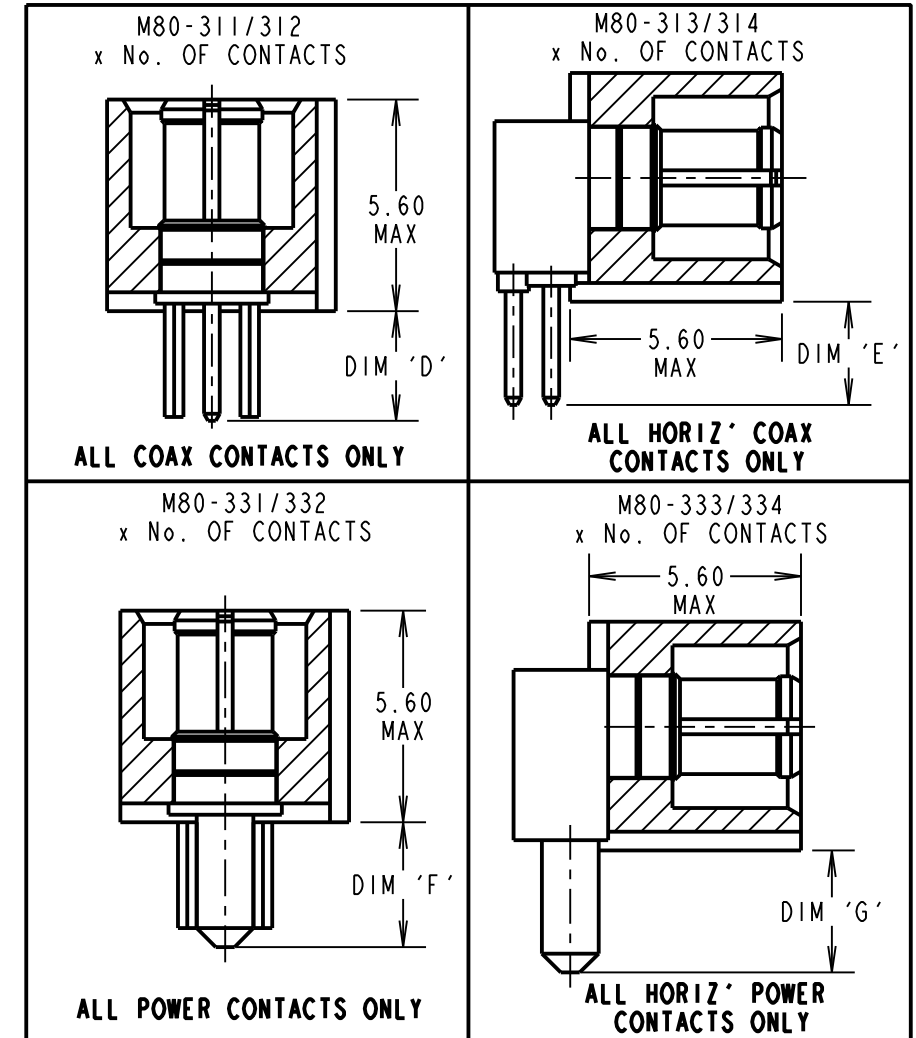
M80-311/312



M80-313/314



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

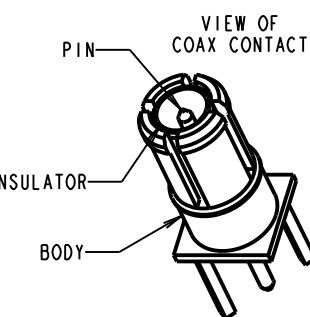
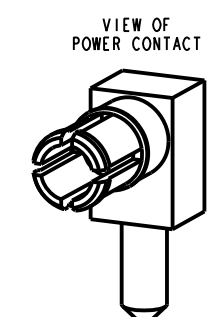
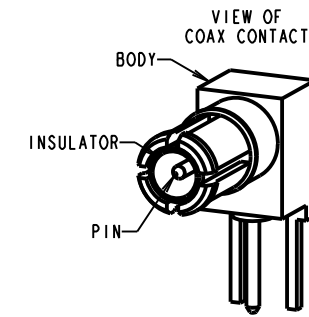


DIMENSION	CALCULATION
DIM 'A'	4 x No. OF CONTACTS - 4.00
DIM 'B'	4 x No. OF CONTACTS + 5.00
DIM 'C'	4 x No. OF CONTACTS + 10.00
DIM 'D'	M80-311 = 3.0mm, M80-312 = 4.5mm
DIM 'E'	M80-313 = 3.0mm, M80-314 = 4.5mm
DIM 'F'	M80-331 = 3.5mm, M80-332 = 5.0mm
DIM 'G'	M80-333 = 3.0mm, M80-334 = 4.5mm
EXAMPLE 1: CONNECTOR WITH 08 COAX CONTACTS, M80-50000000-08-313-00-000 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm DIM 'D' = 3.0mm	
EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS, M80-50000000-10-334-00-000 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm DIM 'E' = 3.5mm	

ORDER CODE: (PC TAIL CONTACTS ONLY)
M80-50000000-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 HORIZ' PC TAIL M80-313
 314 = COAX CONTACT 4.5mm HORIZ' PC TAIL M80-314
 331 = POWER CONTACT 3.5mm VERT' PC TAIL M80-331
 332 = POWER CONTACT 5.0mm VERT' PC TAIL M80-332
 333 = POWER CONTACT 3.0mm HORIZ' PC TAIL M80-333
 334 = POWER CONTACT 4.5mm HORIZ' PC TAIL M80-334



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MATERIAL: SEE ABOVE
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 S/AREA: mm²

TITLE: DATAMATE MIXED TECHNOLOGY MALE ASSEMBLY
 DRAWING NUMBER: M80-50000000-XX-XXX-00-000
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