

# Customer Information Sheet

DRAWING No.: M80-400000F8-XX-XXX-00-000

SHEET 3 OF 4

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 & COAX CONTACT:**  
 BODY = COPPER ALLOY  
 INNER CONTACT, LATCHING COLLAR = BERYLLIUM COPPER  
 INSULATOR = PTFE  
 JACKSCREW, NUT: STAINLESS STEEL

**FINISH:**  
 POWER & COAX CONTACT  
 BODY, SLEEVE, INNER CONTACT = 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 = M80-325 20A MAX 12AWG  
 M80-326 15A MAX 14AWG  
 M80-327 10A MAX 16AWG  
 M80-328 8A MAX 18AWG  
 M80-329 5A MAX 20AWG  
 M80-32A 20A MAX 12AWG  
 M80-32B 15A MAX 14AWG  
 M80-32C 10A MAX 16AWG  
 CONTACT AS SPECIFIED

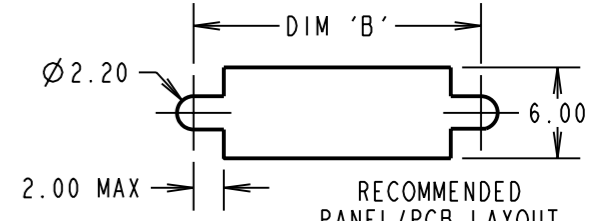
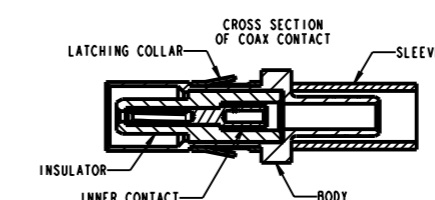
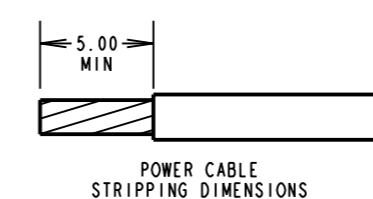
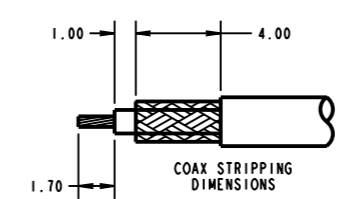
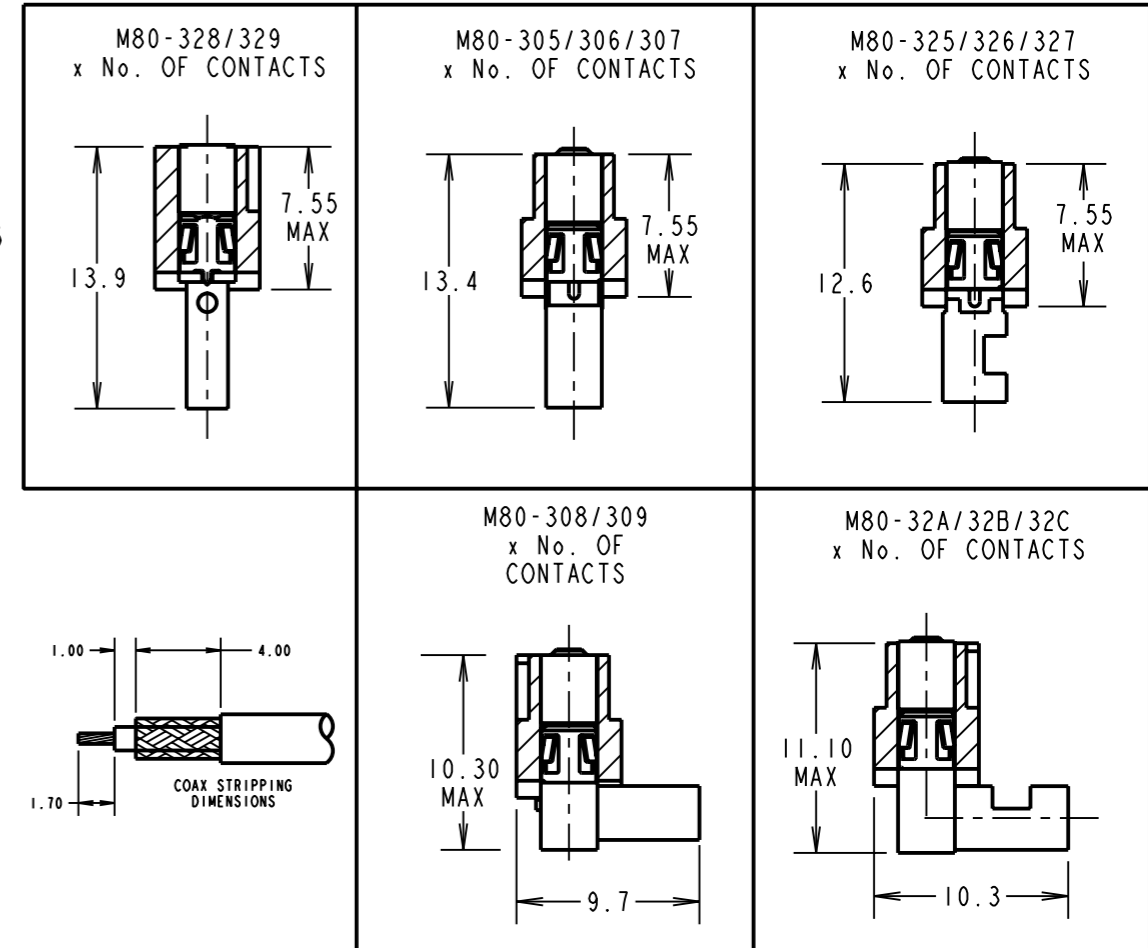
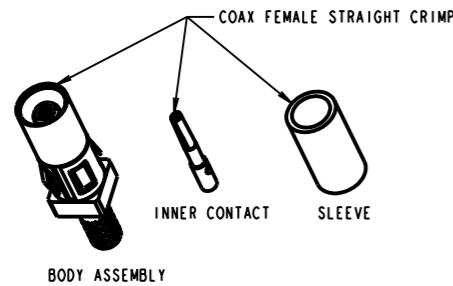
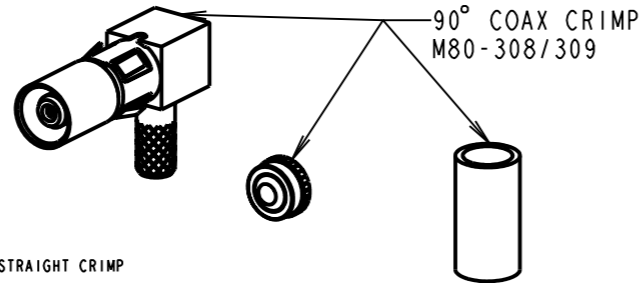
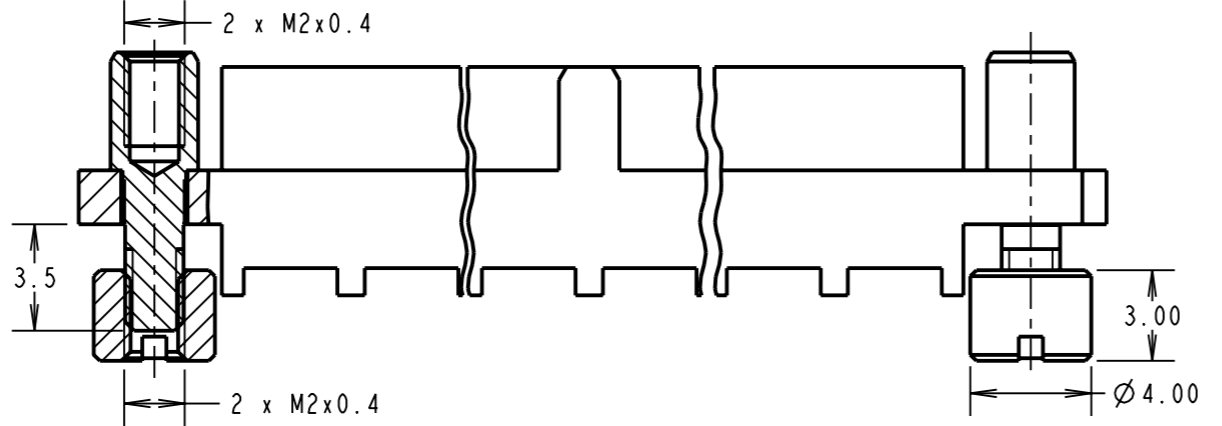
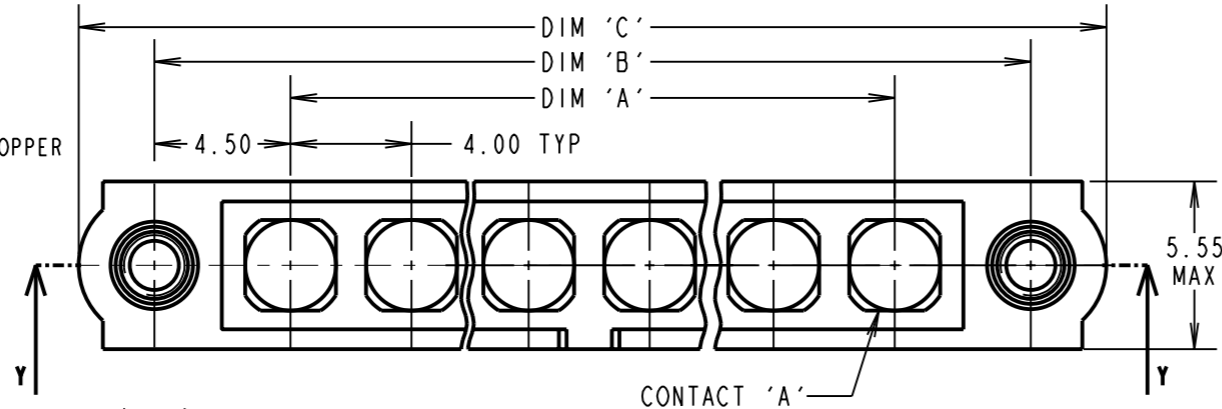
**COAX CONTACT:**  
 FREQUENCY RANGE = 6GHz  
 IMPEDANCE = 50 Ω  
 V.S.W.R = 1.05 + (0.04 x FREQUENCY) GHz MAX  
 CONTACT RESISTANCE 6 mΩ MAX

INSULATION RESISTANCE = 10<sup>6</sup>MΩ @250V AC  
 OPERATING VOLTAGE = 180V AC @ 500mA  
 MAXIMUM VOLTAGE = 1000V AC

**MECHANICAL:**  
 DURABILITY = 500 OPERATIONS  
**POWER & COAX 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)



**ORDER CODE:**  
**M80-400000F8-XX-XXX-00-000**

TOTAL No. OF CONTACTS \_\_\_\_\_  
 02 TO 12

**SPECIAL CONTACTS**

- 305 = COAX CONTACT CRIMP 2.0mm M80-305
- 306 = COAX CONTACT CRIMP 2.4mm M80-306
- 307 = COAX CONTACT CRIMP 2.7mm M80-307
- 308 = 90° COAX CONTACT CRIMP 2.0mm M80-308
- 309 = 90° COAX CONTACT CRIMP 2.7mm M80-309
- 325 = POWER CONTACT SOLDER 12AWG M80-325
- 326 = POWER CONTACT SOLDER 14AWG M80-326
- 327 = POWER CONTACT SOLDER 16AWG M80-327
- 328 = POWER CONTACT CRIMP/SOLDER 18AWG M80-328
- 329 = POWER CONTACT CRIMP/SOLDER 20AWG M80-329
- 32A = 90° POWER CONTACT SOLDER 12AWG M80-32A
- 32B = 90° POWER CONTACT SOLDER 14AWG M80-32B
- 32C = 90° POWER CONTACT SOLDER 16AWG M80-32C

- NOTES:**
- CONNECTORS ARE SUPPLIED WITH CONTACTS LOOSE.
  - COAX CONTACT IS SUPPLIED AS A KIT OF PARTS: BODY, INSULATOR AND LATCHING COLLAR ARE PRE-ASSEMBLED AND SLEEVE AND INNER CONTACT ARE SEPARATE.
  - FOR EXTRA POWER CONTACTS, USE PART NUMBER M80-325/326/327/328/329/32A/32B/32C. FOR EXTRA COAX CONTACTS, USE PART NUMBER M80-305/306/307/308/309
  - RECOMMENDED HAND CRIMP TOOL FOR COAX INNER CONTACT = Z80-292 WITH POSITIONER Z80-291 AND RECOMMENDED HAND CRIMP TOOL AND DIE SET FOR COAX SLEEVE = Z80-293.
  - RECOMMENDED HAND CRIMP TOOL FOR CONTACTS M80-328/329 = Z80-294 AND POSITIONER Z80-295.
  - POWER AND COAX CONTACT EXTRACTION TOOL = Z80-290
  - INSTRUCTION SHEETS ARE AVAILABLE.
  - RECOMMENDED PANEL/PCB THICKNESS = 1.3 - 1.6mm.

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,**  
 M80-400000F8-08-305-00-000  
 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm  
 DIM 'D' = 13.4mm

**EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS,**  
 M80-400000F8-10-325-00-000  
 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm  
 DIM 'E' = 12.7mm

SB	2	26.05.11	11275
NAME	ISS.	DATE	C/NOTE
APPROVED: S.BENNETT			
CHECKED: S.FLOWER			
DRAWN: R.ADDE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

**HARWIN**

HARWIN USA TEL: 603 893 5376 FAX: 603 893 5396 mis@harwin.com	HARWIN Europe (UK) TEL: 023 9231 4545 FAX: 023 9231 4590 mis@harwin.co.uk	HARWIN Asia TEL: +65 6 779 4909 FAX: +65 6 779 3868 mis@harwin.com.sg
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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:** mm<sup>2</sup>

**TITLE:** DATAMATE MIX-TEK FEMALE ASSEMBLY WITH BOARDMOUNT JACKSCREWS  
**DRAWING NUMBER:** M80-400000F8-XX-XXX-00-000  
 SHT 3 OF 4

# Customer Information Sheet

DRAWING No.: M80-400000F8-XX-XXX-00-000

SHEET 4 OF 4

IF IN DOUBT - ASK

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NOT TO SCALE

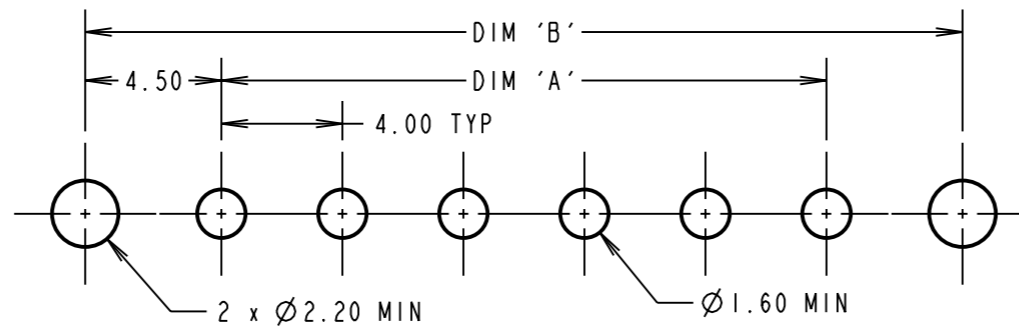
THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

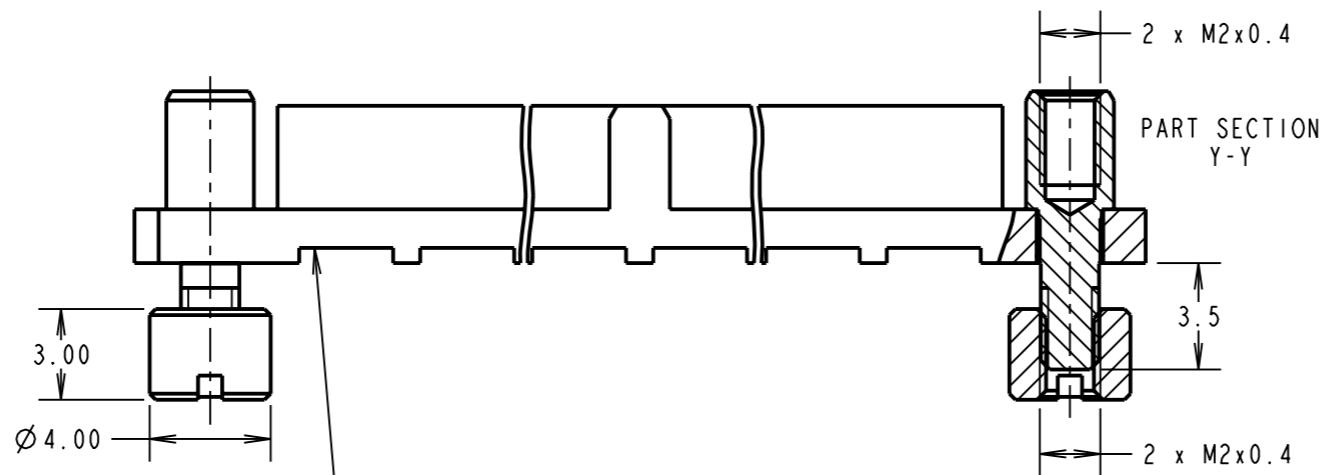
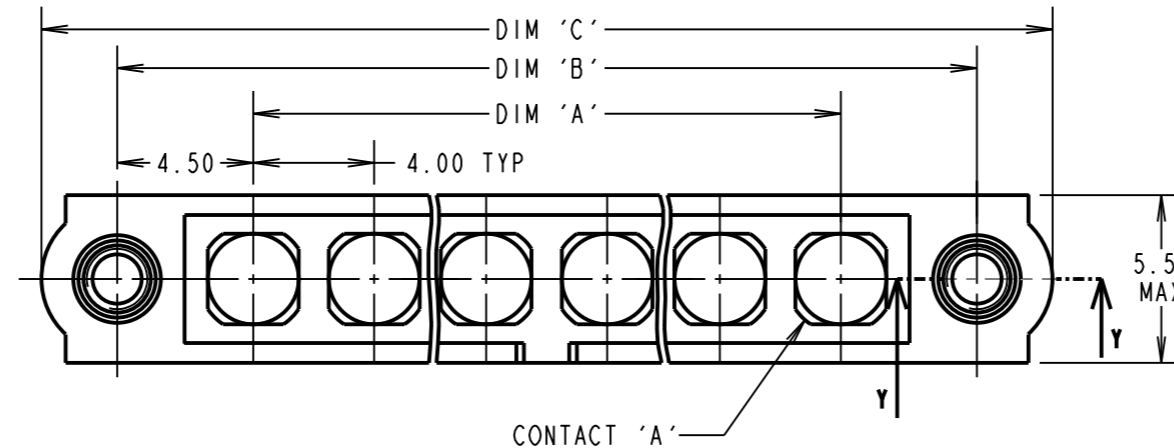
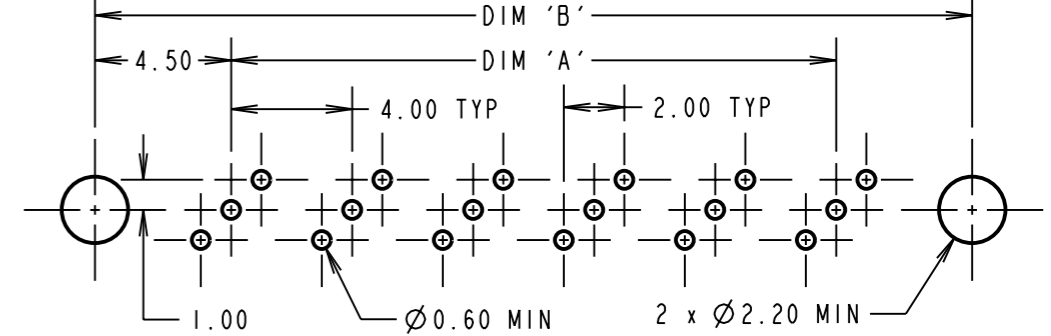
## SPECIFICATIONS:

**MATERIAL:**  
 MOULDING: GLASS FILLED PPS, UL94V-0, BLACK  
**POWER & COAX CONTACT:**  
 BODY = COPPER ALLOY  
 INNER CONTACT = BERYLLIUM COPPER  
 INSULATOR = PTFE  
 JACKSCREW, NUT: STAINLESS STEEL  
**FINISH:**  
 POWER & COAX CONTACT  
 BODY, SLEEVE, 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 = 10<sup>6</sup>MΩ @250V AC  
 OPERATING VOLTAGE = 180V AC @ 500mA  
 MAXIMUM VOLTAGE = 1000V AC  
**MECHANICAL:**  
 DURABILITY = 500 OPERATIONS  
**POWER & COAX 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)

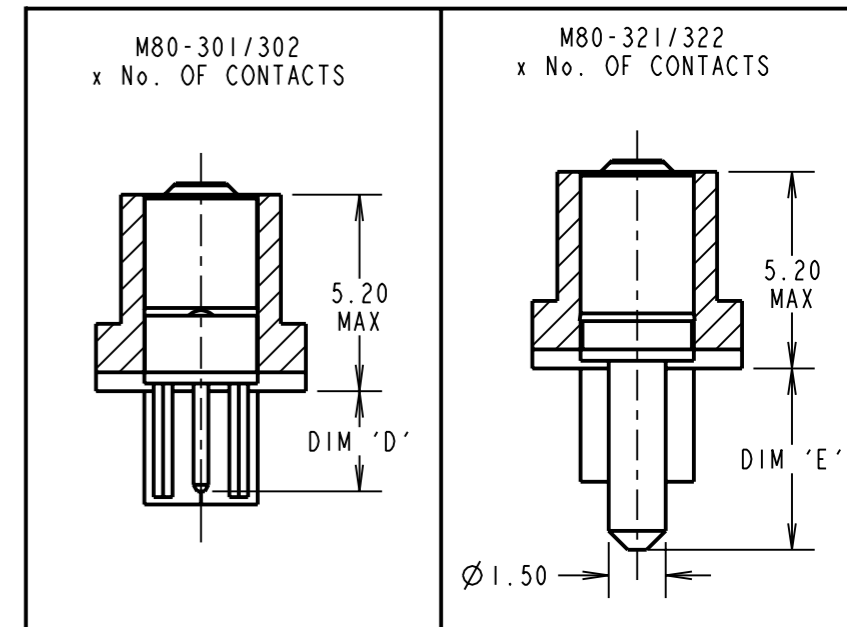
RECOMMENDED PCB LAYOUT FOR POWER CONTACTS



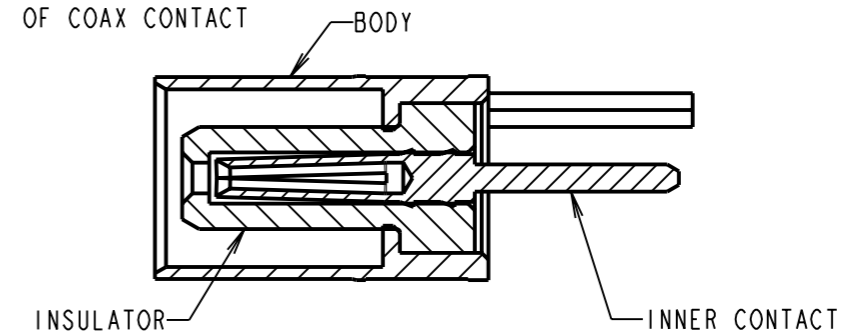
RECOMMENDED PCB LAYOUT FOR COAX CONTACTS



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



CROSS-SECTION OF COAX CONTACT



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'	M80-301 = 3.00mm, M80-302 = 4.50mm
DIM 'E'	M80-321 = 3.50mm, M80-322 = 5.00mm

EXAMPLE 1: CONNECTOR WITH 08 COAX CONTACTS,  
 M80-400000F8-08-301-00-000  
 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm  
 DIM 'D' = 3.00mm

EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS,  
 M80-400000F8-10-321-00-000  
 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm  
 DIM 'E' = 3.50mm

ORDER CODE:(PC TAIL CONTACTS ONLY)

**M80-400000F8-XX-XXX-00-000**

TOTAL No. OF CONTACTS \_\_\_\_\_  
 02 TO 12

SPECIAL CONTACTS

301 = COAX CONTACT PC TAIL 3.0mm M80-301  
 302 = COAX CONTACT PC TAIL 4.5mm M80-302  
 321 = POWER CONTACT PC TAIL 3.5mm M80-321  
 322 = POWER CONTACT PC TAIL 5.0mm M80-322

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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: mm<sup>2</sup>

TITLE: DATAMATE MIX-TEK FEMALE ASSEMBLY WITH BOARDMOUNT JACKSCREWS  
 DRAWING NUMBER: **M80-400000F8-XX-XXX-00-000**

SB	2	26.05.11	11275
NAME	ISS.	DATE	C/NOTE
APPROVED: S.BENNETT			
CHECKED: S.FLOWER			
DRAWN: R.ADDE			
CUSTOMER REF.:			
ASSEMBLY DRG:			