

# Customer Information Sheet

DRAWING No.: M80-400000F3-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  
**POWER & COAX CONTACT:**  
 BODY = COPPER ALLOY  
 INNER CONTACT, LATCHING COLLAR = BERYLLIUM COPPER  
 INSULATOR = PTFE  
 BOARD MOUNT JACKSCREW, NUTS: STAINLESS STEEL

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

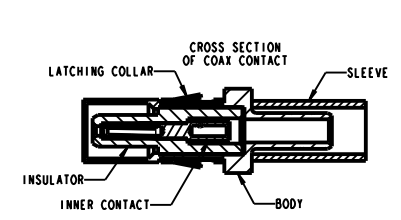
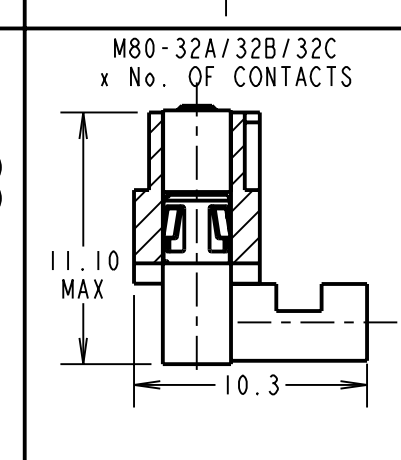
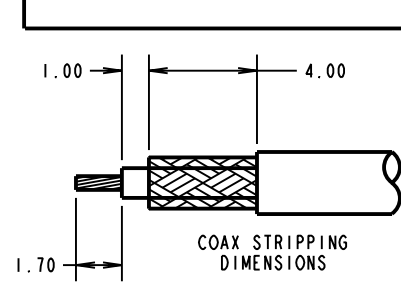
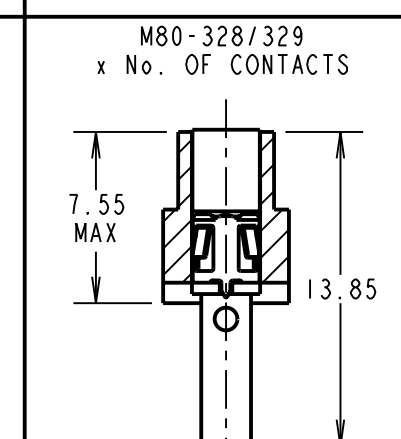
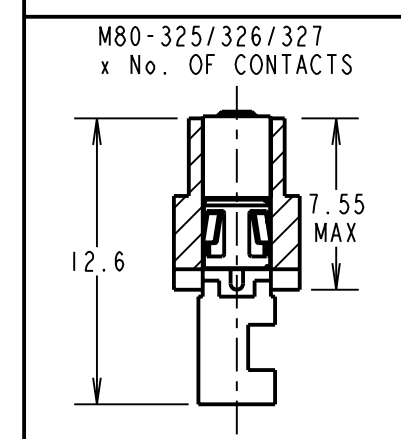
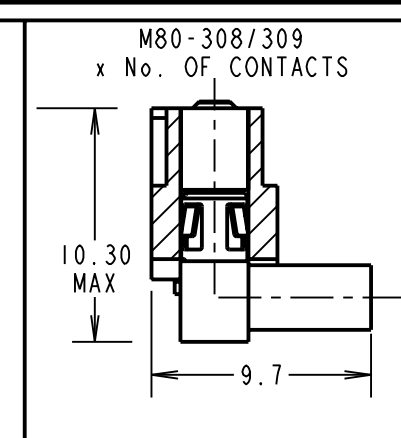
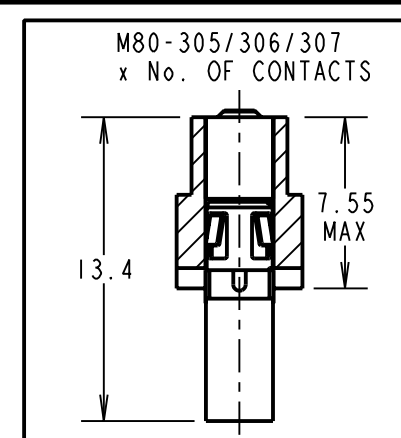
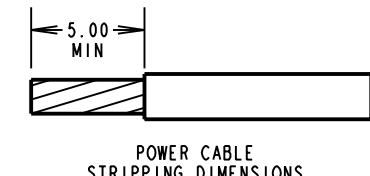
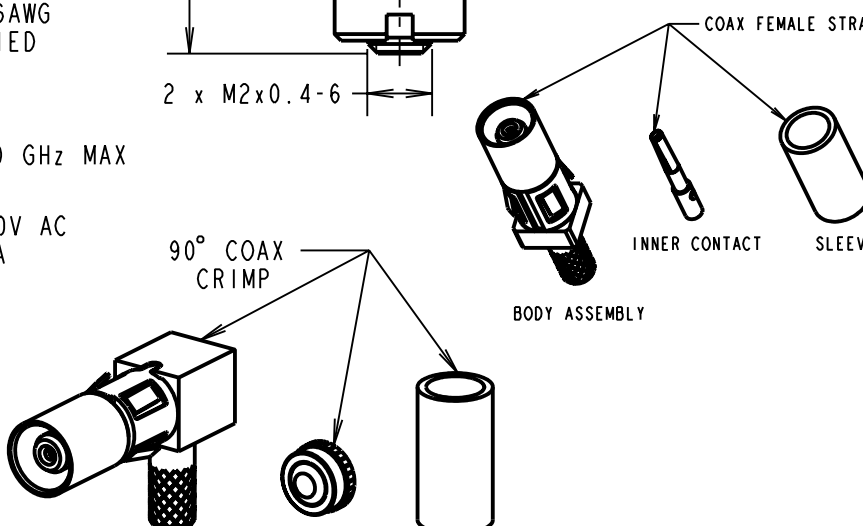
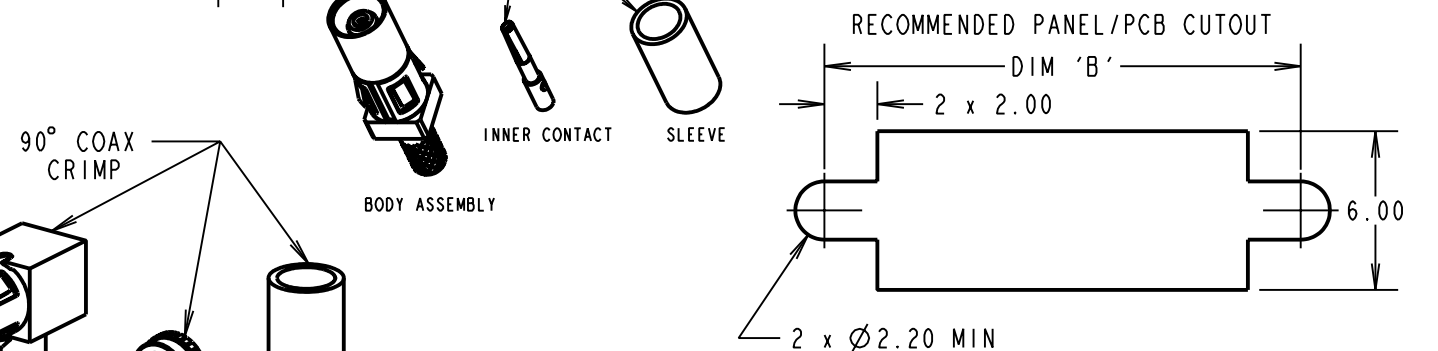
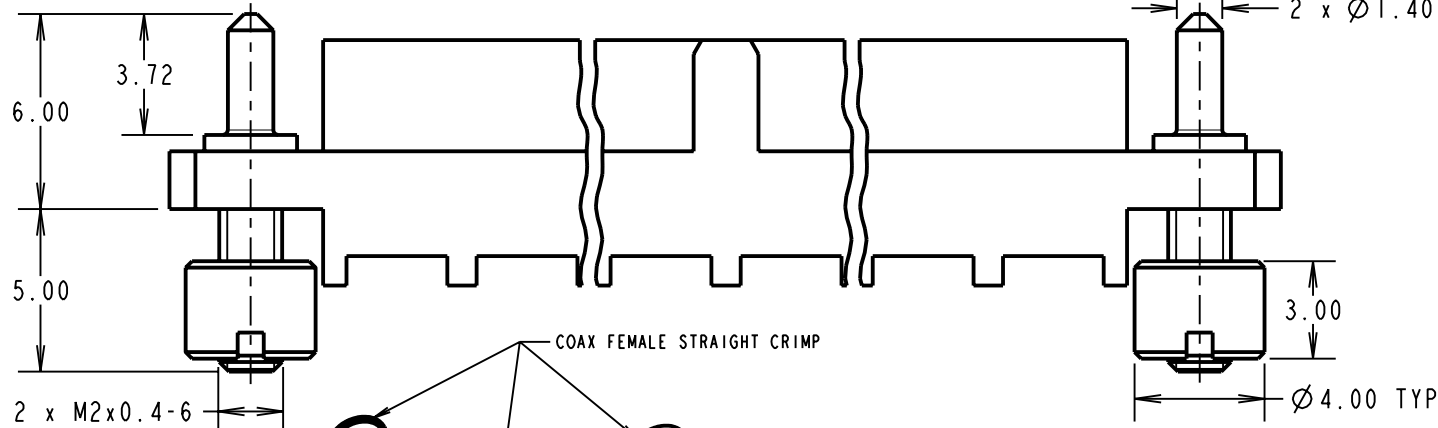
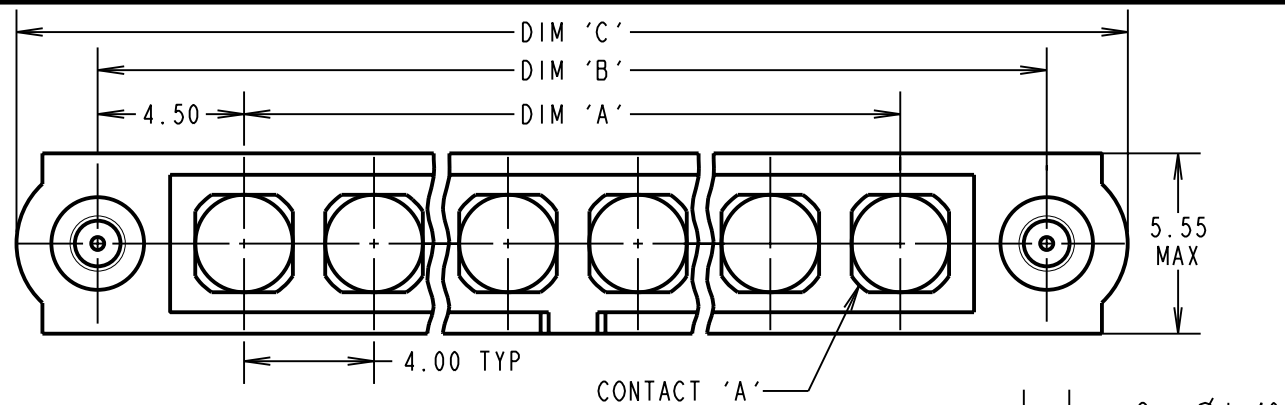
**ELECTRICAL:**  
 WORKING VOLTAGE = 120V AC/DC  
 VOLTAGE PROOF = 360V AC/DC  
 INSULATION RESISTANCE = 100MΩ MIN

**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: (CRIMP/SOLDER)  
**M80-400000F3-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 SOLDER/CRIMP 18AWG M80-328  
 329 = POWER CONTACT SOLDER/CRIMP 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 COAX CONTACTS, USE PART NUMBER M80-305/306/307/308/309 FOR EXTRA POWER CONTACTS, USE PART NUMBER M80-325/326/327/328/329/32A/32B/32C.
  - 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 CRIMP TOOL FOR M80-328/329 = Z80-294 AND POSITIONER Z80-295.
  - POWER AND COAX CONTACT EXTRACTION TOOL = Z80-290
  - INSTRUCTION SHEETS ARE AVAILABLE.

| 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,  
 M80-400000F3-08-305-00-000  
 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm  
 DIM 'D' = 13.4mm

EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS,  
 M80-400000F3-10-325-00-000  
 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

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 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:** M80-400000F3-XX-XXX-00-000  
 SHT 3 OF 4

# Customer Information Sheet

DRAWING No.: M80-400000F3-XX-XXX-00-000

SHEET 4 OF 4

IF IN DOUBT - ASK

©

NOT TO SCALE

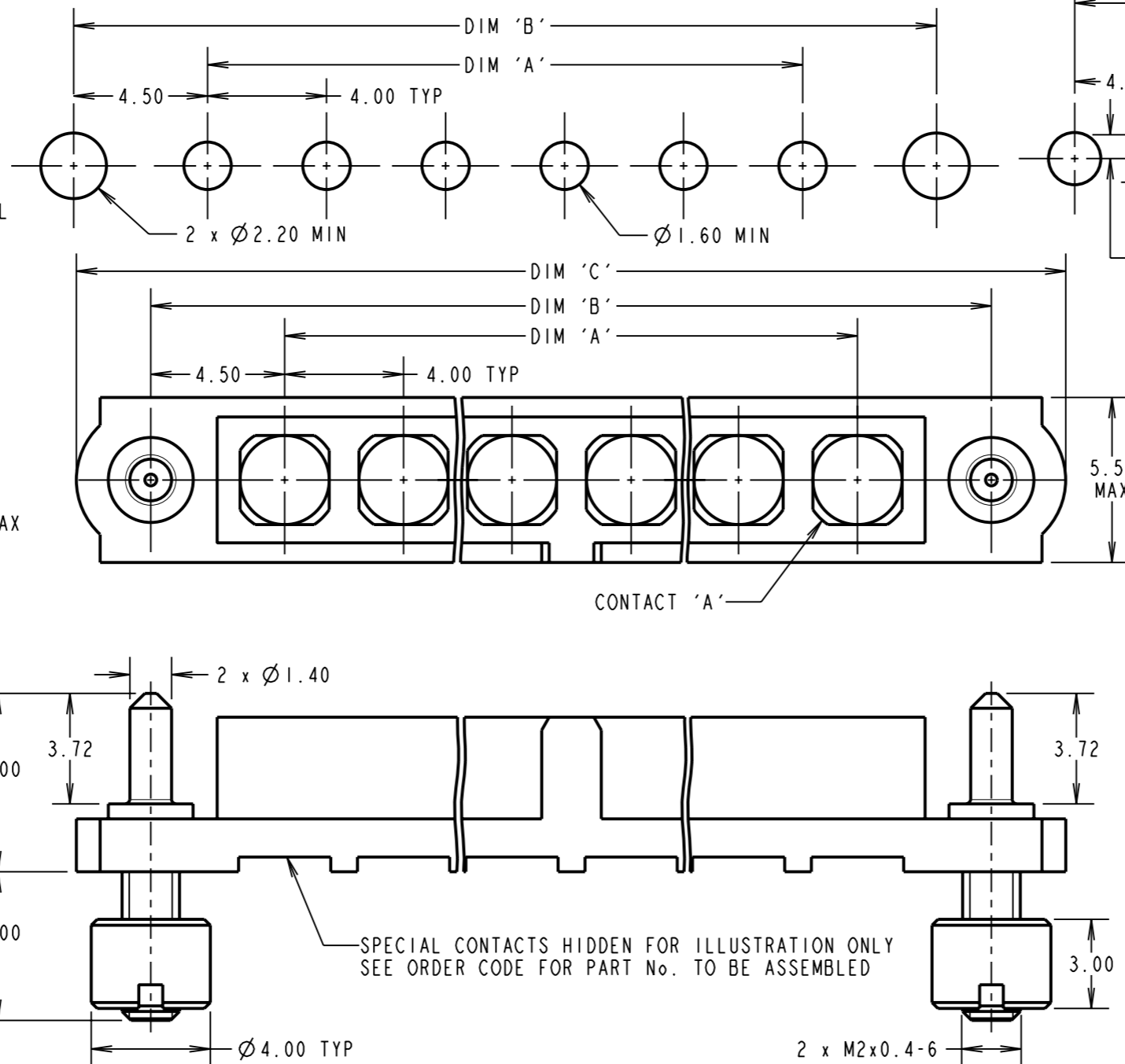
THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

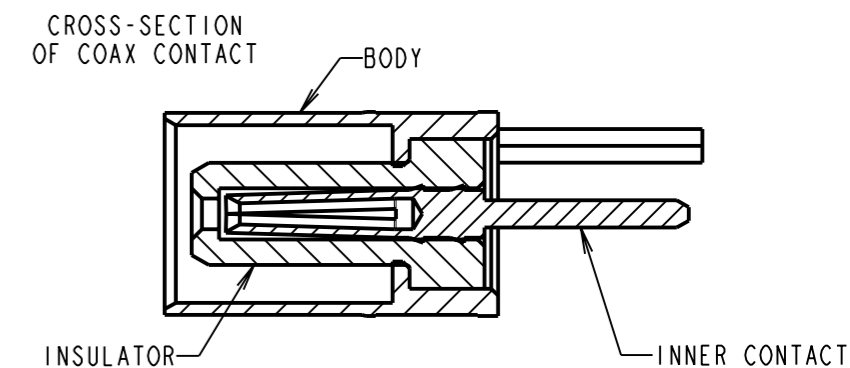
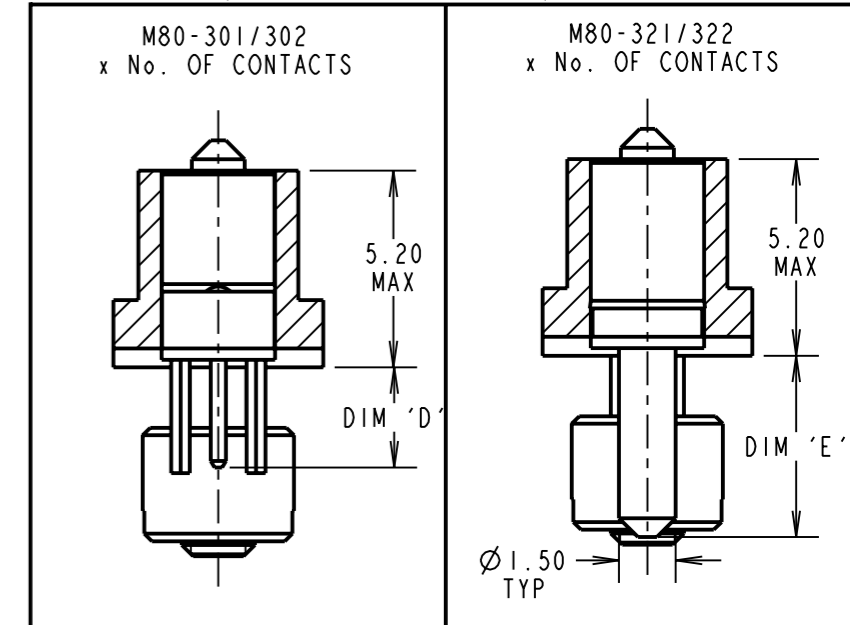
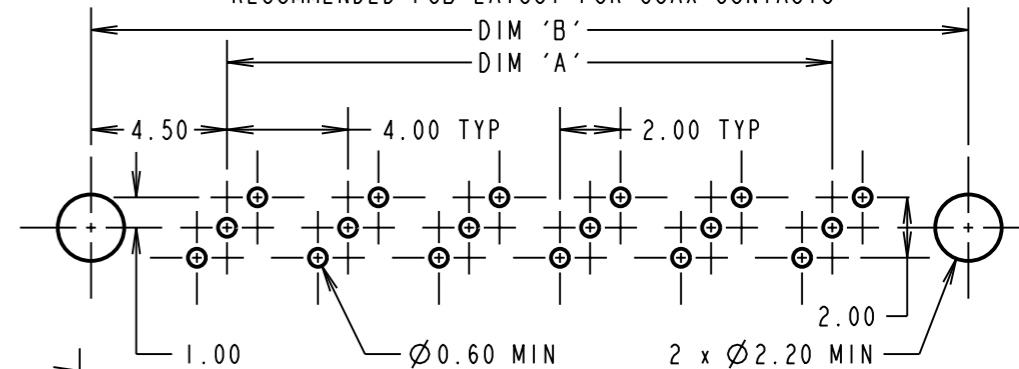
## SPECIFICATIONS:

**MATERIAL:**  
 Moulding: GLASS FILLED PPS, UL94V-0, BLACK  
**POWER & COAX CONTACT:**  
 BODY = COPPER ALLOY  
 INNER CONTACT = BERYLLIUM COPPER  
 INSULATOR = PTFE  
 BOARD MOUNT JACKSCREW, NUTS: 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



| 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: CONNNECTOR WITH 08 COAX CONTACTS,<br>M80-400000F3-08-301-00-000<br>DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm<br>DIM 'D' = 3.00mm  |                                    |
| EXAMPLE 2: CONNNECTOR WITH 10 POWER CONTACTS,<br>M80-400000F3-10-321-00-000<br>DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm<br>DIM 'E' = 3.50mm |                                    |

ORDER CODE: (PC TAIL CONTACTS ONLY)  
**M80-400000F3-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

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

|  |  |  |   |  |   |  |
|--|--|--|---|--|---|--|
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| HARWIN USA<br>TEL: 603 893 5376<br>FAX: 603 893 5396<br>mis@harwin.com | HARWIN Europe (UK)<br>TEL: 023 9231 4545<br>FAX: 023 9231 4590<br>mis@harwin.co.uk | HARWIN Asia<br>TEL: +65 6 779 4909<br>FAX: +65 6 779 3868<br>mis@harwin.com.sg |   |  |   |  |
| FINISH: SEE ABOVE  |  |  | S/AREA: mm <sup>2</sup>   |  | DRAWING NUMBER: <b>M80-400000F3-XX-XXX-00-000</b> |  |
|  |  |  |   |  |   | SHT 4 OF 4   |