

# Customer Information Sheet

DRAWING No.: M80-500000M5-XX-XXX-00-000

IF IN DOUBT - ASK

©

NOT TO SCALE

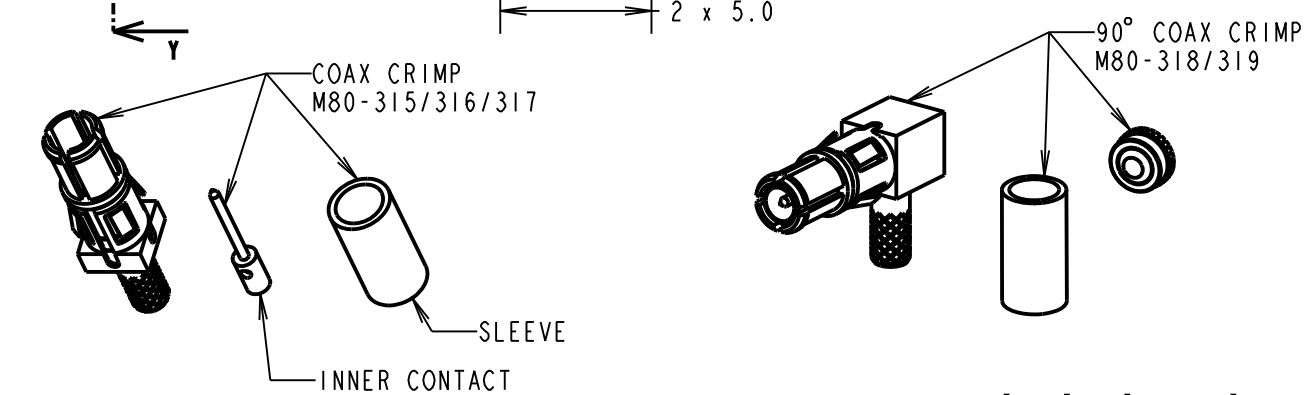
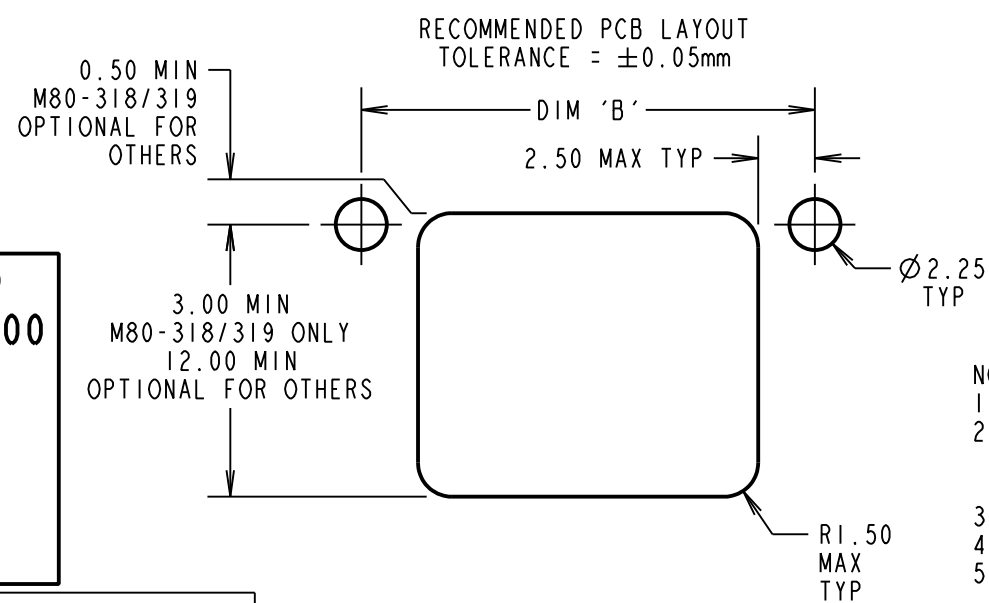
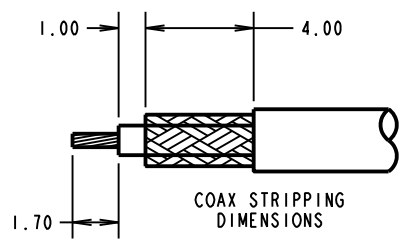
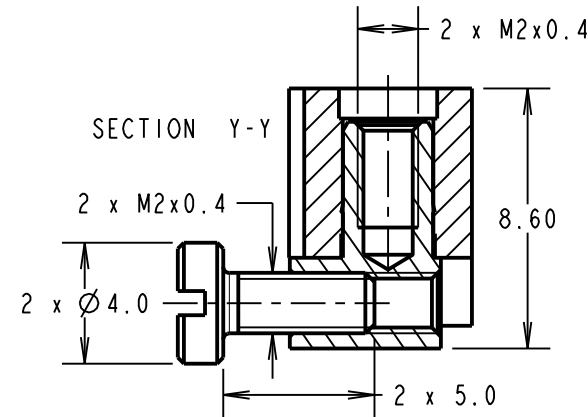
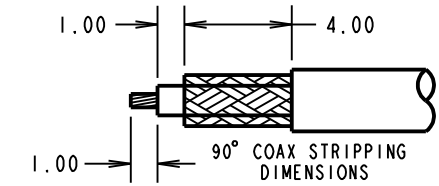
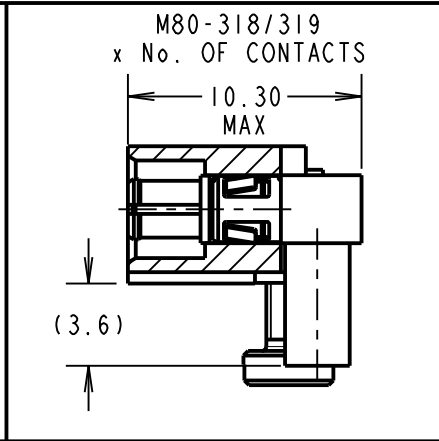
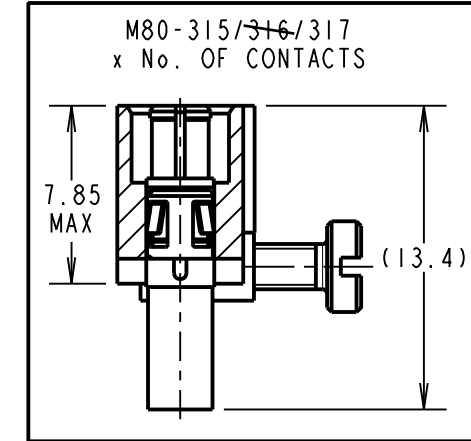
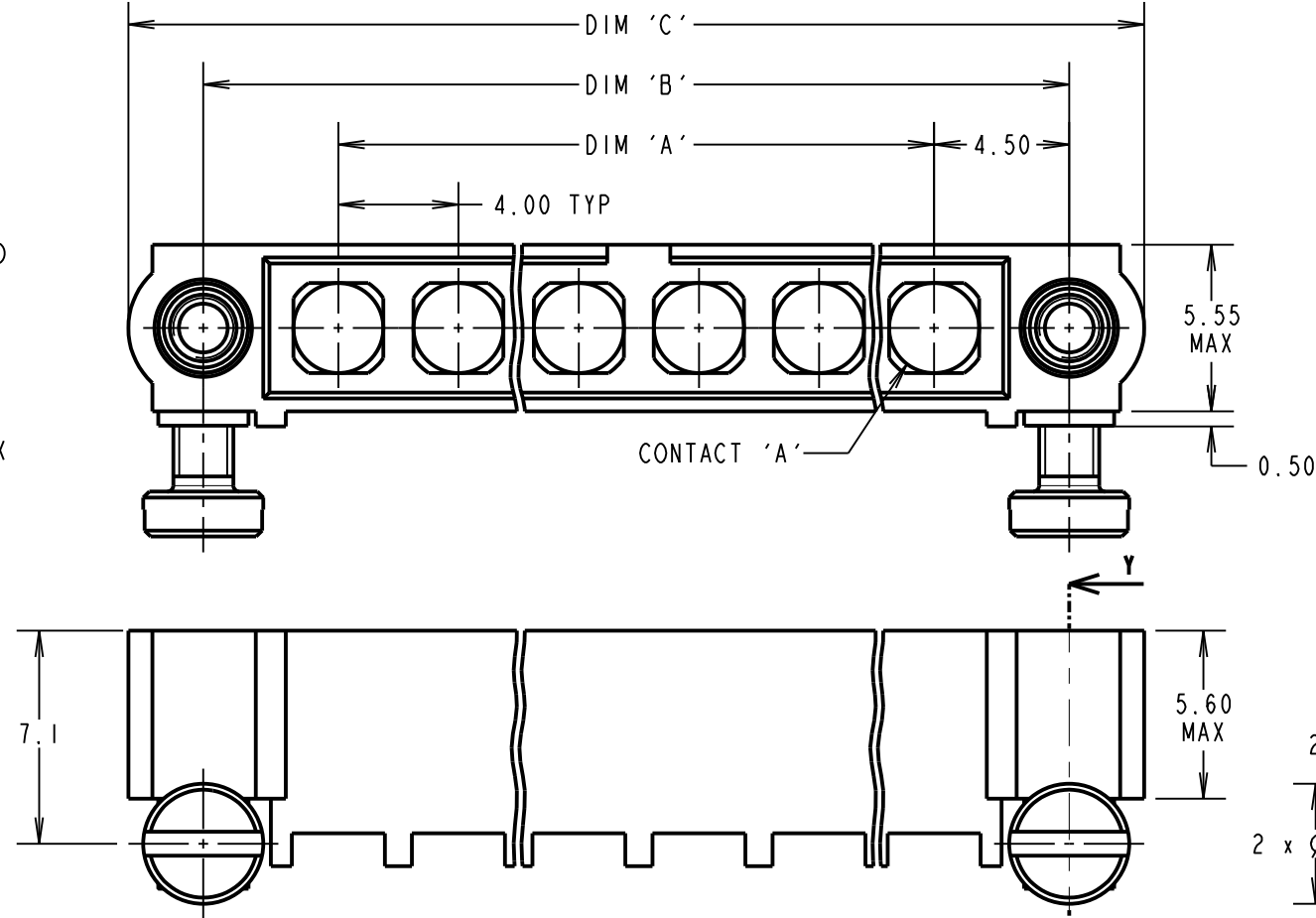
THIRD ANGLE PROJECTION

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  
 JACKSCREW, SCREW = 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 = 50Ω  
 V.S.W.R = 1.05 + (0.04 x FREQUENCY) GHz MAX  
 CONTACT RESISTANCE = 6mΩ MAX  
 INSULATION RESISTANCE = 10<sup>6</sup>MΩ @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 AND SOLDER CONTACTS ONLY



ORDER CODE: (COAX CRIMP/SOLDER CONTACTS)  
**M80-500000M5-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 AND BM SCREWS NOT ASSEMBLED.
  - 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             | 11   | 09.12.19 | 21540  |
| NAME            | ISS. | DATE     | C/NOTE |
| APPROVED: MGP   |      |          |        |
| CHECKED: MR     |      |          |        |
| DRAWN: S.FLOWER |      |          |        |
| 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: CONNECTOR WITH 08 COAX CONTACTS,  
 M80-500000M5-08-315-00-000  
 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm

**HARWIN**  
 www.harwin.com  
 technical@harwin.com

THIS DRAWING AND ANY INFORMATION OR DESCRIPTIVE MATTER SET OUT HEREON ARE CONFIDENTIAL AND COPYRIGHT PROPERTY OF THE HARWIN GROUP AND MUST NOT BE DISCLOSED, LOANED, COPIED OR USED FOR MANUFACTURING, TENDERING OR FOR ANY OTHER PURPOSE WITHOUT THEIR WRITTEN PERMISSION.

**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:** mm<sup>2</sup>

**TITLE:** DATAMATE MIX-TEK MALE ASSY WITH HORIZONTAL BOARDMOUNT J/SCREW  
**DRAWING NUMBER:** M80-500000M5-XX-XXX-00-000  
 SHT 4 OF 6

# Customer Information Sheet

DRAWING No.: M80-500000M5-XX-XXX-00-000

IF IN DOUBT - ASK

©

NOT TO SCALE

THIRD ANGLE PROJECTION

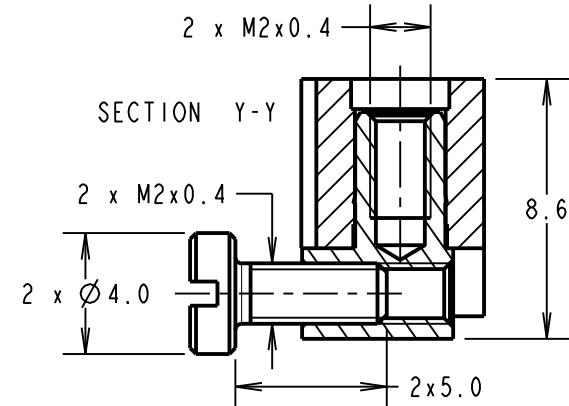
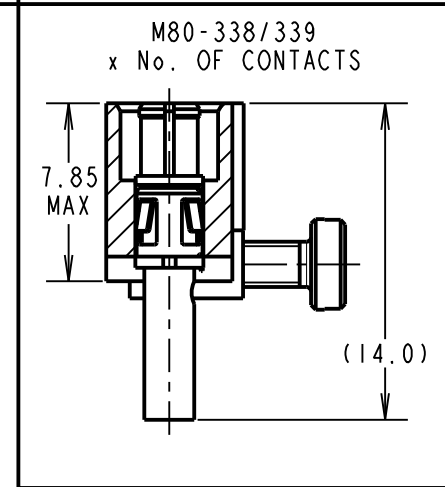
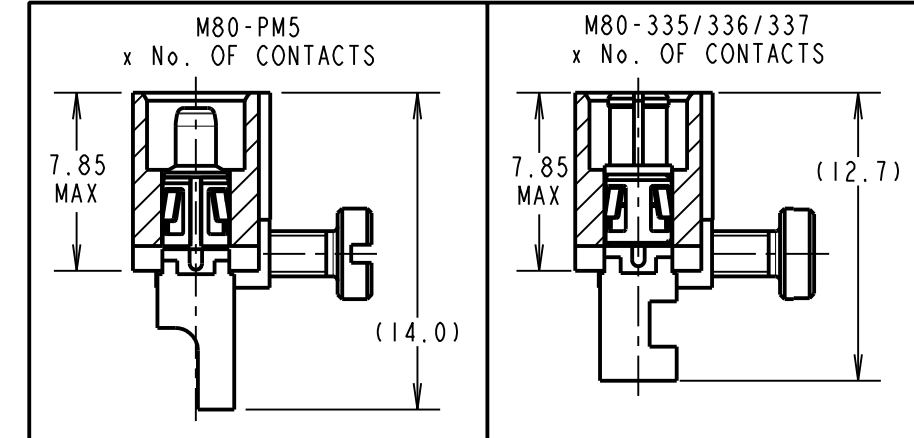
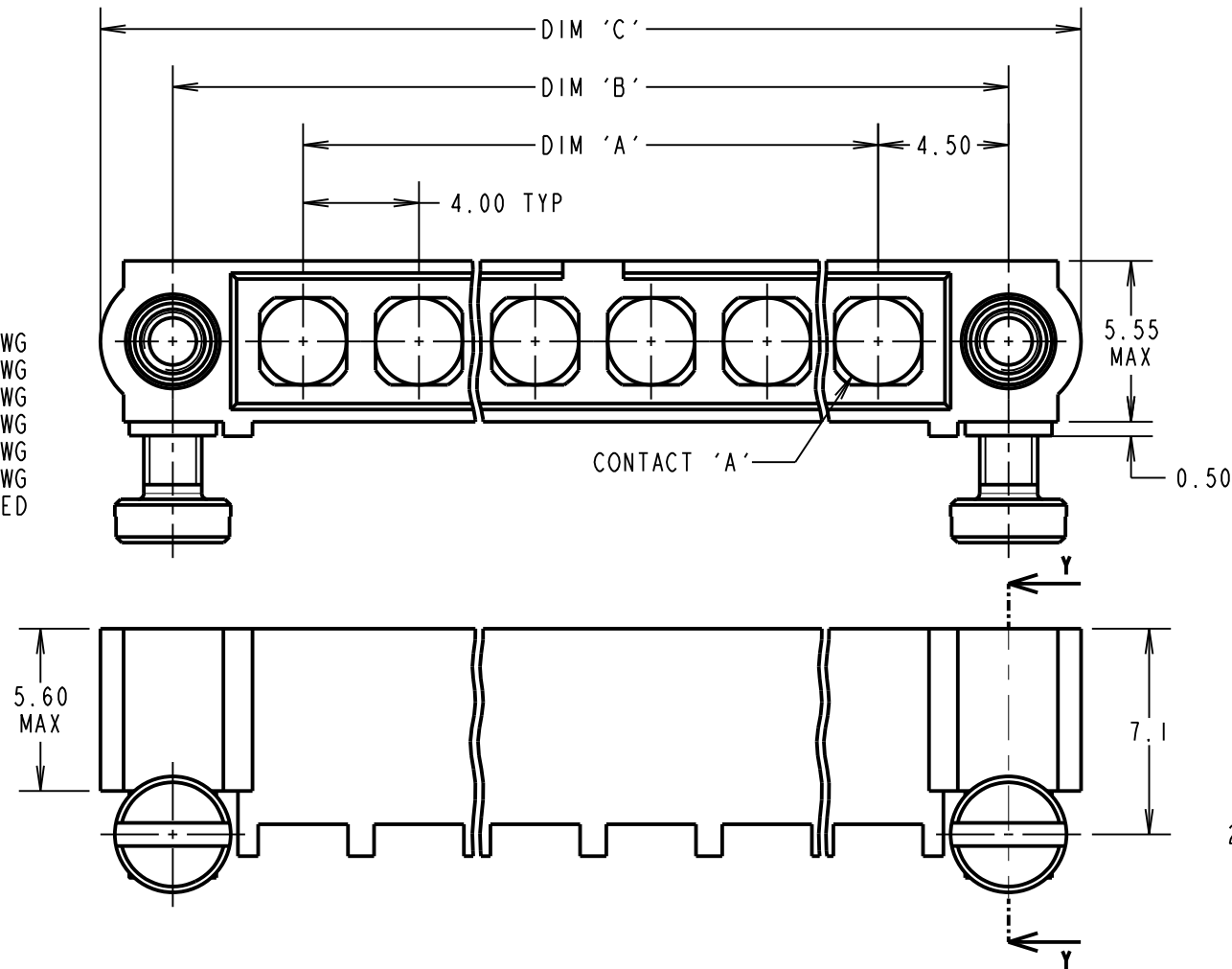
ALL DIMENSIONS IN mm

## SPECIFICATIONS:

**MATERIAL:**  
 MOULDING: GLASS FILLED PPS, UL94V-0, BLACK  
**POWER CONTACT:**  
 BODY = COPPER ALLOY  
 LATCHING COLLAR = BERYLLIUM COPPER  
 JACKSCREW, SCREW = STAINLESS STEEL  
**FINISH:**  
**POWER CONTACT:**  
 BODY = GOLD  
 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 = M80-335 = 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  
**POWER CONTACT:**  
 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 AND SOLDER CONTACTS ONLY



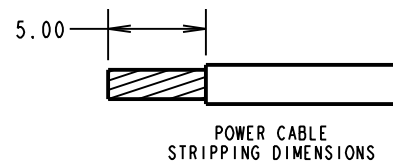
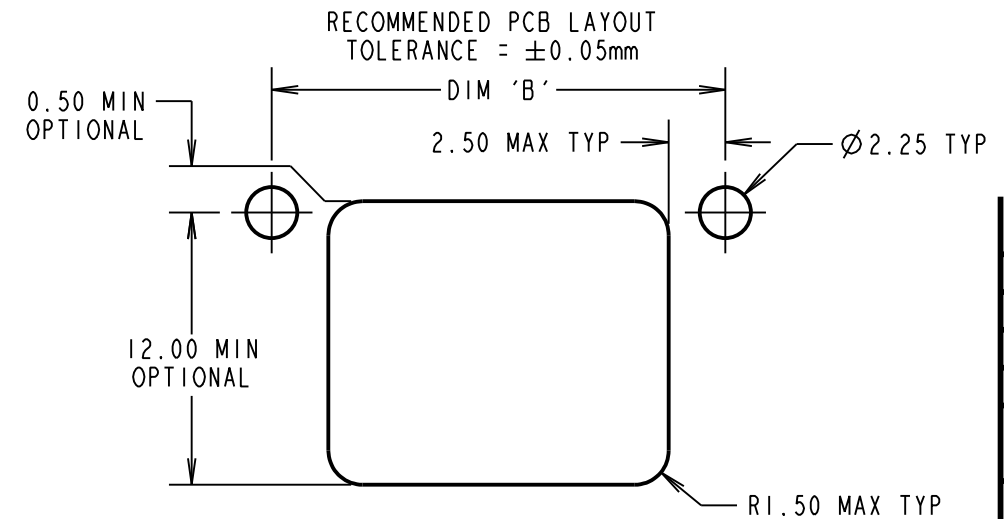
- NOTES:**
- CONNECTORS ARE SUPPLIED WITH CONTACTS AND BM SCREWS NOT ASSEMBLED.
  - FOR EXTRA POWER CONTACTS USE PART NUMBERS: M80-335/336/337/338/339/PM5.
  - CONTACT EXTRACTION TOOL = Z80-290
  - RECOMMENDED HAND CRIMP TOOL FOR CONTACTS M80-338/339 = Z80-294 AND POSITIONER Z80-295.
  - INSTRUCTION SHEETS ARE AVAILABLE.

ORDER CODE: (POWER CRIMP/SOLDER CONTACTS)

**M80-500000M5-XX-XXX-00-000**

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

SPECIAL CONTACTS (CRIMP)  
 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             | 11   | 09.12.19 | 21540  |
| NAME            | ISS. | DATE     | C/NOTE |
| APPROVED: MGP   |      |          |        |
| CHECKED: MR     |      |          |        |
| DRAWN: S.FLOWER |      |          |        |
| 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: CONNECTOR WITH 10 POWER CONTACTS,<br>M80-500000M5-10-335-00-000 |                            |
| DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.0mm                   |                            |

**HARWIN**  
 www.harwin.com  
 technical@harwin.com

THIS DRAWING AND ANY INFORMATION OR DESCRIPTIVE MATTER SET OUT HEREON ARE CONFIDENTIAL AND COPYRIGHT PROPERTY OF THE HARWIN GROUP AND MUST NOT BE DISCLOSED, LOANED, COPIED OR USED FOR MANUFACTURING, TENDERING OR FOR ANY OTHER PURPOSE WITHOUT THEIR WRITTEN PERMISSION.

**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:**  
 mm<sup>2</sup>

**TITLE:** DATAMATE MIX-TEK MALE ASSY WITH HORIZONTAL BOARDMOUNT J/SCREW  
**DRAWING NUMBER:** M80-500000M5-XX-XXX-00-000  
 SHT 5 OF 6

# Customer Information Sheet

DRAWING No.: M80-5000000M5-XX-XXX-00-000

IF IN DOUBT - ASK

©

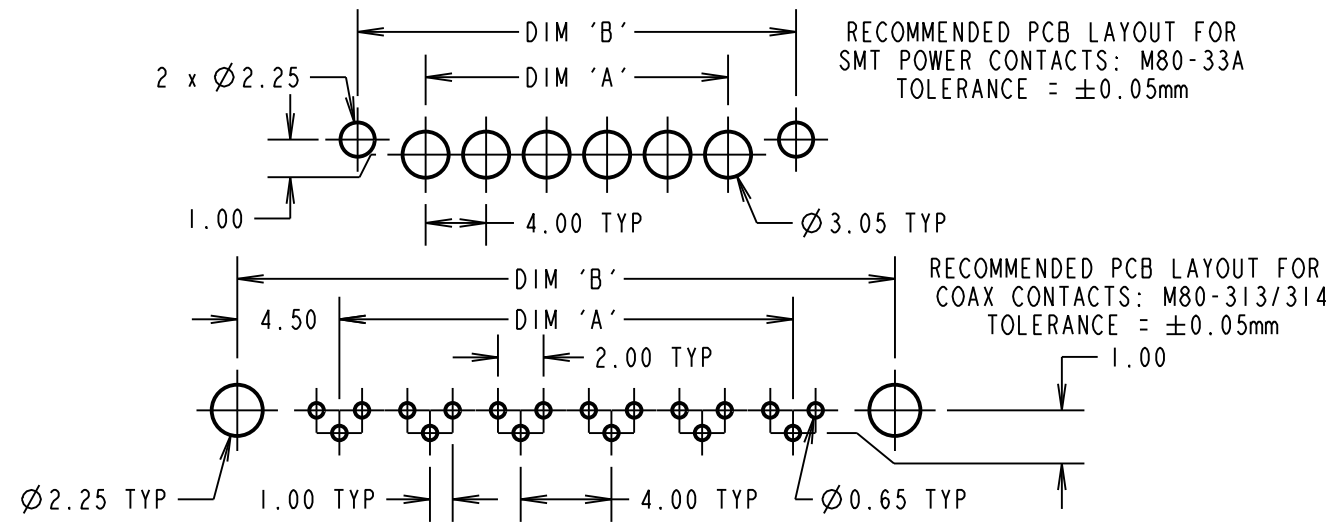
NOT TO SCALE

THIRD ANGLE PROJECTION

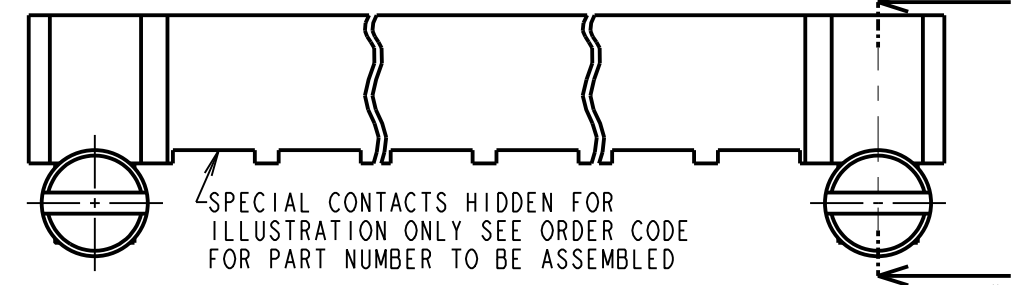
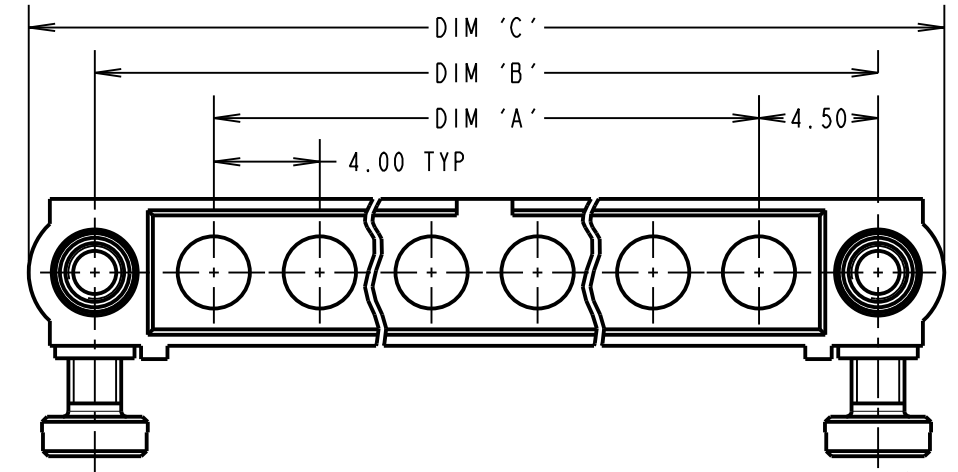
ALL DIMENSIONS IN mm

**SPECIFICATIONS:**

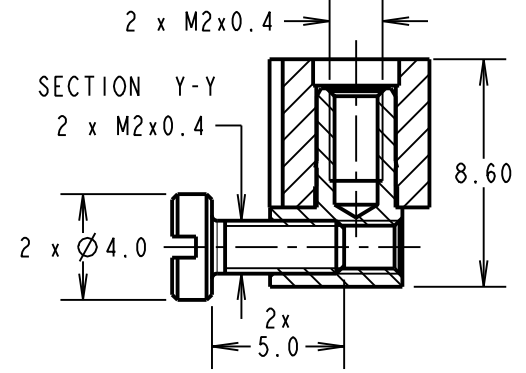
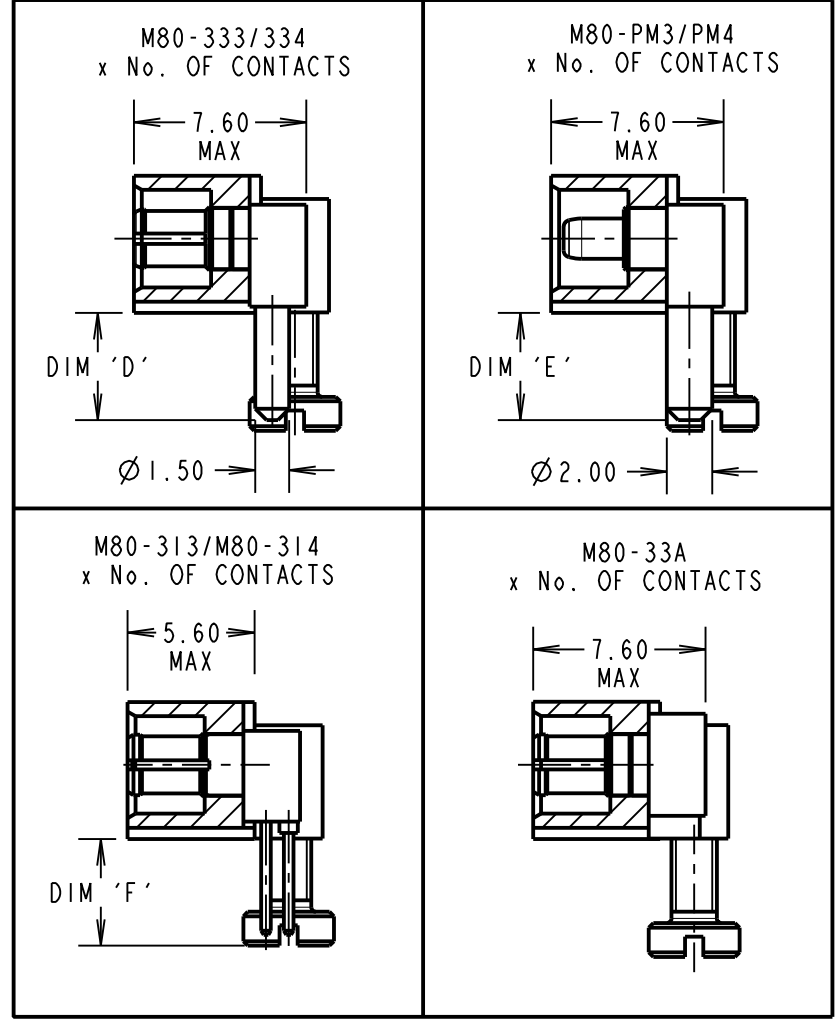
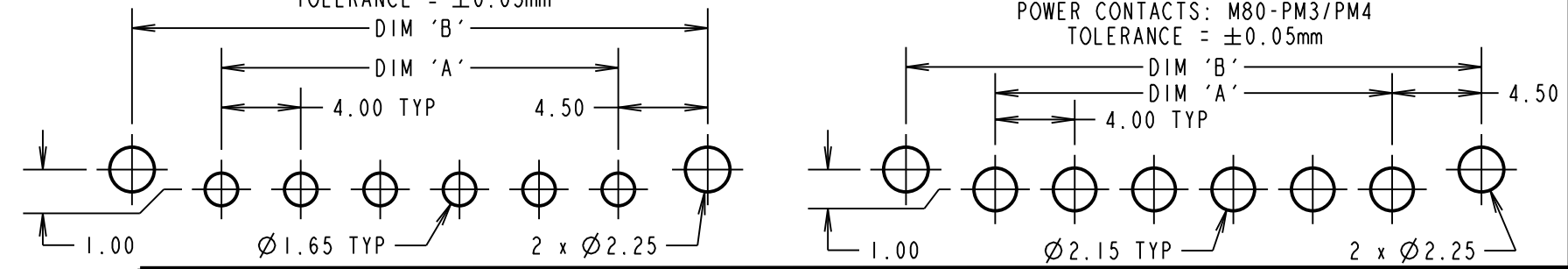
**MATERIAL:**  
 MOULDING: GLASS FILLED PPS, UL94V-0, BLACK  
 POWER CONTACT: COPPER ALLOY  
 COAX CONTACT:  
 BODY = COPPER ALLOY  
 INNER CONTACT = COPPER ALLOY  
 INSULATOR = PTFE  
 JACKSCREW, SCREW = STAINLESS STEEL  
**FINISH:**  
 POWER CONTACT: GOLD  
 COAX CONTACT: BODY, INNER CONTACT = GOLD  
**ELECTRICAL:**  
 WORKING VOLTAGE = 800V AC/DC  
 VOLTAGE PROOF = 1200V AC/DC  
 INSULATION RESISTANCE = 100MΩ MIN  
**POWER CONTACT:**  
 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 = 10<sup>6</sup>MΩ @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)



**COAX AND POWER PC TAIL CONTACTS ONLY**



RECOMMENDED PCB LAYOUT FOR POWER CONTACTS: M80-333/334 TOLERANCE = ±0.05mm



NOTES:  
 1. CONNECTORS ARE SUPPLIED WITH CONTACTS ASSEMBLED. SUPPLIED BM SCREWS ARE NOT ASSEMBLED.

ORDER CODE: (COAX & POWER PC TAIL CONTACTS ONLY)  
**M80-5000000M5-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 PC TAIL M80-333  
 334 = 20A POWER CONTACT 5.0mm PC TAIL M80-334  
 PM3 = 40A POWER CONTACT 3.5mm PC TAIL M80-PM3  
 PM4 = 40A POWER CONTACT 5.0mm PC TAIL M80-PM4  
 33A = 20A POWER CONTACT HORIZONTAL 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'   | M80-333 = 3.5mm, M80-334 = 5.0mm |
| DIM 'E'   | M80-PM3 = 3.5mm, M80-PM4 = 5.0mm |
| DIM 'F'   | M80-313 = 3.0mm, M80-314 = 4.5mm |

EXAMPLE: CONNECTOR WITH 10 POWER CONTACTS,  
 M80-5000000M5-10-333-00-000  
 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.0mm  
 DIM 'D' = 3.5mm

**HARWIN**  
 www.harwin.com  
 technical@harwin.com

THIS DRAWING AND ANY INFORMATION OR DESCRIPTIVE MATTER SET OUT HEREON ARE CONFIDENTIAL AND COPYRIGHT PROPERTY OF THE HARWIN GROUP AND MUST NOT BE DISCLOSED, LOANED, COPIED OR USED FOR MANUFACTURING, TENDERING OR FOR ANY OTHER PURPOSE WITHOUT THEIR WRITTEN PERMISSION.

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: mm<sup>2</sup>

TITLE: DATAMATE MIX-TEK MALE ASSY WITH HORIZONTAL BOARDMOUNT J/SCREW  
 DRAWING NUMBER: **M80-5000000M5-XX-XXX-00-000**  
 SHEET 6 OF 6

|                 |      |          |        |
|-----------------|------|----------|--------|
| MGP             | 11   | 09.12.19 | 21540  |
| NAME            | ISS. | DATE     | C/NOTE |
| APPROVED: MGP   |      |          |        |
| CHECKED: MR     |      |          |        |
| DRAWN: S.FLOWER |      |          |        |
| CUSTOMER REF.:  |      |          |        |
| ASSEMBLY DRG:   |      |          |        |