

Customer Information Sheet

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

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NOT TO SCALE

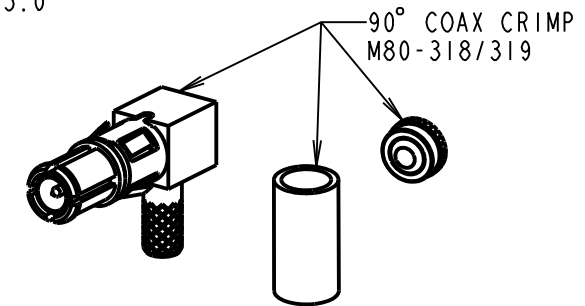
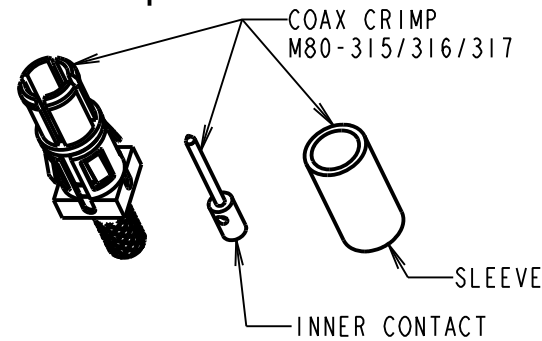
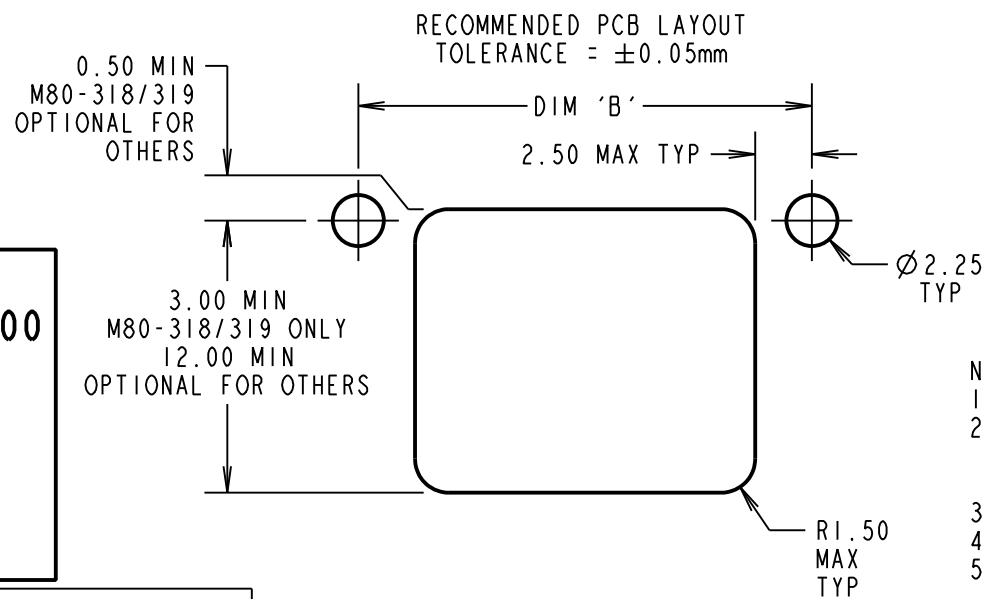
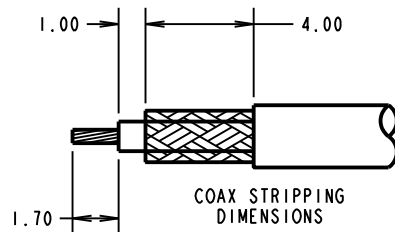
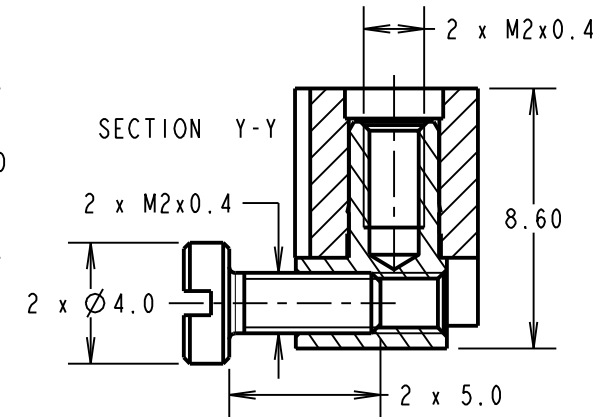
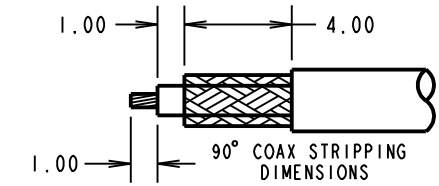
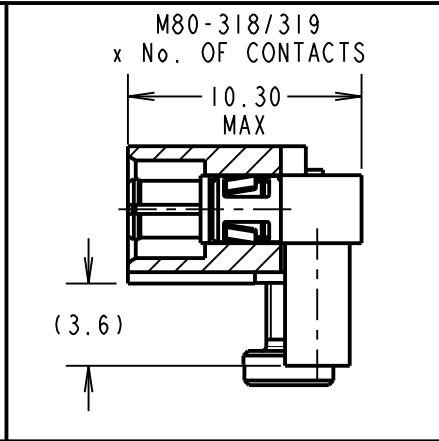
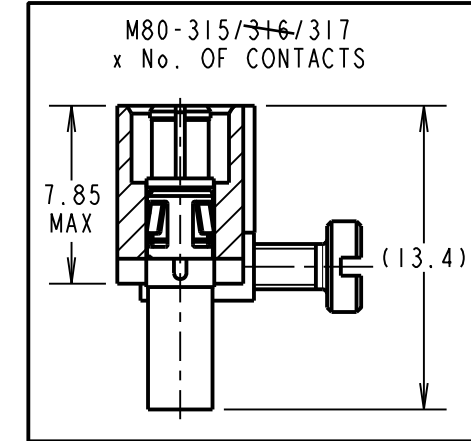
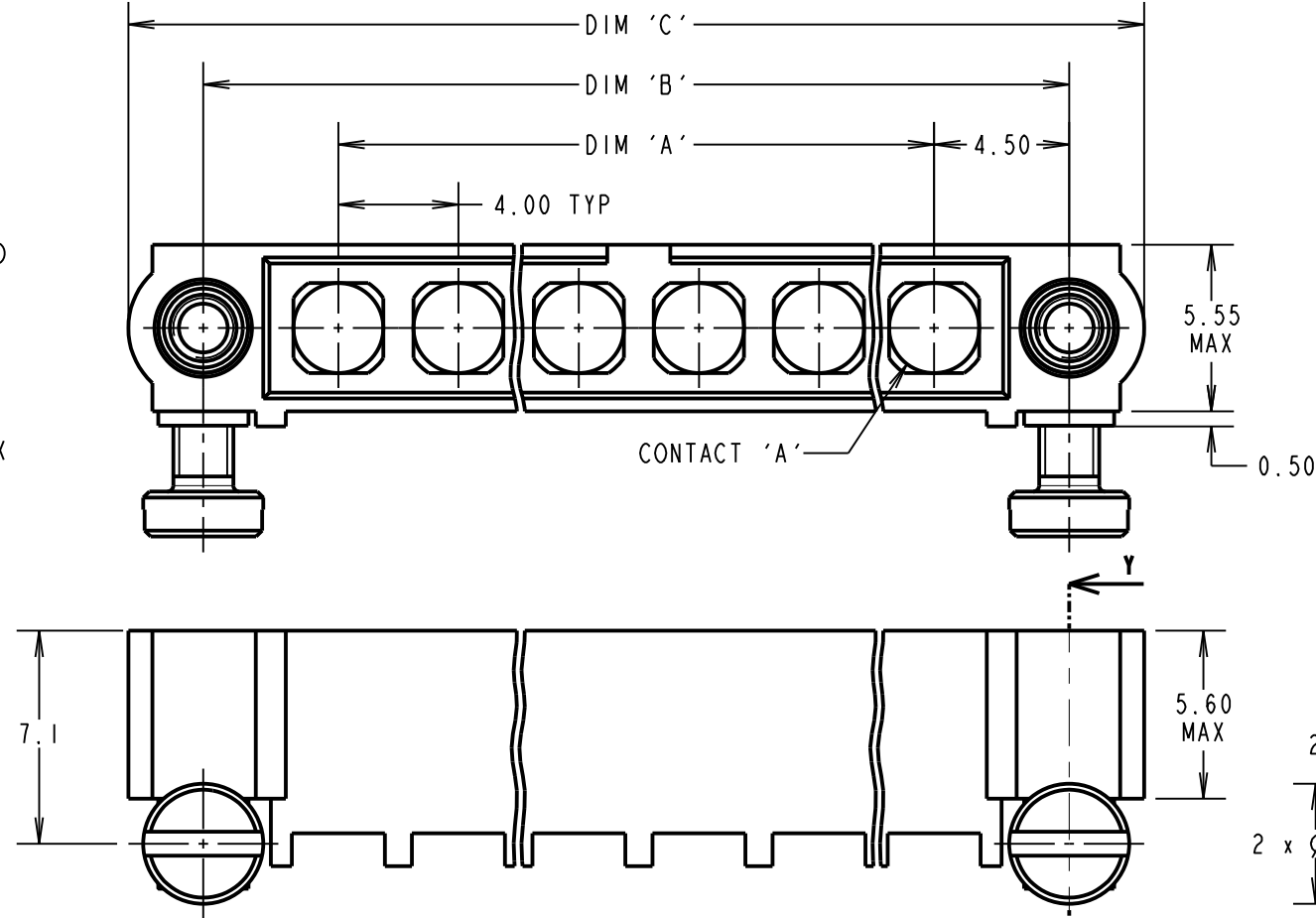
THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

SPECIFICATIONS:

MATERIAL:
 MOULDING: GLASS FILLED PPS, UL94V-0, BLACK
 COAX CONTACT:
 BODY, 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 = 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 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

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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: mm²

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

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NOT TO SCALE

THIRD ANGLE PROJECTION

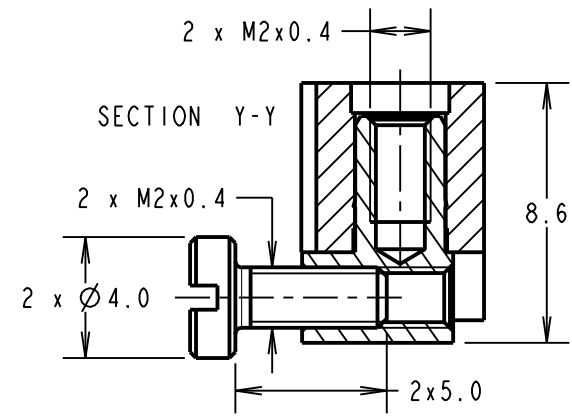
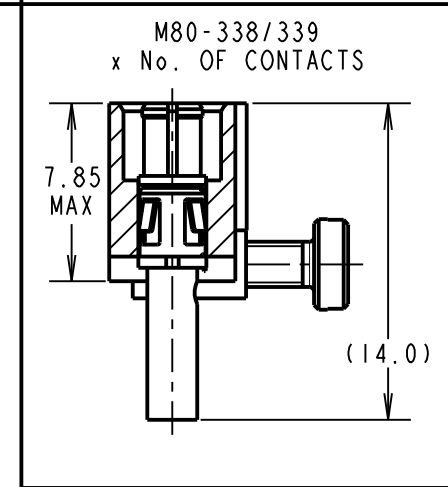
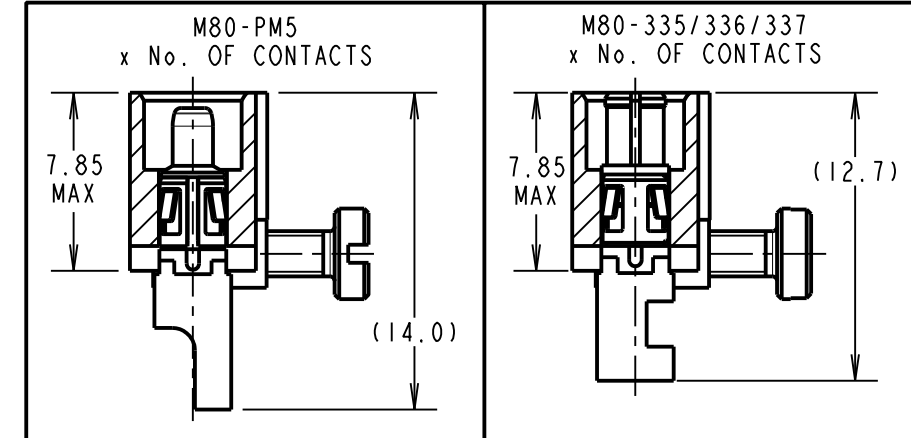
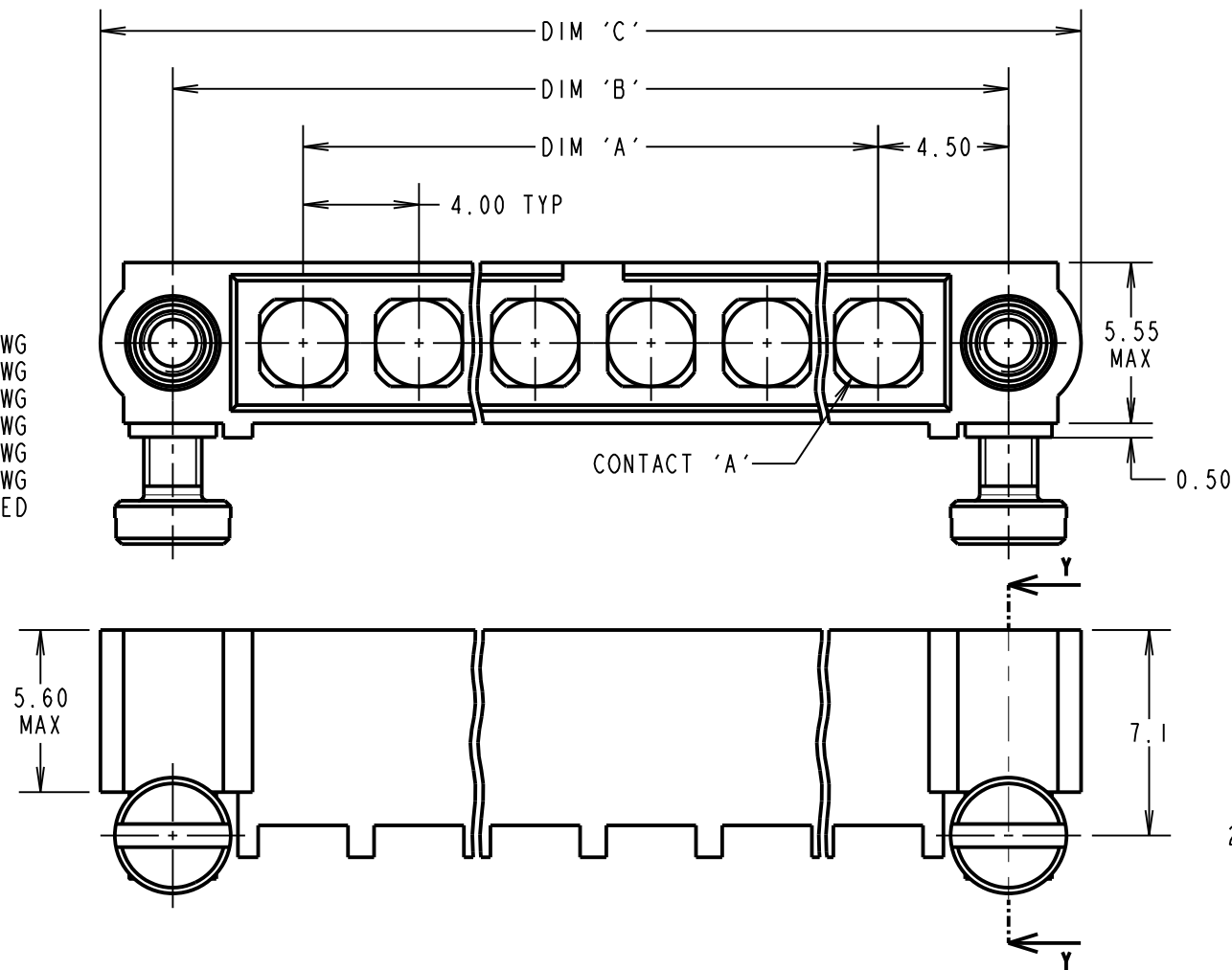
ALL DIMENSIONS IN mm

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



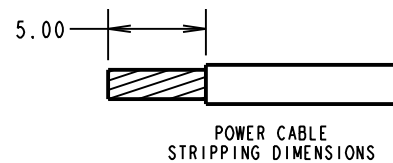
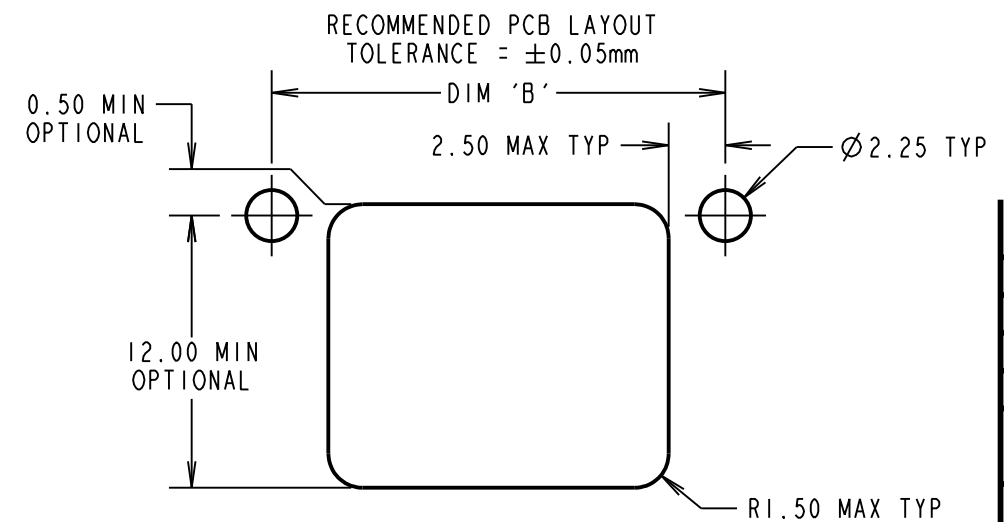
- NOTES:**
- CONNECTORS ARE SUPPLIED WITH CONTACTS AND BM SCREWS NOT ASSEMBLED.
 - FOR EXTRA POWER CONTACTS USE PART NUMBERS: M80-335/336/337/338/339/PM5.
 - CONTACT EXTRACTION TOOL = Z80-290
 - RECOMMENDED HAND CRIMP TOOL FOR CONTACTS M80-338/339 = Z80-294 AND POSITIONER Z80-295.
 - INSTRUCTION SHEETS 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, M80-500000M5-10-335-00-000 | |
| DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.0mm | |

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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:
 mm²

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

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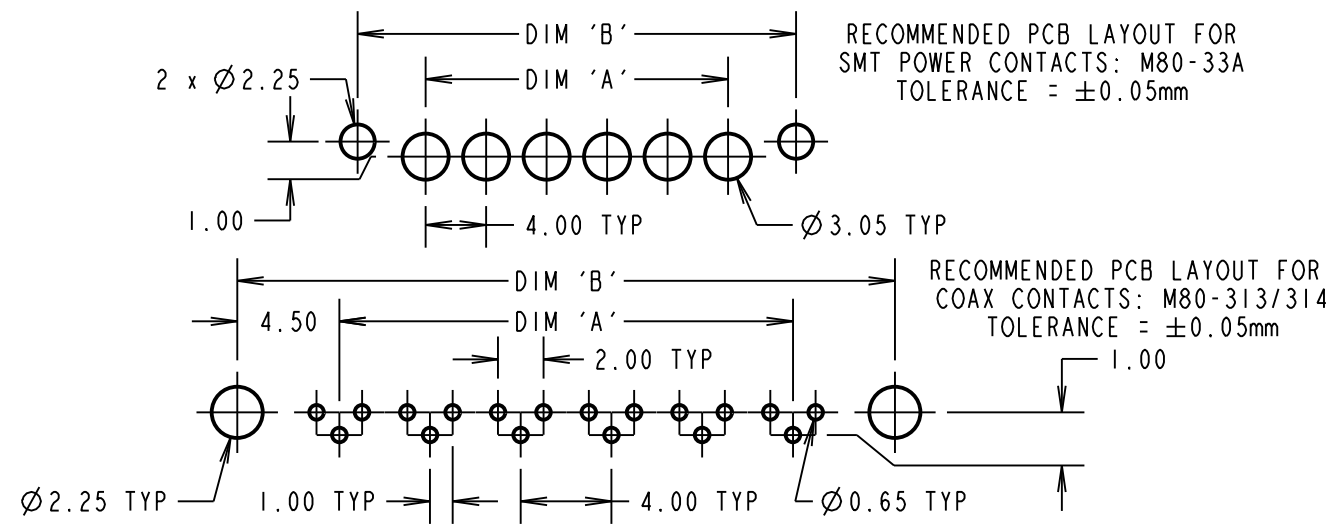
NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

SPECIFICATIONS:

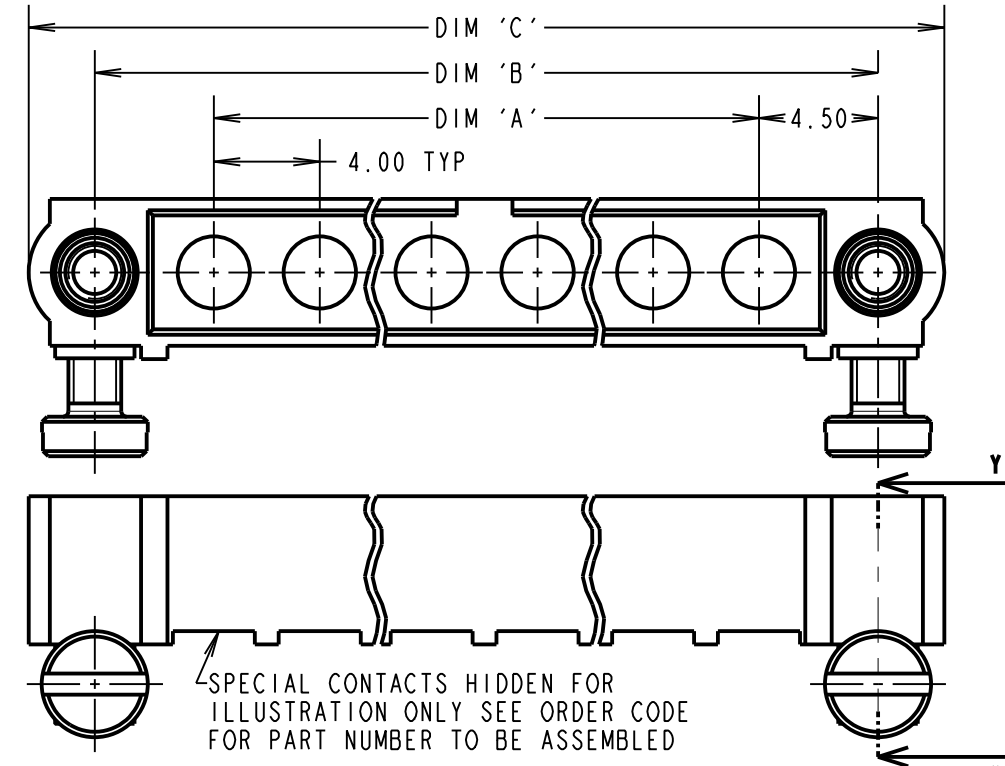
MATERIAL:
 MOULDING: GLASS FILLED PPS, UL94V-0, BLACK
 POWER CONTACT: COPPER ALLOY
 COAX CONTACT:
 BODY = COPPER ALLOY
 INNER CONTACT = COPPER ALLOY
 INSULATOR = PTFE
 JACKSCREW, SCREW = STAINLESS STEEL
FINISH:
 POWER CONTACT: GOLD
 COAX CONTACT: BODY, INNER CONTACT = GOLD
ELECTRICAL:
 WORKING VOLTAGE = 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 = 10⁶MΩ @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)



RECOMMENDED PCB LAYOUT FOR SMT POWER CONTACTS: M80-33A TOLERANCE = ±0.05mm

RECOMMENDED PCB LAYOUT FOR COAX CONTACTS: M80-313/314 TOLERANCE = ±0.05mm

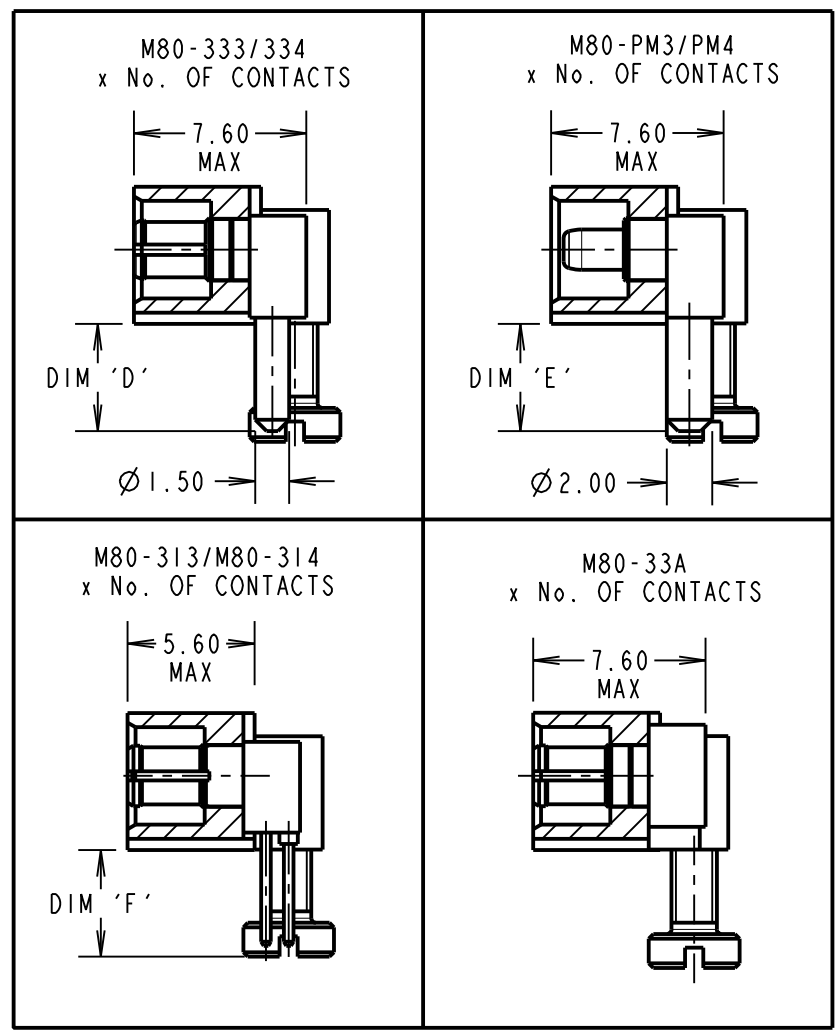
COAX AND POWER PC TAIL CONTACTS ONLY



SPECIAL CONTACTS HIDDEN FOR ILLUSTRATION ONLY SEE ORDER CODE FOR PART NUMBER TO BE ASSEMBLED

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

RECOMMENDED PCB LAYOUTS FOR POWER CONTACTS: M80-PM3/PM4 TOLERANCE = ±0.05mm



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

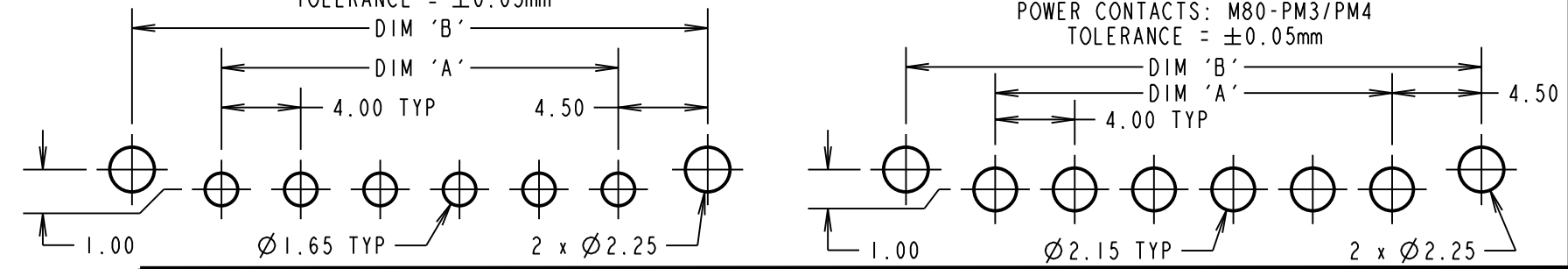
ORDER CODE: (COAX & POWER PC TAIL CONTACTS ONLY)
M80-5000000M5-XX-XXX-00-000

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



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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: mm²

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: | | | |

Mouser Electronics

Authorized Distributor

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Harwin:

[M80-5000000M5-02-333-00-000](#) [M80-5000000M5-03-333-00-000](#) [M80-5000000M5-08-333-00-000](#) [M80-5000000M5-02-PM3-00-000](#) [M80-5000000M5-04-333-00-000](#) [M80-5000000M5-10-333-00-000](#) [M80-5000000M5-06-333-00-000](#) [M80-5000000M5-04-PM3-00-000](#) [M80-5000000M5-06-PM3-00-000](#) [M80-5000000M5-06-PM4-00-000](#) [M80-5000000M5-02-PM4-00-000](#) [M80-5000000M5-08-PM3-00-000](#) [M80-5000000M5-10-PM3-00-000](#) [M80-5000000M5-04-313-00-000](#) [M80-5000000M5-08-PM4-00-000](#) [M80-5000000M5-05-333-00-000](#)