

Customer Information Sheet

DRAWING No.: M80-500000M3-XX-XXX-00-000

SHEET 3 OF 4

IF IN DOUBT - ASK

©

NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

SPECIFICATIONS:

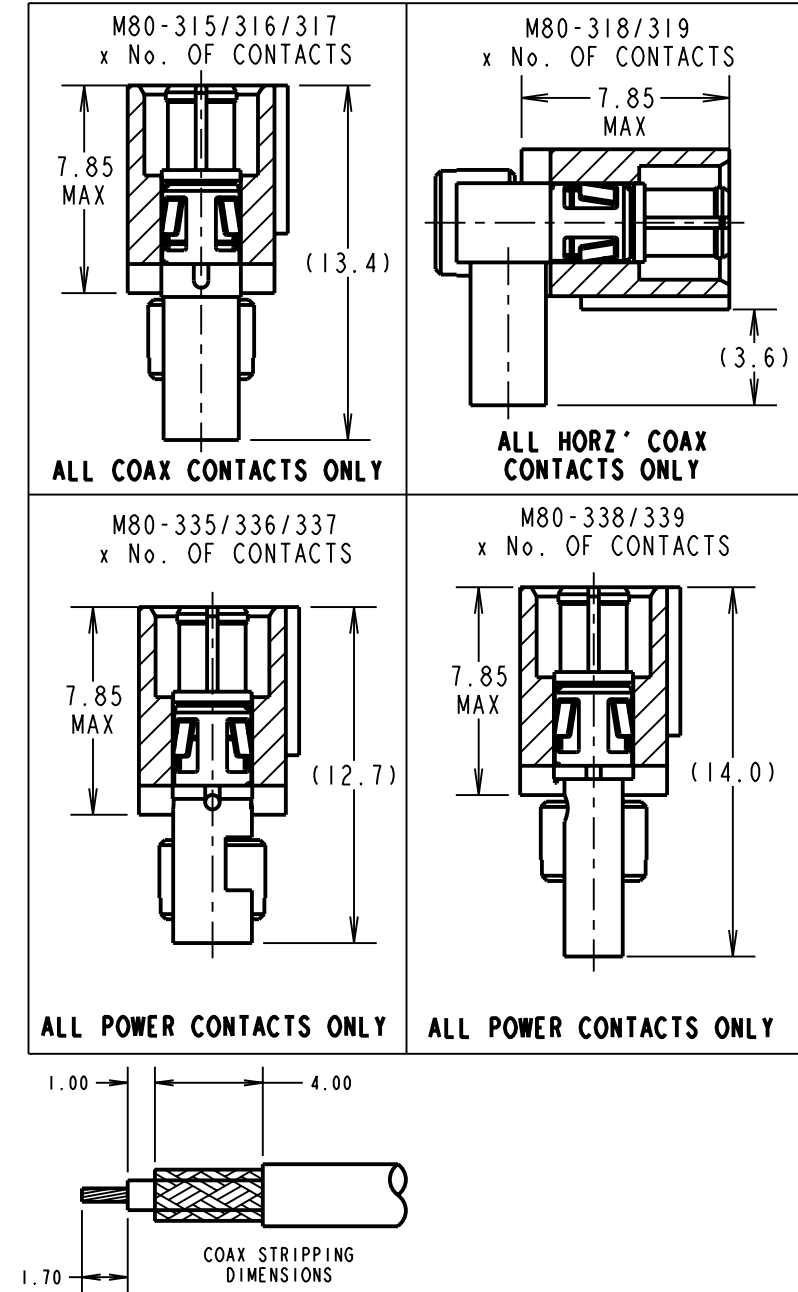
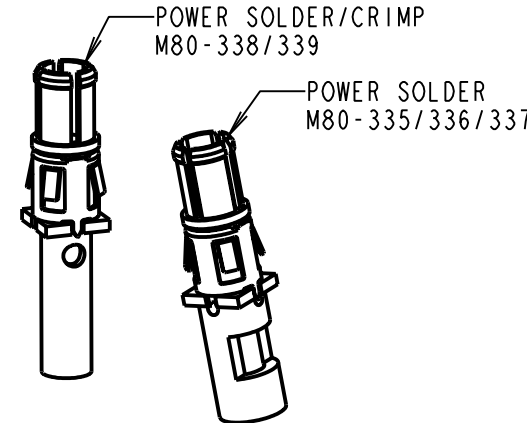
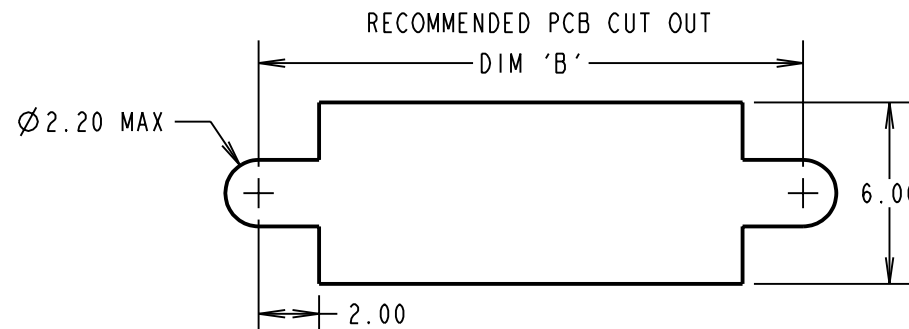
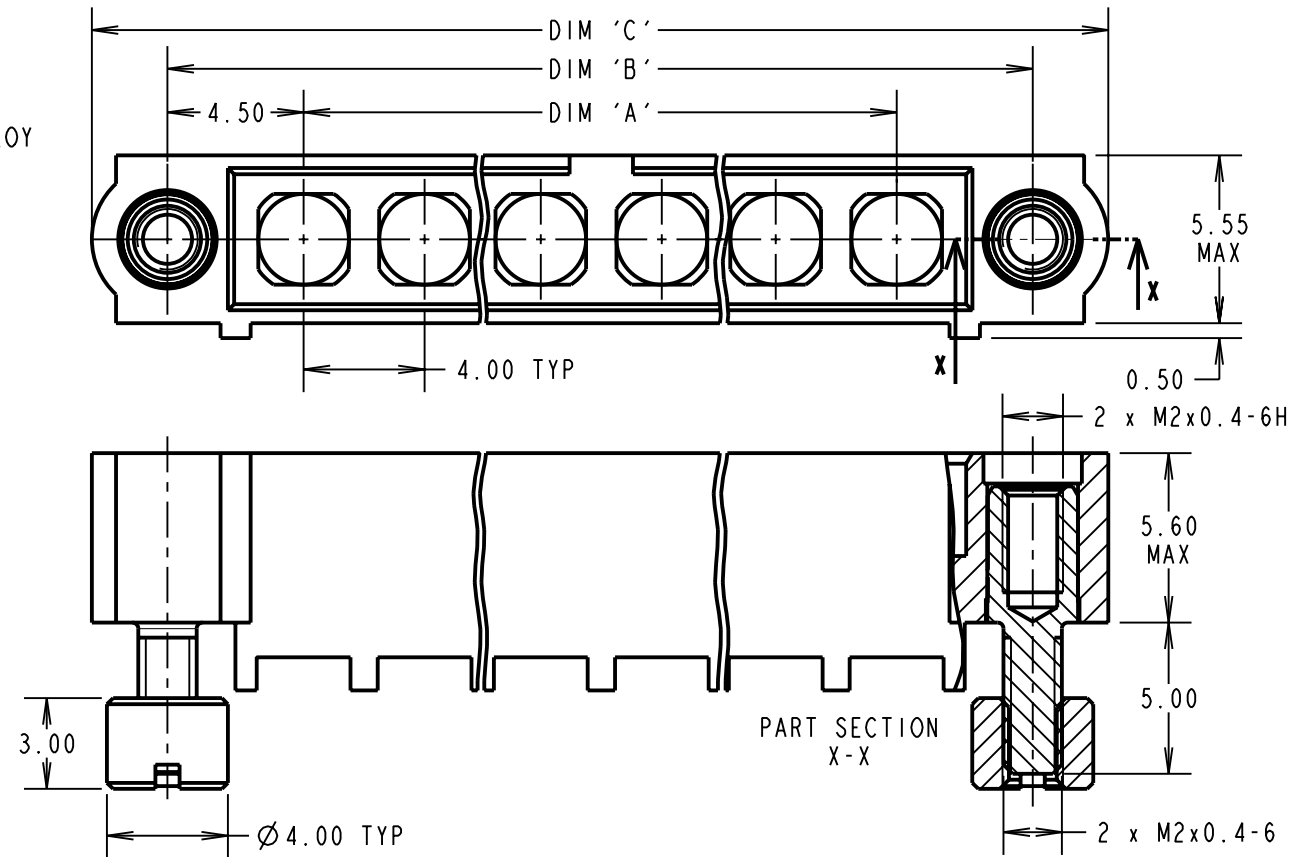
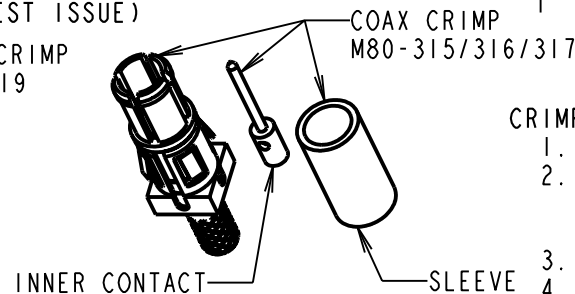
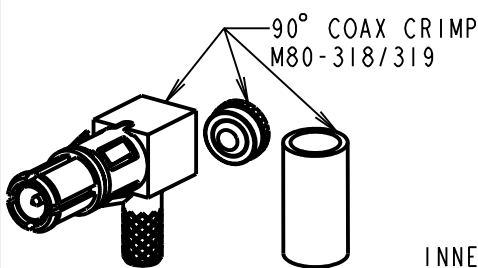
MATERIAL:
 MOULDING: GLASS FILLED PPS, UL94V-0, BLACK
COAX & POWER CONTACT:
 BODY, SLEEVE, INNER CONTACT, END PLUG = COPPER ALLOY
 LATCHING COLLAR = BERYLLIUM COPPER
 INSULATOR = PTFE
BOARD MOUNT JACKSCREW, NUT: STAINLESS STEEL
FINISH:
COAX & POWER CONTACT:
 BODY, SLEEVE, INNER CONTACT, END PLUG = GOLD
 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)



- CRIMP/SOLDER 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.

ORDER CODE: (CRIMP/SOLDER CONTACTS)

M80-500000M3-XX-XXX-00-000

TOTAL No. OF CONTACTS _____
 02 TO 12

- SPECIAL CONTACTS**
- 315 = COAX CONTACT 2.00mm CRIMP M80-315
 - 316 = COAX CONTACT 2.40mm CRIMP M80-316
 - 317 = COAX CONTACT 2.70mm CRIMP M80-317
 - 318 = COAX CONTACT 2.00mm HORZ' CRIMP M80-318
 - 319 = COAX CONTACT 2.70mm HORZ' CRIMP M80-319
 - 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

| 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,
 M80-500000M3-08-315-00-000
 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm

EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS,
 M80-500000M3-10-335-00-000
 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm

HARWIN

| | | |
|--|--|--|
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|--|--|--|

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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: JACKSCREW DATAMATE MIXED TECHNOLOGY VERTICAL MALE ASSEMBLY

DRAWING NUMBER: M80-500000M3-XX-XXX-00-000

SHT 3 **OF** 4

| | | | |
|----------------|------|-------------|--------|
| RA | B | 21.12.09 | ---- |
| NAME | ISS. | DATE | C/NOTE |
| APPROVED: | | R.ADDE | |
| CHECKED: | | M.G.PLESTED | |
| DRAWN: | | R.ADDE | |
| CUSTOMER REF.: | | | |
| ASSEMBLY DRG: | | | |

Customer Information Sheet

DRAWING No.: M80-5000000M3-XX-XXX-00-000

SHEET 4 OF 4

IF IN DOUBT - ASK

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NOT TO SCALE

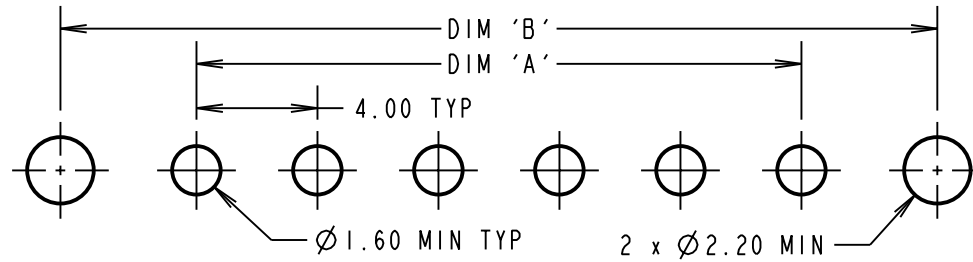
THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

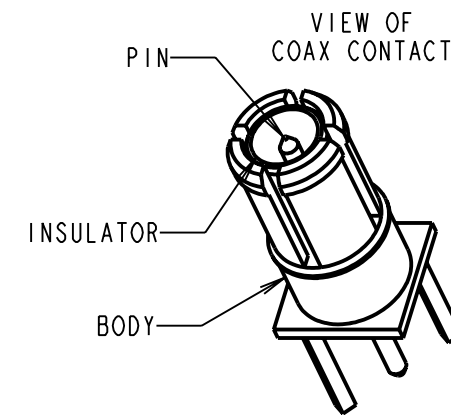
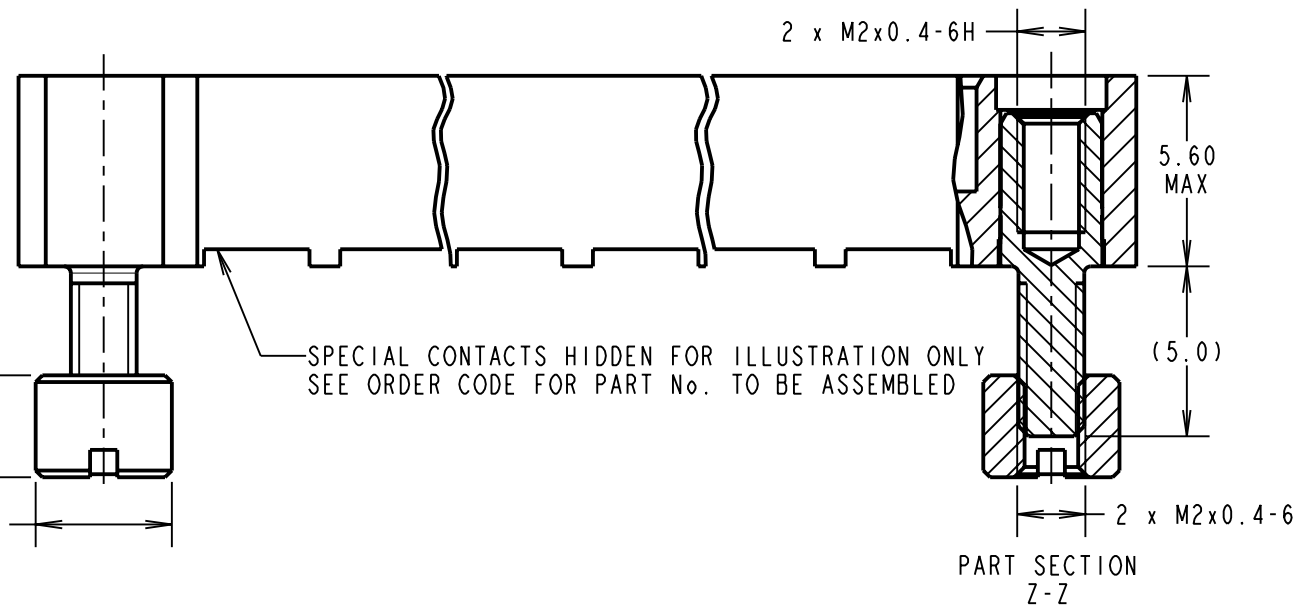
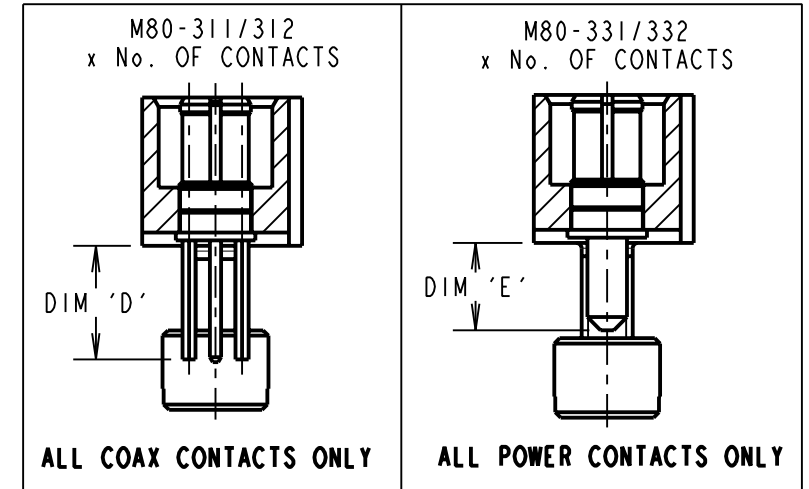
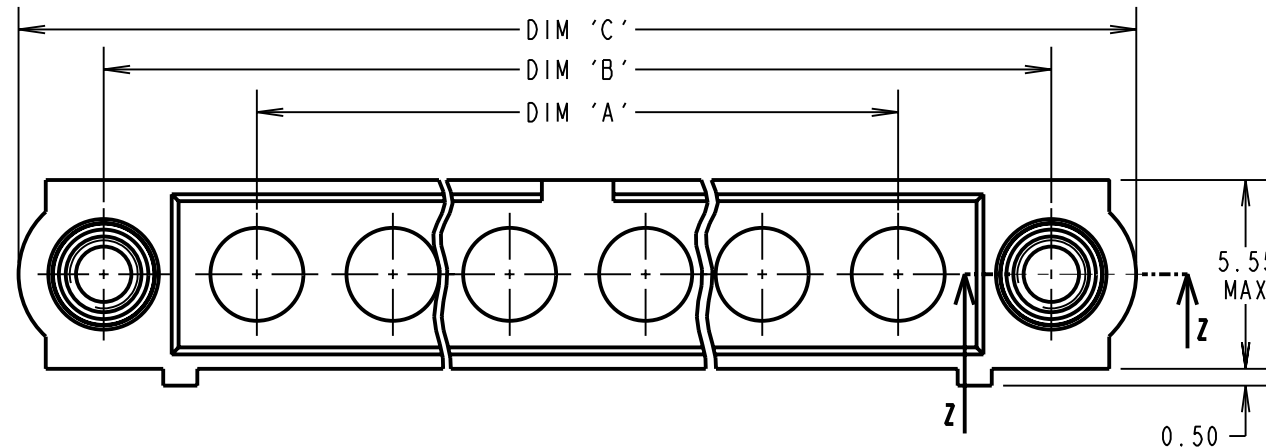
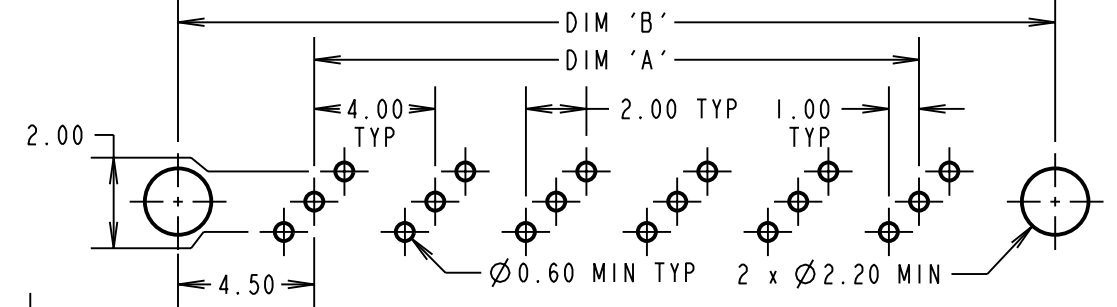
SPECIFICATIONS:

MATERIAL:
 Moulding: GLASS FILLED PPS, UL94V-0, BLACK
 POWER CONTACT: COPPER ALLOY
 COAX CONTACT:
 BODY = COPPER ALLOY
 INNER CONTACT = PHOSPHOR BRONZE
 INSULATOR = PTFE
 BOARD-MOUNT JACKSCREW, NUT: STAINLESS STEEL
FINISH:
 POWER CONTACT: GOLD
 COAX 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
 OPERATING VOLTAGE = 180V AC @ 500mA
 MAXIMUM VOLTAGE = 1000V AC
MECHANICAL:
 DURABILITY = 500 OPERATIONS
POWER CONTACT:
 INSERTION FORCE = 5N MAX
 WITHDRAWAL FORCE = 0.5N MIN
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)

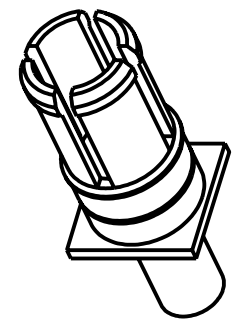
RECOMMENDED PCB LAYOUT FOR ALL POWER ONLY



RECOMMENDED PCB LAYOUT FOR ALL COAX ONLY



VIEW OF POWER 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' | M80-311=3.0mm, M80-312=4.5mm |
| DIM 'E' | M80-331=3.5mm, M80-332=5.0mm |

EXAMPLE 1: CONNECTOR WITH 08 COAX CONTACTS,
 M80-5000000M3-08-312-00-000
 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm
 DIM 'D' = 4.5mm

EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS,
 M80-5000000M3-10-331-00-000
 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm
 DIM 'E' = 3.5mm

ORDER CODE:(PC TAIL CONTACTS)

M80-5000000M3-XX-XXX-00-000

TOTAL No. OF CONTACTS _____
 02 TO 12

SPECIAL CONTACTS

311 = COAX CONTACT 3.0mm PC TAIL M80-311
 312 = COAX CONTACT 4.5mm PC TAIL M80-312
 331 = POWER CONTACT 3.5mm PC TAIL M80-331
 332 = POWER CONTACT 5.0mm PC TAIL M80-332

PC TAIL NOTES:

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

| | | | |
|----------------|------|-------------|--------|
| RA | B | 21.12.09 | ---- |
| NAME | ISS. | DATE | C/NOTE |
| APPROVED: | | R.ADDE | |
| CHECKED: | | M.G.PLESTED | |
| DRAWN: | | R.ADDE | |
| CUSTOMER REF.: | | | |
| ASSEMBLY DRG: | | | |

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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: JACKSCREW DATAMATE MIXED TECHNOLOGY VERTICAL MALE ASSEMBLY
 DRAWING NUMBER: **M80-5000000M3-XX-XXX-00-000**
 SHT 4 OF 4