

Customer Information Sheet

DRAWING No.: M80-5000000M5-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, SCREW: 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:

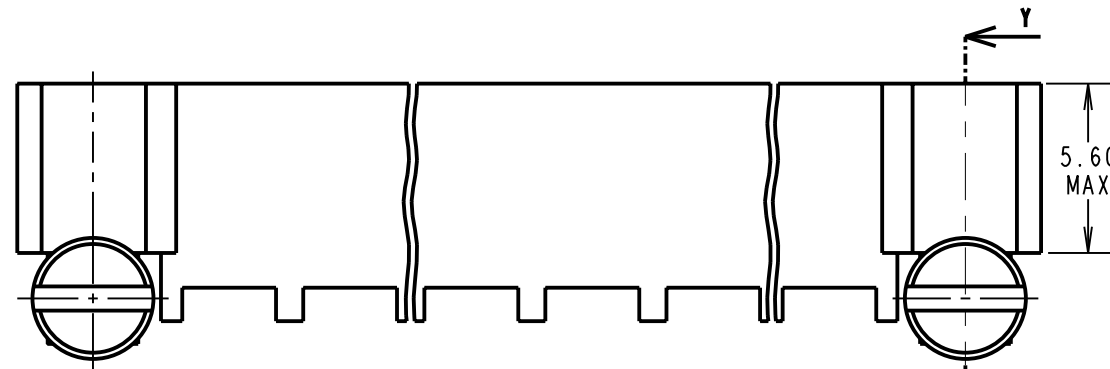
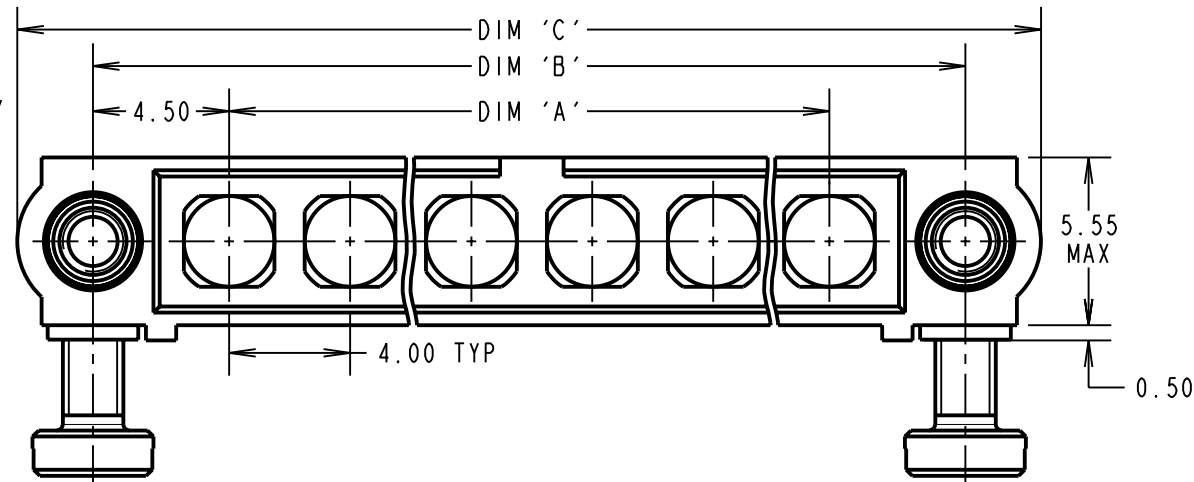
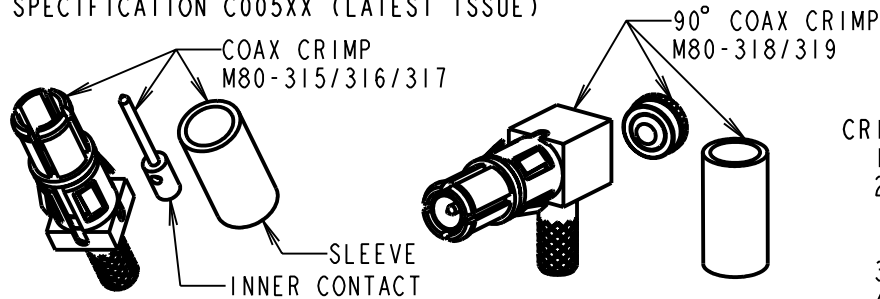
DURABILITY = 500 OPERATIONS
 COAX & POWER CONTACT:
 INSERTION FORCE = 5N MAX
 WITHDRAWAL FORCE = 0.5N MIN

ENVIRONMENTAL:

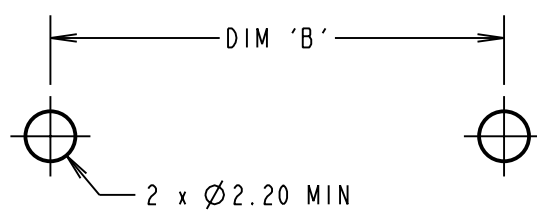
TEMPERATURE RANGE = -55°C TO +125°C

PACKING:

BAG
 FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)

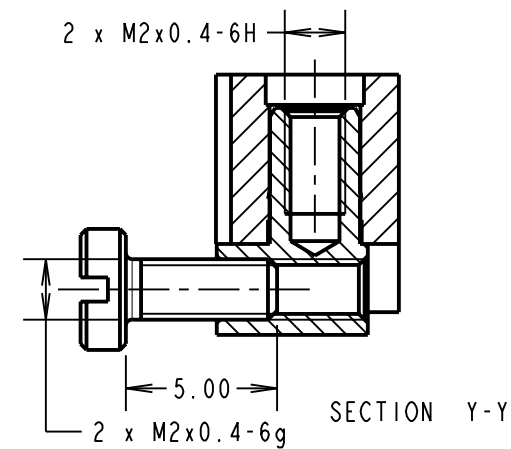


RECOMMENDED PCB LAYOUT



POWER SOLDER/CRIMP
M80-338/339

POWER SOLDER
M80-335/336/337



COAX STRIPPING DIMENSIONS

1.70

1.00

4.00

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.

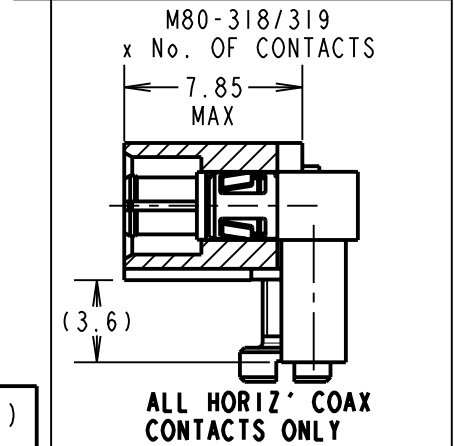
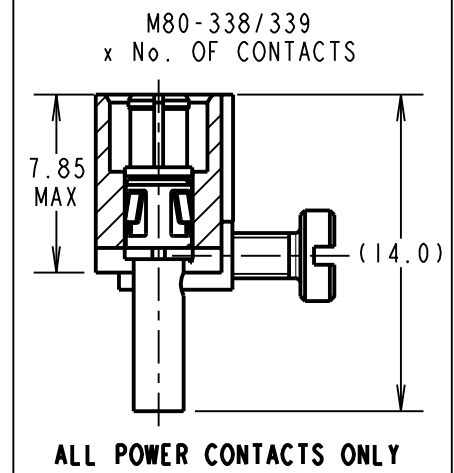
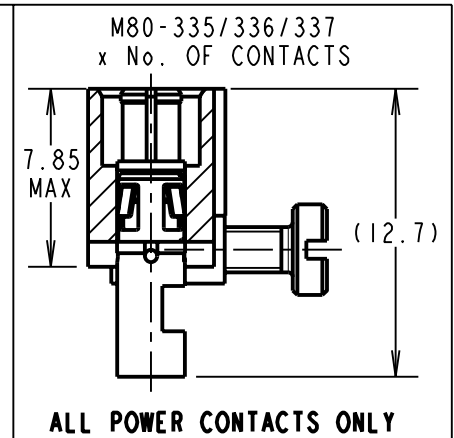
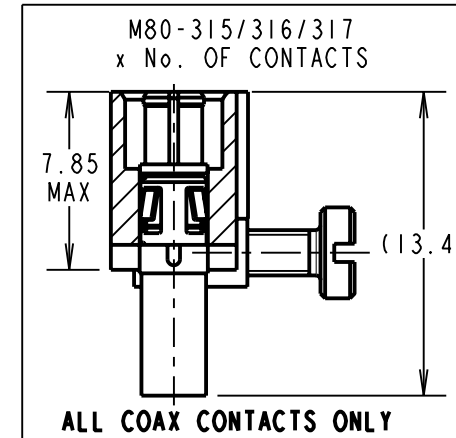
ORDER CODE: (CRIMP/SOLDER CONTACTS)

M80-5000000M5-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 HORIZ' CRIMP M80-318
- 319 = COAX CONTACT 2.70mm HORIZ' 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,
 M80-5000000M5-08-313-00-000
 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm

EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS,
 M80-5000000M5-10-333-00-000
 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm

HARWIN

HARWIN USA
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 FAX: 603 893 5396
 mis@harwin.com

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 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: mm²

TITLE: JACKSCREW DATAMATE
 MIXED TECHNOLOGY
 PC TAIL MALE ASSEMBLY

DRAWING NUMBER:
M80-5000000M5-XX-XXX-00-000

RA	D	19.01.10	10649
NAME	ISS.	DATE	C/NOTE
APPROVED:		R. ADDE	
CHECKED:		M.G. PLESTED	
DRAWN:		S. FLOWER	
CUSTOMER REF.:			
ASSEMBLY DRG:			

SHT
3 OF 4

Customer Information Sheet

DRAWING No.: M80-5000000M5-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 = COPPER ALLOY
 INSULATOR = PTFE
 BOARD-MOUNT JACKSCREW, SCREW: STAINLESS STEEL

FINISH:
 POWER CONTACT: GOLD
 COAX CONTACT: BODY, INNER CONTACT = GOLD

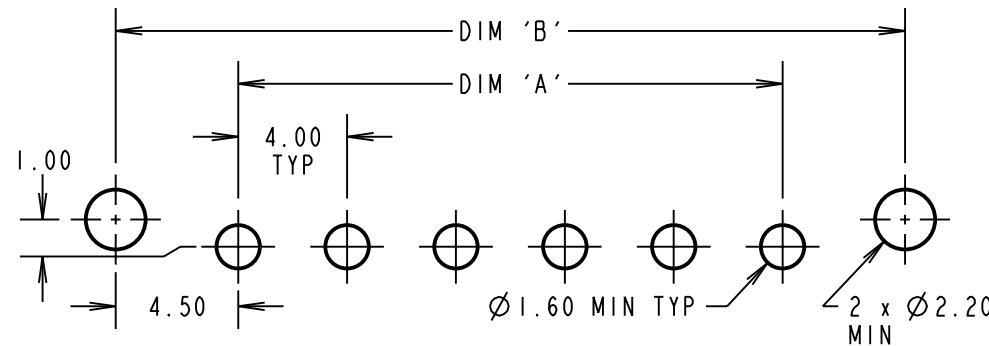
ELECTRICAL:
 WORKING VOLTAGE = 120V AC/DC
 VOLTAGE PROOF = 360V AC/DC
 INSULATION RESISTANCE = 100MΩ MIN
 POWER CONTACT:
 CONTACT RESISTANCE 6 mΩ MAX
 CURRENT RATING = 20A MAX
 COAX CONTACT:
 FREQUENCY RANGE = 6GHz
 IMPEDANCE = 50 Ω
 V.S.W.R = 1.05 + (0.04 x FREQUENCY) GHz MAX
 CONTACT RESISTANCE 6 mΩ 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

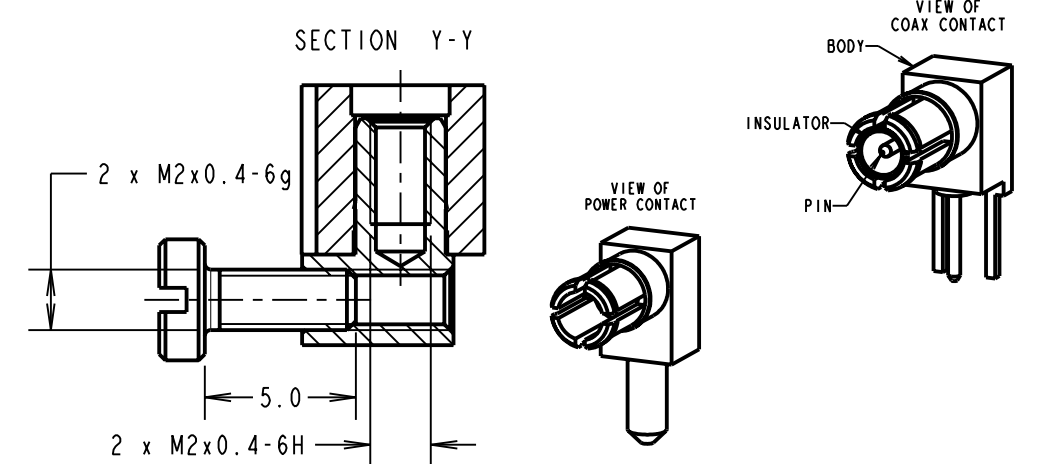
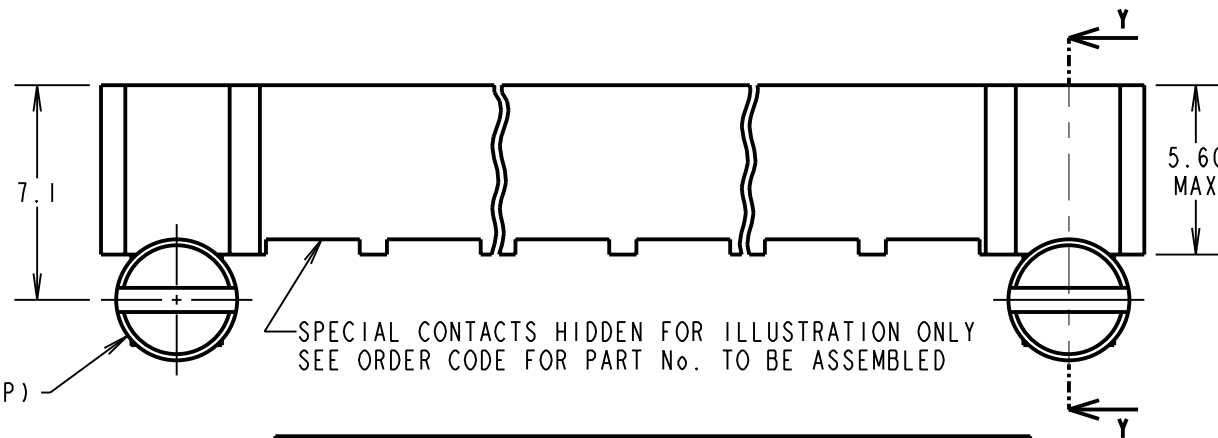
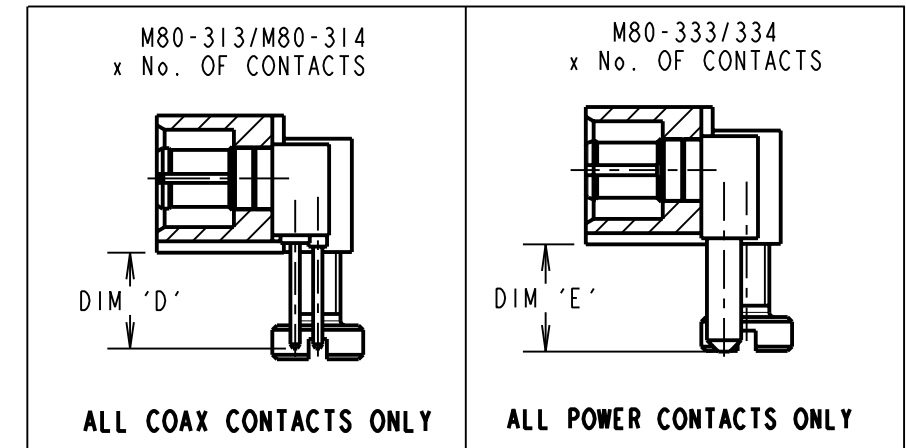
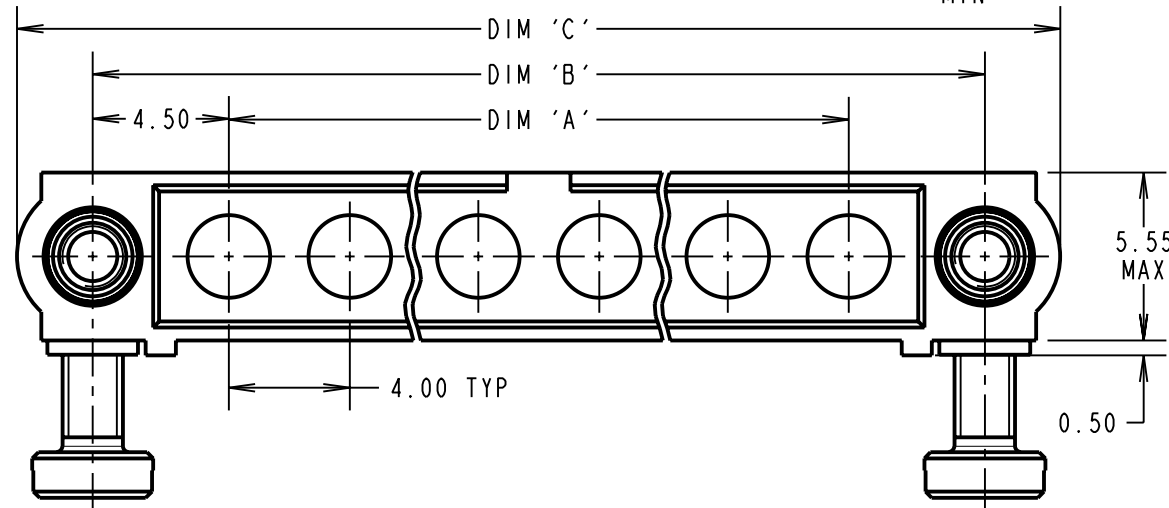
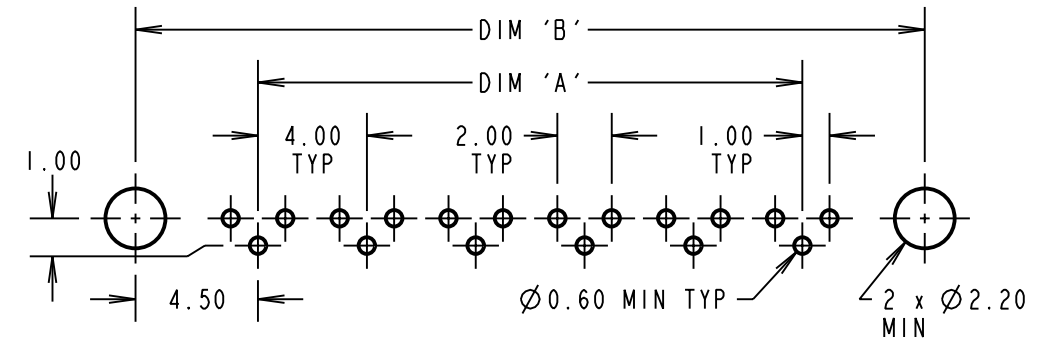
ENVIRONMENTAL:
 TEMPERATURE RANGE = -55°C TO +125°C

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



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'	M80-313 = 3.0mm, M80-314 = 4.5mm
DIM 'E'	M80-333 = 3.5mm, M80-334 = 5.0mm

EXAMPLE 1: CONNECTOR WITH 08 COAX CONTACTS,
 M80-5000000M5-08-313-00-000
 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm
 DIM 'D' = 3.0mm

EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS,
 M80-5000000M5-10-333-00-000
 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm
 DIM 'E' = 3.5mm

ORDER CODE:
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
 331 = POWER CONTACT 3.5mm PC TAIL M80-331
 332 = POWER CONTACT 5.0mm PC TAIL M80-332
 333 = POWER CONTACT 3.5mm PC TAIL M80-333
 334 = POWER CONTACT 5.0mm PC TAIL M80-334

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

RA	D	19.01.10	10649
NAME	ISS.	DATE	C/NOTE
APPROVED:		R.ADDE	
CHECKED:		M.G.PLESTED	
DRAWN:		S.FLOWER	
CUSTOMER REF.:			
ASSEMBLY DRG:			

HARWIN

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 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 PC TAIL MALE ASSEMBLY
 DRAWING NUMBER:
M80-5000000M5-XX-XXX-00-000
 SHT 4 OF 4