

Customer Information Sheet

DRAWING No.: M80-5000000M7-XX-XXX-00-000

SHEET 4 OF 6

IF IN DOUBT - ASK

(C)

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

BOARD MOUNT JACKSCREW, SCREW = STAINLESS STEEL

FINISH:

COAX CONTACT:

BODY, SLEEVE, INNER CONTACT, END PLUG = GOLD

LATCHING COLLAR = NICKEL

ELECTRICAL:

WORKING VOLTAGE = 800V AC/DC

VOLTAGE PROOF = 1200V AC/DC

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:

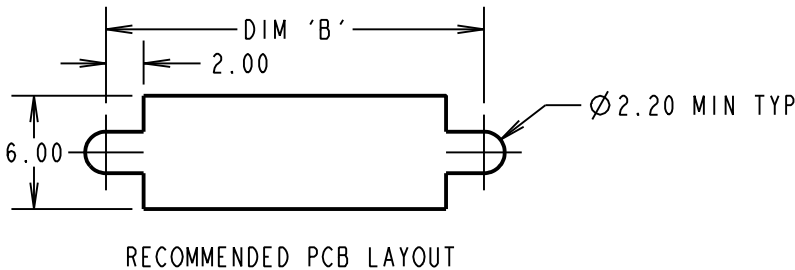
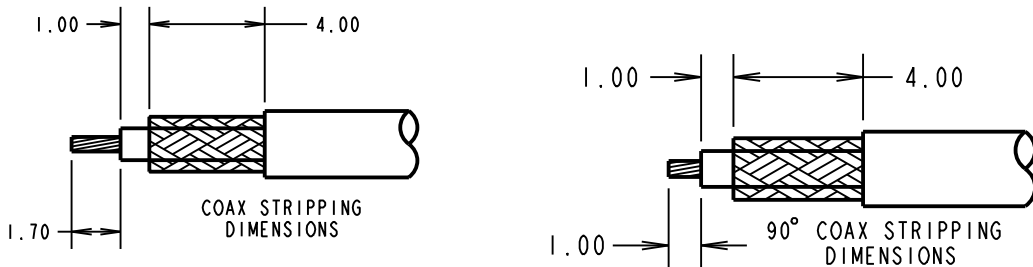
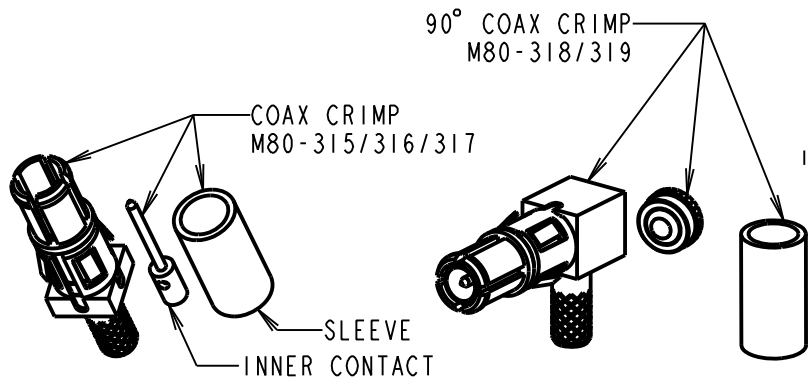
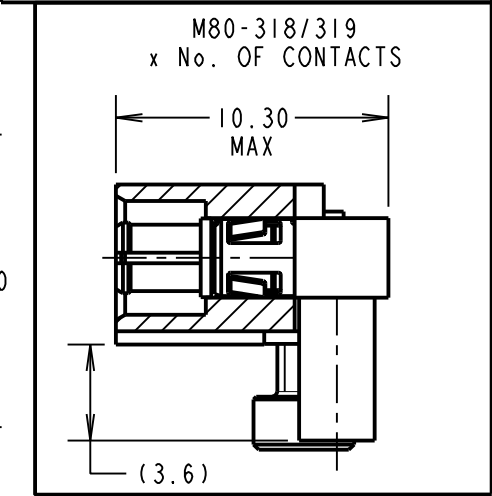
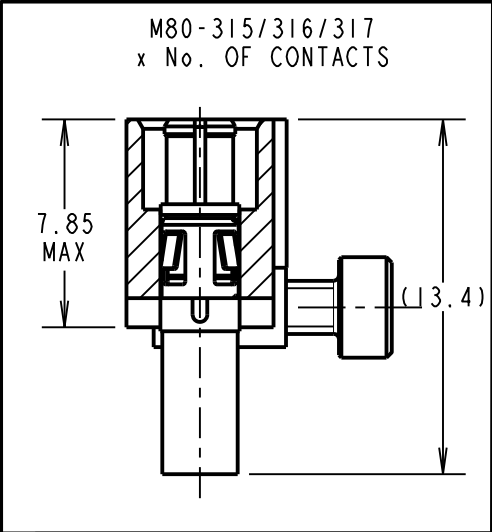
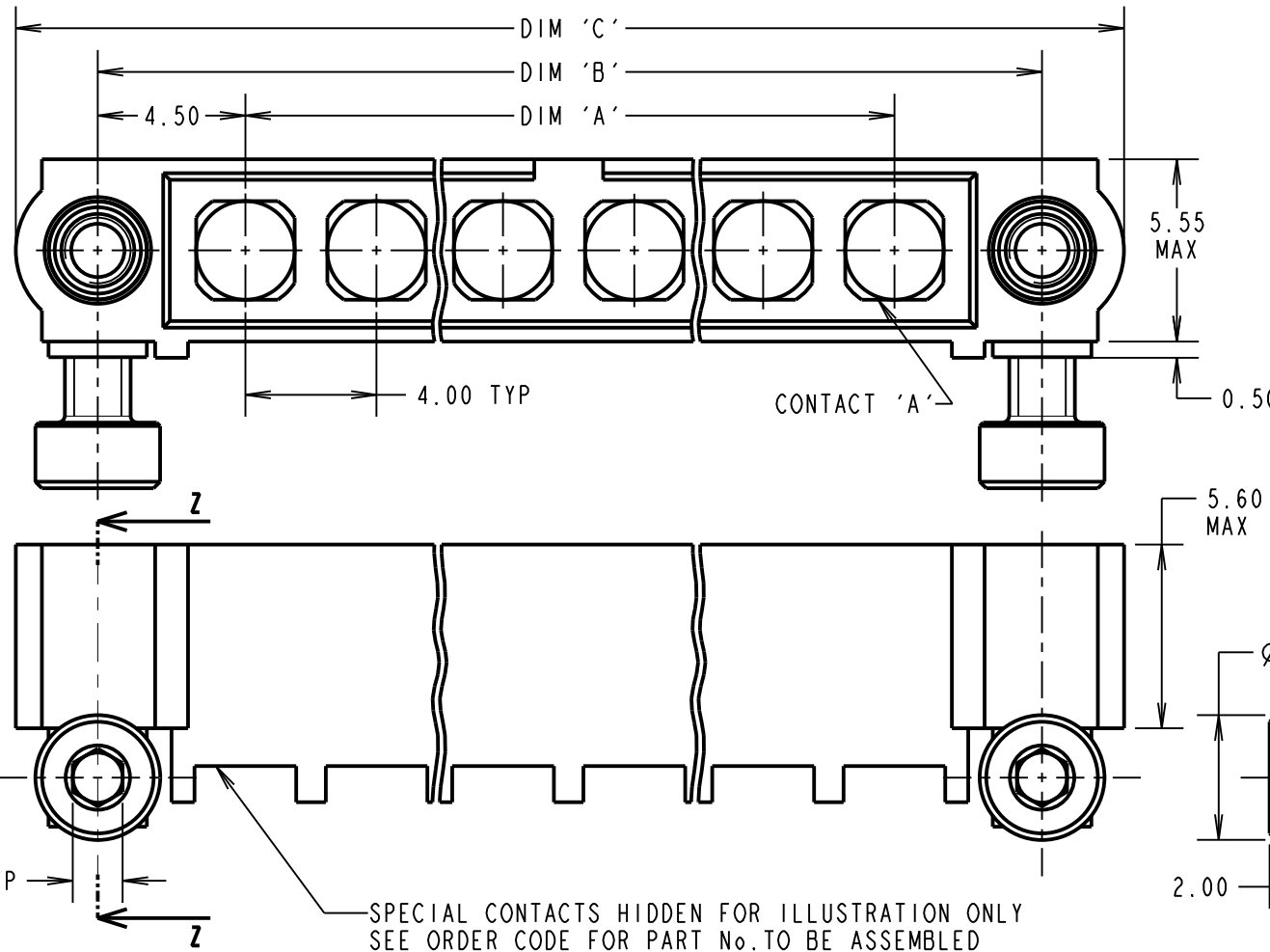
TEMPERATURE RANGE = -55°C TO +125°C

PACKING:

BAG

FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)

COAX CRIMP CONTACTS ONLY



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.
- COAX 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.

ORDER CODE: (COAX CRIMP CONTACTS)

M80-5000000M7-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

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,
M80-5000000M7-08-315-00-000
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 = ±0.10mm
X.XXX = ±0.01mm
ANGLES = ±5°
UNLESS STATED

MATERIAL:

SEE ABOVE

FINISH:

SEE ABOVE

S/AREA:

mm²

TITLE:

DATAMATE MIX-TEK
MALE ASSY WITH
HEX SOCKET BOARDMOUNT J/SCREW

DRAWING NUMBER:

M80-5000000M7-XX-XXX-00-000

SHT

4 OF 6

MSP	3	23.02.15	12566
NAME	ISS.	DATE	C/NOTE
APPROVED:	M.PERREN		
CHECKED:	S.BENNETT		
DRAWN:	S.MCCULLAGH		
CUSTOMER REF.:			
ASSEMBLY DRG:			

Customer Information Sheet

DRAWING No.: M80-5000000M7-XX-XXX-00-000

SHEET 5 OF 6

IF IN DOUBT - ASK

(C)

NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

SPECIFICATIONS:

MATERIAL:

MOULDING: GLASS FILLED PPS, UL94V-0, BLACK

POWER CONTACT:

BODY, SLEEVE, INNER CONTACT, END PLUG = COPPER ALLOY

LATCHING COLLAR = BERYLLIUM COPPER

INSULATOR = PTFE

BOARD MOUNT JACKSCREW, SCREW = STAINLESS STEEL

FINISH:

POWER CONTACT:

BODY, SLEEVE, INNER CONTACT, END PLUG = GOLD

LATCHING COLLAR = NICKEL

ELECTRICAL:

WORKING VOLTAGE = 800V AC/DC

VOLTAGE PROOF = 1200V AC/DC

INSULATION RESISTANCE = 100M Ω MIN

POWER CONTACT:

CONTACT RESISTANCE = 6m Ω 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

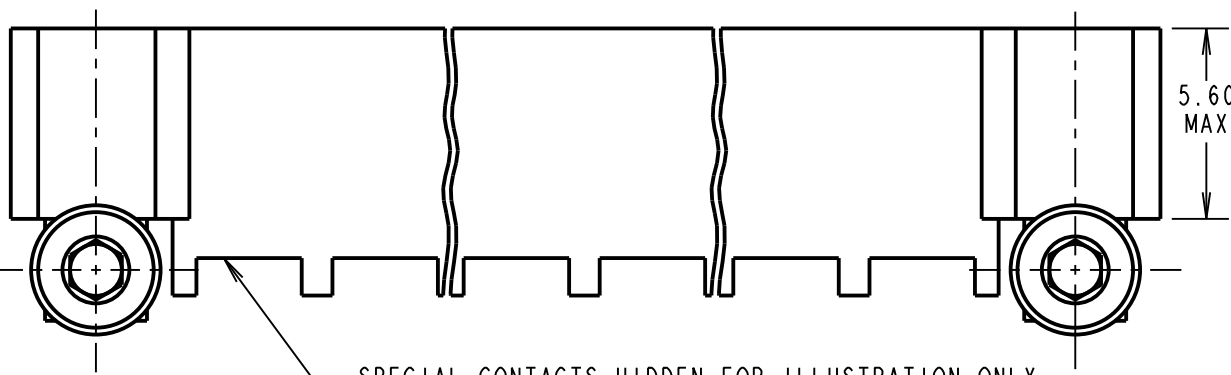
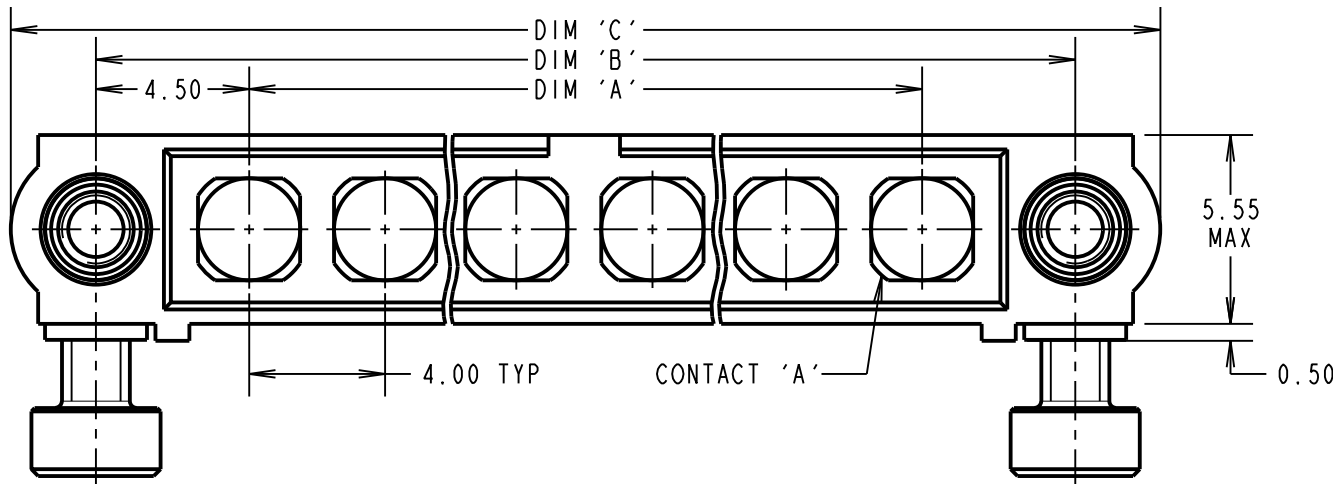
PACKING:

BAG

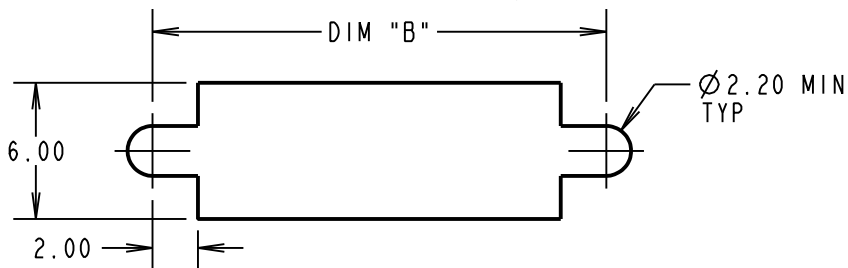
FOR COMPLETE SPECIFICATION SEE COMPONENT

SPECIFICATION C005XX (LATEST ISSUE)

POWER CRIMP & SOLDER CONTACTS ONLY



RECOMMENDED PCB LAYOUT

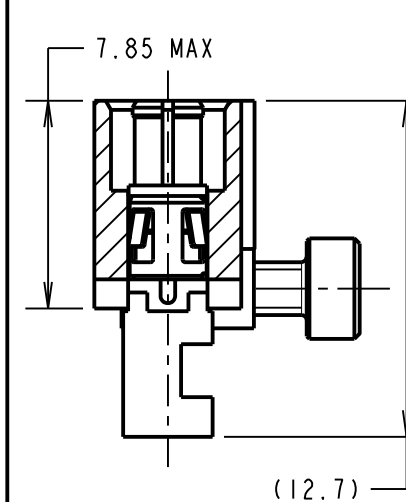


5.00 MIN

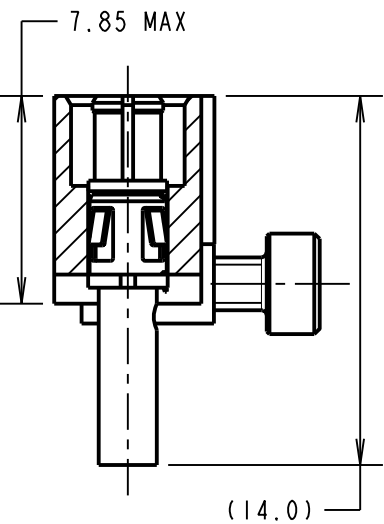


POWER CABLE
STRIPPING DIMENSIONS

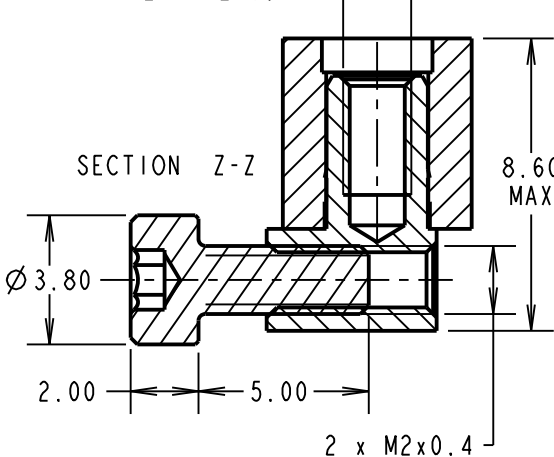
M80-335/336/337
x No. OF CONTACTS



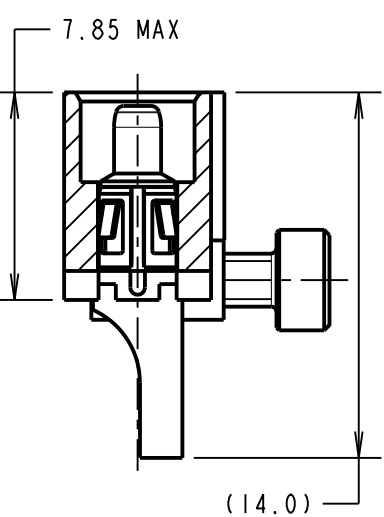
M80-338/339
x No. OF CONTACTS



2 x M2x0.4



M80-PM5
x No. OF CONTACTS



ORDER CODE: (POWER CRIMP/SOLDER CONTACTS)
M80-5000000M7-XX-XXX-00-000

TOTAL No. OF CONTACTS
02 TO 12

SPECIAL CONTACTS

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

CRIMP/SOLDER NOTES:

- CONNECTORS ARE SUPPLIED WITH CONTACTS LOOSE.
- FOR EXTRA POWER CONTACTS USE PART NUMBERS M80-335/336/337/338/339/PM5.
- POWER CONTACT EXTRACTION TOOL = Z80-290.
- RECOMMENDED HAND CRIMP TOOL FOR CONTACTS 338/339 = Z80-294 AND POSITIONER Z80-295.
- 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 2: CONNECTOR WITH 10 POWER CONTACTS, M80-5000000M7-10-335-00-000 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm	

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TOLERANCES

X. = ± 1 mm
X.X = ± 0.50 mm
X.XX = ± 0.10 mm
X.XXX = ± 0.01 mm
ANGLES = $\pm 5^\circ$
UNLESS STATED

MATERIAL:

SEE ABOVE

FINISH:

SEE ABOVE

S/AREA:

mm²

TITLE:

DATAMATE MIX-TEK
MALE ASSY WITH
HEX SOCKET BOARDMOUNT J/SCREW

DRAWING NUMBER:

M80-5000000M7-XX-XXX-00-000

SHT

5

OF 6

MSP	3	23.02.15	12566
NAME	ISS.	DATE	C/NOT
APPROVED:		M.PERREN	
CHECKED:		S.BENNETT	
DRAWN:		S.MCCULLAGH	
CUSTOMER REF.:			
ASSEMBLY DRG:			

Customer Information Sheet

DRAWING No.: M80-5000000M7-XX-XXX-00-000

SHEET 6 OF 6

IF IN DOUBT - ASK

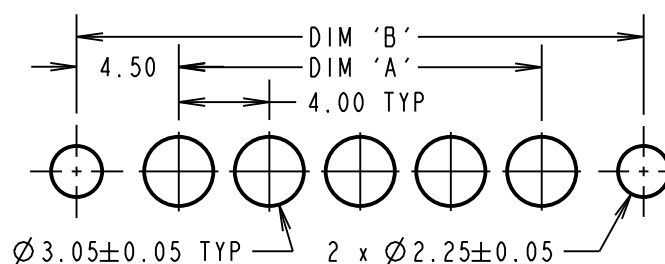
(C)

NOT TO SCALE

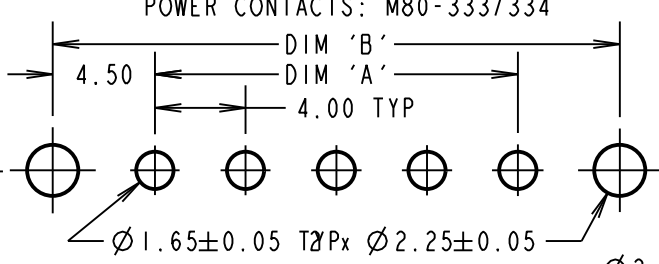
THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

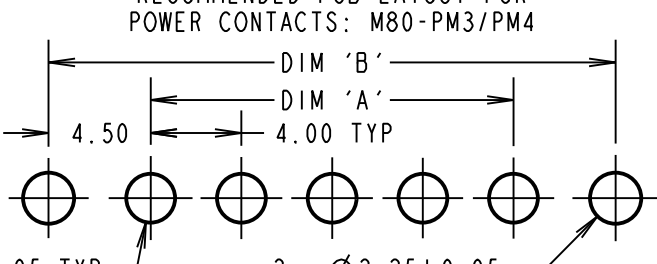
RECOMMENDED PCB LAYOUT FOR POWER SMT



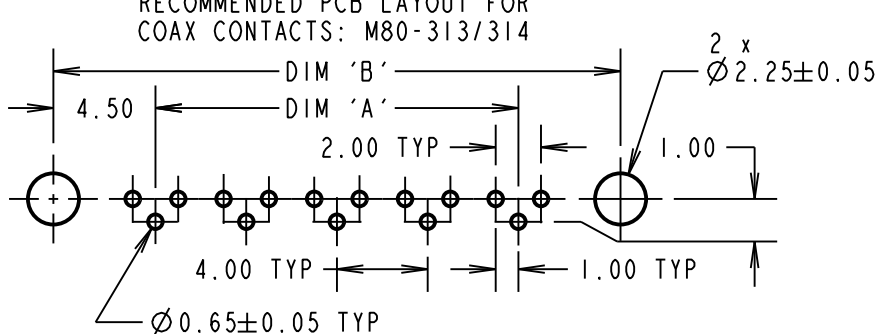
RECOMMENDED PCB LAYOUT FOR POWER CONTACTS: M80-333/334



RECOMMENDED PCB LAYOUT FOR POWER CONTACTS: M80-PM3/PM4



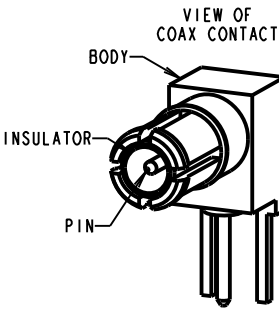
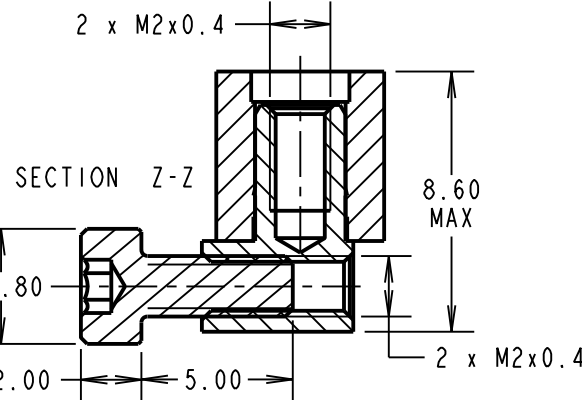
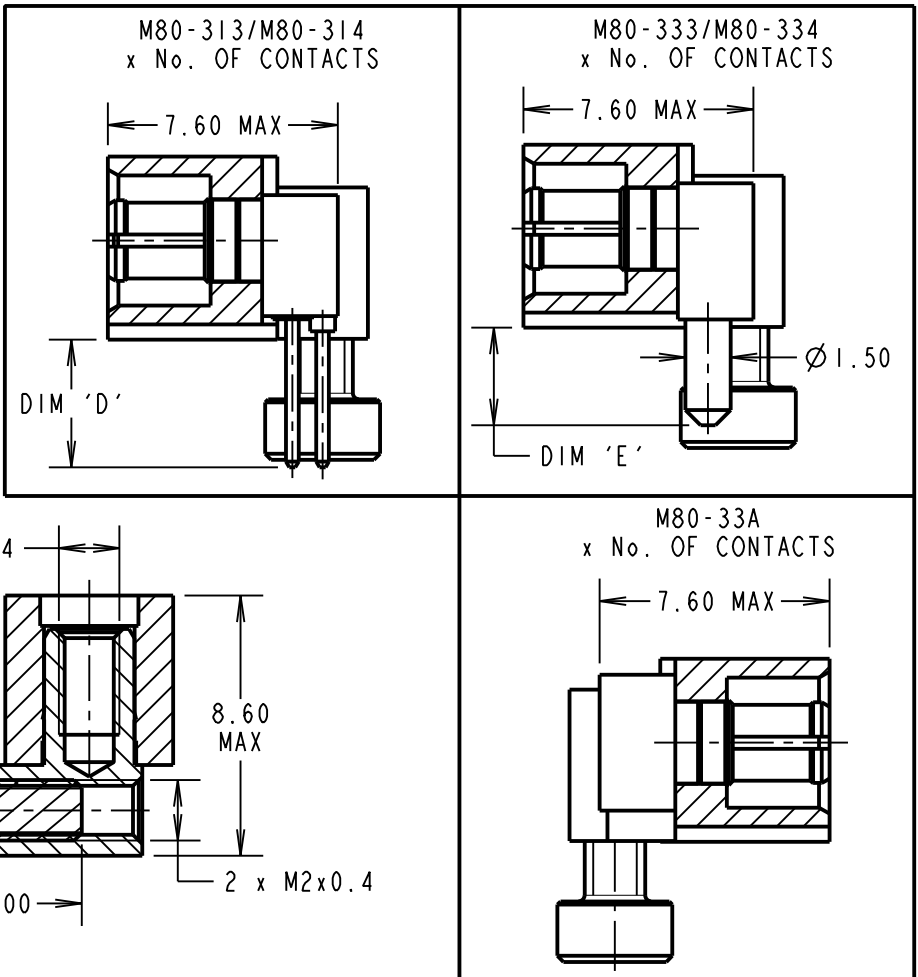
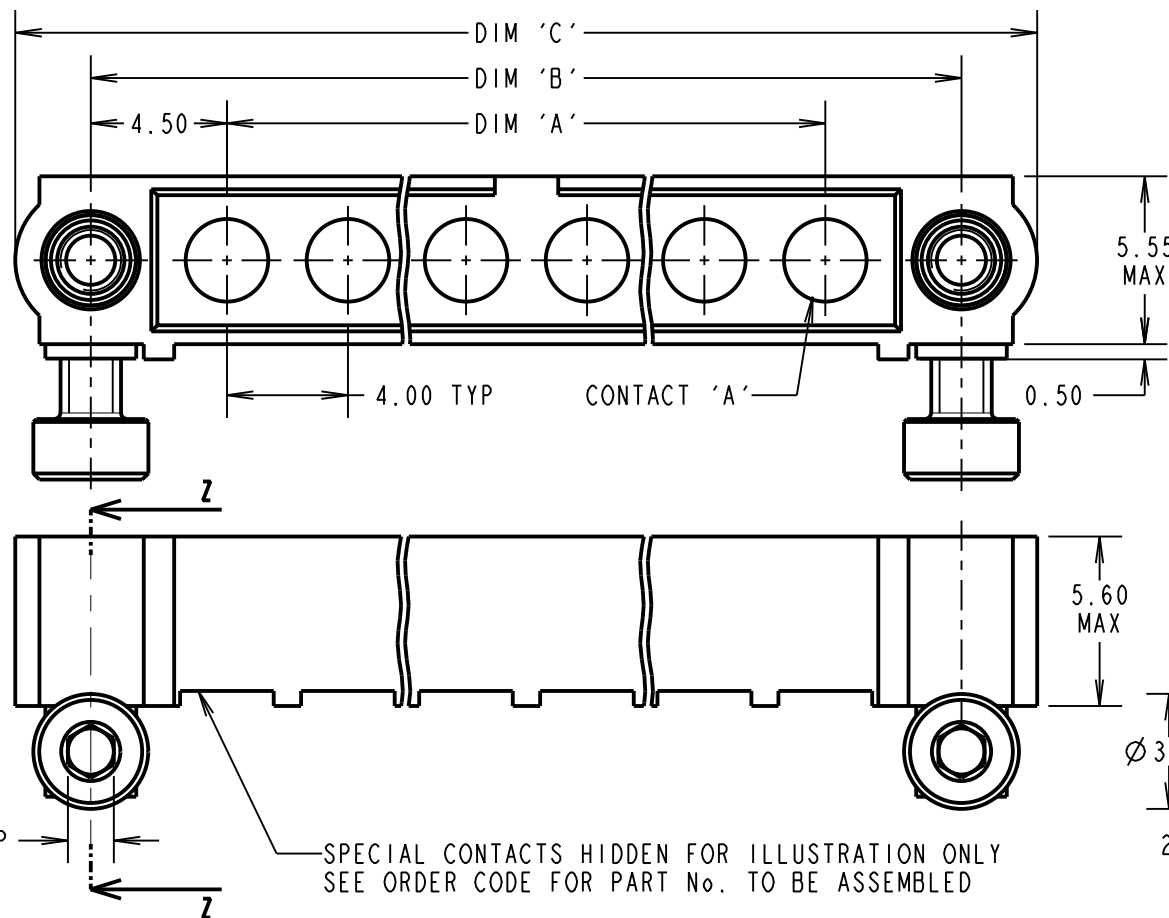
RECOMMENDED PCB LAYOUT FOR COAX CONTACTS: M80-313/314



HORIZONTAL PC TAIL & SMT CONTACTS ONLY

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 = 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 +125°C
PACKING:
TUBE
FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)



ORDER CODE: (PC TAIL CONTACTS ONLY)
M80-5000000M7-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 HORZ' PC TAIL M80-333
334 = 20A POWER CONTACT 5.0mm HORZ' PC TAIL M80-334
PM3 = 40A POWER CONTACT 3.5mm HORZ' PC TAIL M80-PM3
PM4 = 40A POWER CONTACT 5.0mm HORZ' PC TAIL M80-PM4
33A = POWER CONTACT HORZ' SMT M80-33A

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TOLERANCES
X. = ±1mm
X.X = ±0.50mm
X.XX = ±0.10mm
X.XXX = ±0.01mm
ANGLES = ±5°
UNLESS STATED

MATERIAL:
SEE ABOVE
FINISH: SEE ABOVE
S/AREA: mm²

TITLE: DATAMATE MIX-TEK
MALE ASSY WITH
HEX SOCKET BOARDMOUNT J/SCREW

DRAWING NUMBER: M80-5000000M7-XX-XXX-00-000
SHT 6 OF 6

MSP	3	23.02.15	12566
NAME	ISS.	DATE	C/NOTE
APPROVED:		M.PERREN	
CHECKED:		S.BENNETT	
DRAWN:		S.MCCULLAGH	
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 + 10.00
DIM 'D'	M80-313 = 3.0mm, M80-314 = 4.5mm
DIM 'E'	M80-333 = 3.5mm, M80-334 = 5.0mm
DIM 'F'	M80-PM3 = 3.5mm, M80-PM4 = 5.0mm

EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS,
M80-5000000M7-10-333-00-000
DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm
DIM 'E' = 3.5mm