

Customer Information Sheet

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

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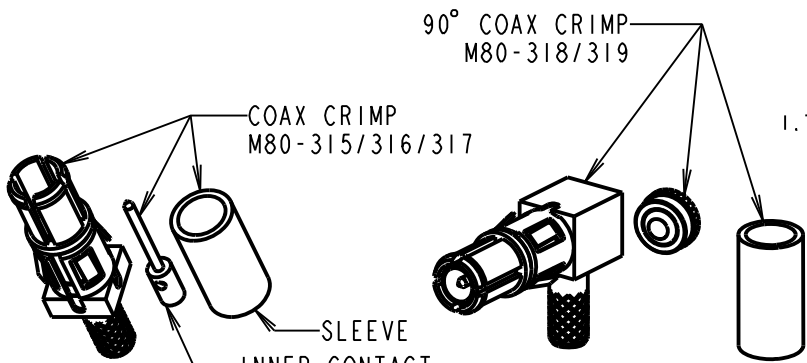
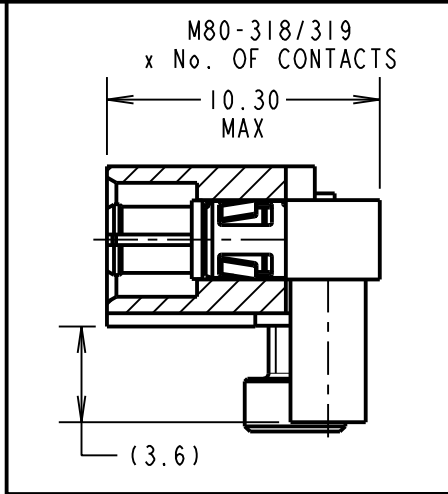
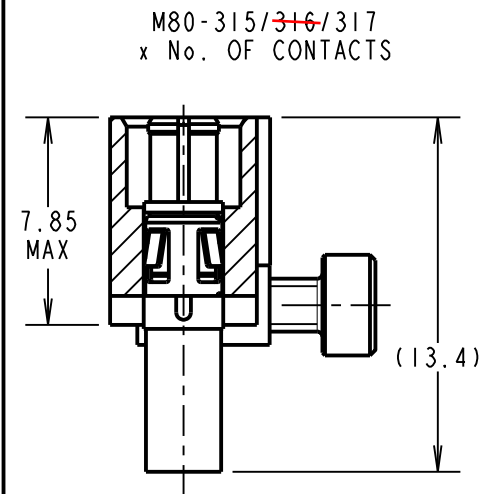
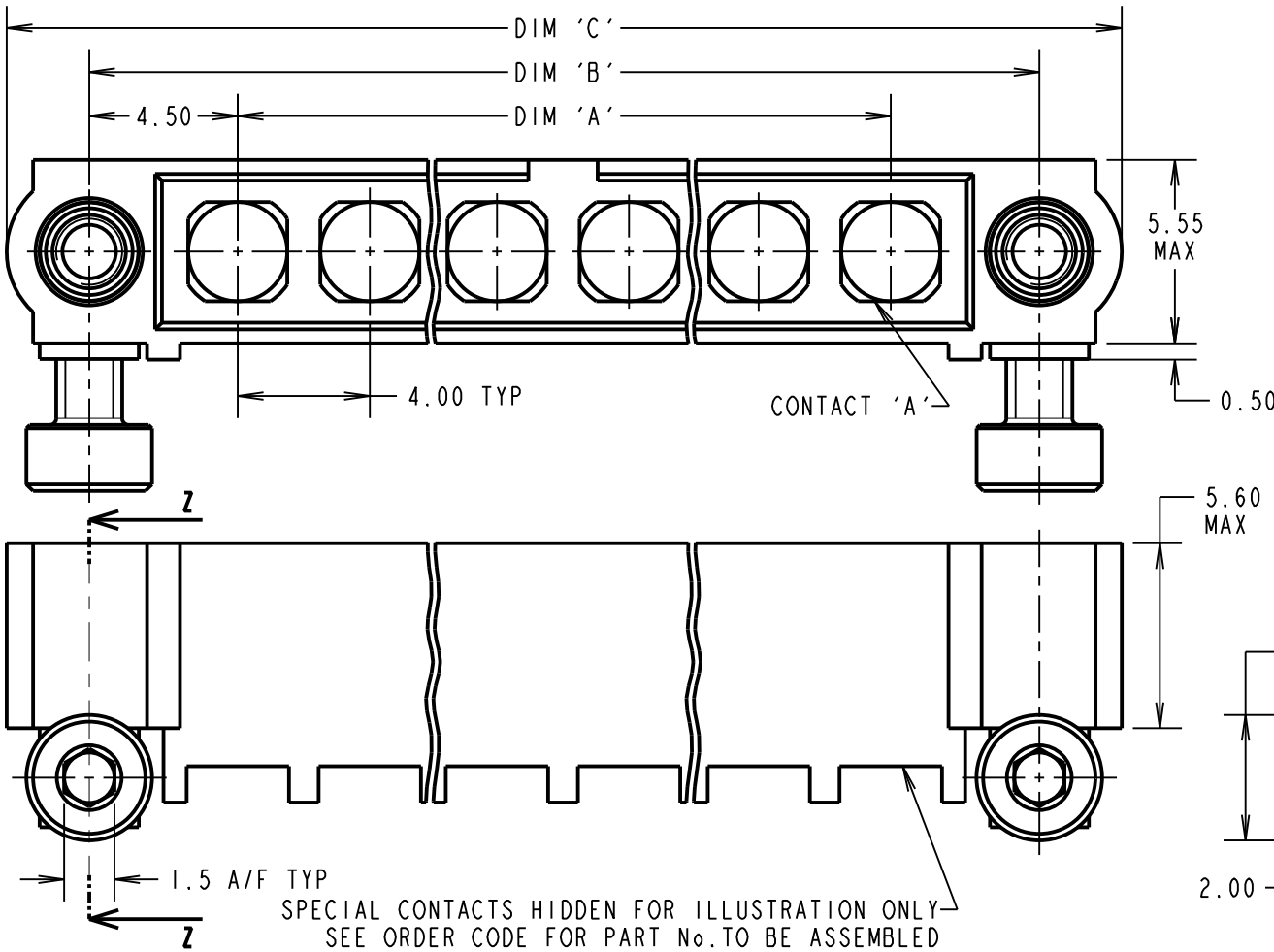
THIRD ANGLE PROJECTION

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:
COAX CONTACT:
FREQUENCY RANGE = 6GHz
IMPEDANCE = 50Ω
V.S.W.R = $1.05 + (0.04 \times \text{FREQUENCY}) \text{ GHz MAX}$
CONTACT RESISTANCE = $6m\Omega \text{ MAX}$
INSULATION RESISTANCE = $10^6 M\Omega @ 250V \text{ AC}$
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



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 1: CONNECTOR WITH 08 COAX CONTACTS,
M80-5000000M7-08-315-00-000
DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.0mm

- CRIMP/SOLDER NOTES:
- CONNECTORS ARE SUPPLIED WITH CONTACTS AND SCREWS 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

MGP	6	09.12.19	21540
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: MR			
DRAWN: S.MCCULLAGH			
CUSTOMER REF.:			
ASSEMBLY DRG:			

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technical@harwin.com

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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
HEX SOCKET BOARDMOUNT J/SCREW
DRAWING NUMBER: **M80-5000000M7-XX-XXX-00-000**
SHT 4 OF 6

Customer Information Sheet

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THIRD ANGLE PROJECTION

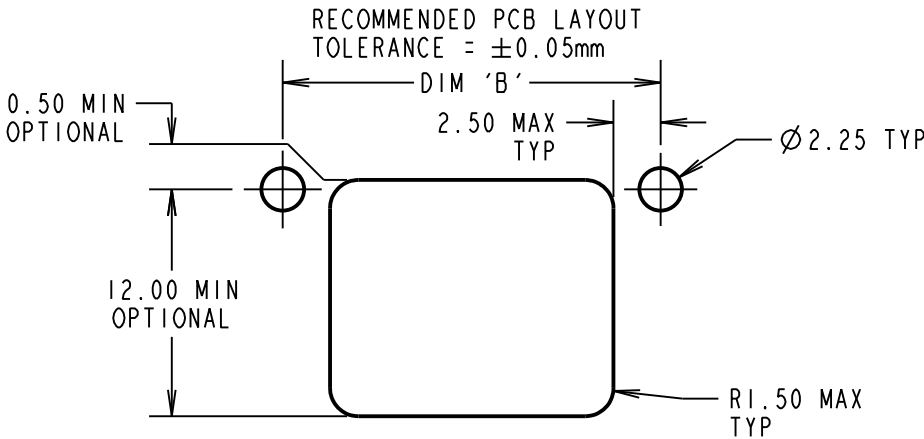
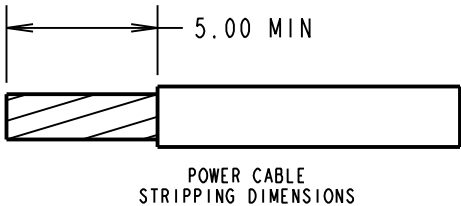
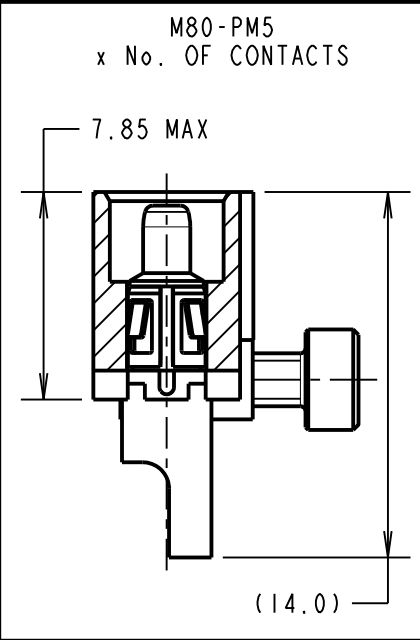
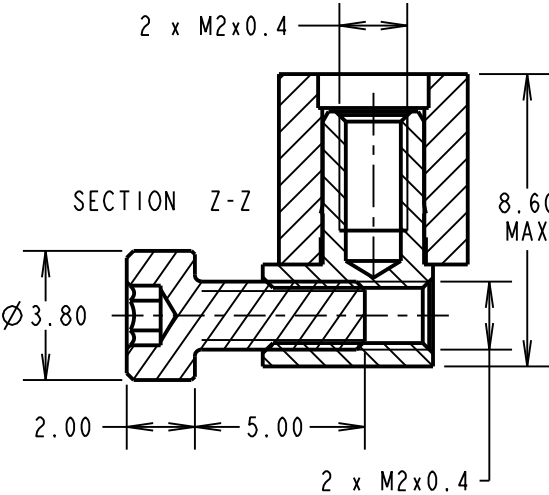
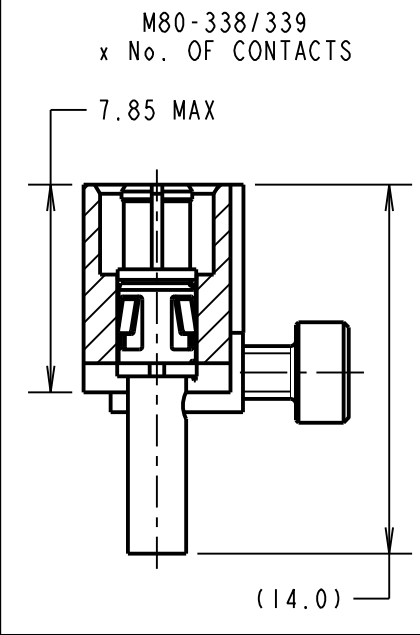
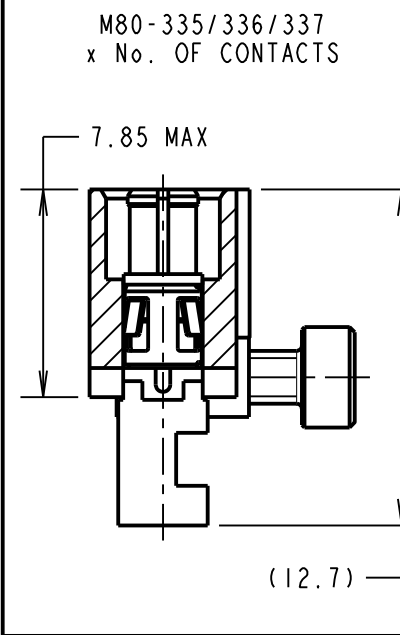
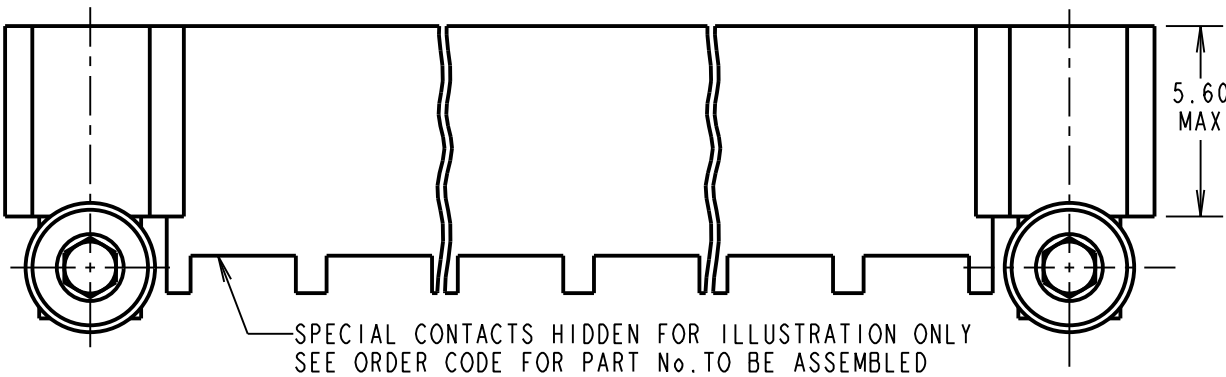
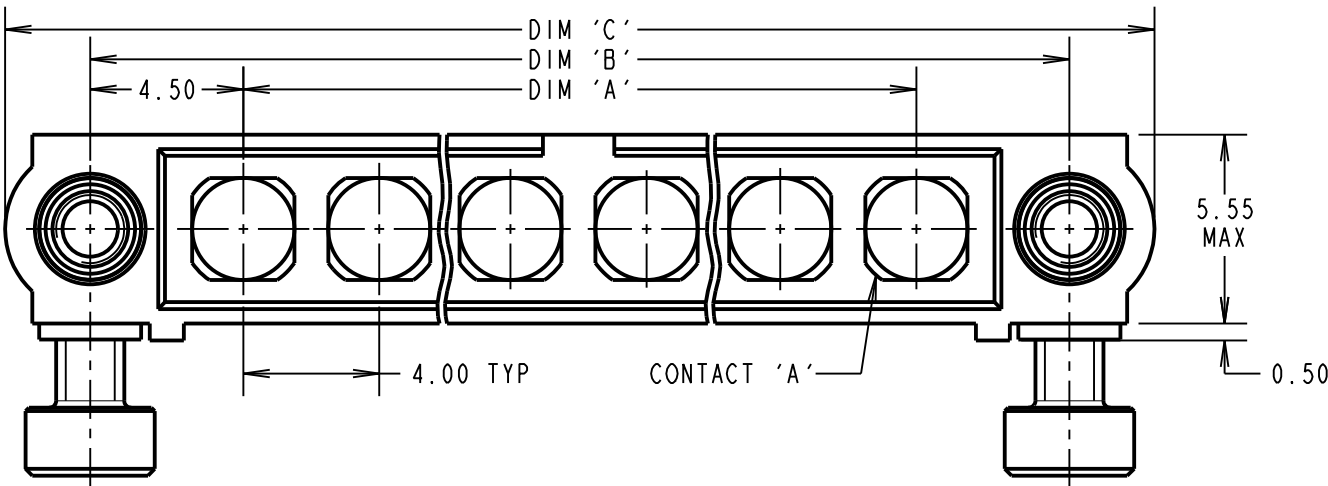
ALL DIMENSIONS IN mm

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



- CRIMP/SOLDER NOTES:**
- CONNECTORS ARE SUPPLIED WITH CONTACTS AND SCREWS 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.

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

MGP	6	09.12.19	21540
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: MR			
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 + 10.0

EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS,
M80-5000000M7-10-335-00-000
DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.0mm

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TOLERANCES
X. = ± 1 mm
X.X = ± 0.50 mm
X.XX = ± 0.20 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

Customer Information Sheet

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

IF IN DOUBT - ASK

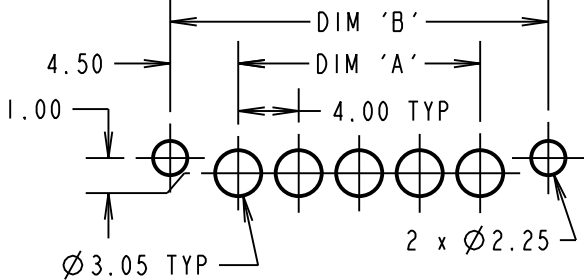
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NOT TO SCALE

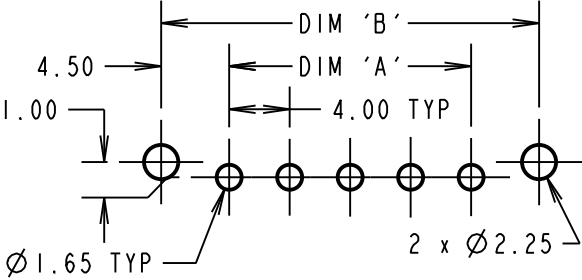
THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

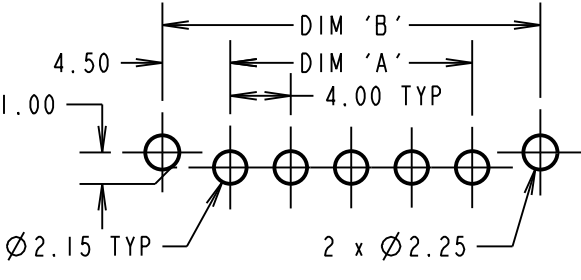
RECOMMENDED PCB LAYOUT FOR
SMT CONTACT: M80-33A
TOLERANCE = $\pm 0.05\text{mm}$



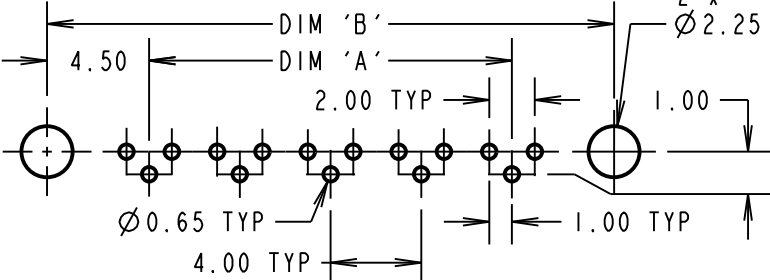
RECOMMENDED PCB LAYOUT FOR
POWER CONTACTS: M80-333/334
TOLERANCE = $\pm 0.05\text{mm}$



RECOMMENDED PCB LAYOUT FOR
POWER CONTACTS: M80-PM3/PM4
TOLERANCE = $\pm 0.05\text{mm}$



RECOMMENDED PCB LAYOUT FOR
COAX CONTACTS: M80-313/314
TOLERANCE = $\pm 0.05\text{mm}$



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:
POWER CONTACT:
WORKING VOLTAGE = 800V AC/DC
VOLTAGE PROOF = 1200V AC/DC
INSULATION RESISTANCE = $100\text{M}\Omega$ MIN
CONTACT RESISTANCE = $6\text{m}\Omega$ 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 = $1.05 + (0.04 \times \text{FREQUENCY})$ GHz MAX
CONTACT RESISTANCE = $6\text{m}\Omega$ MAX

INSULATION RESISTANCE = $10^6\text{M}\Omega$ @250V AC
OPERATING VOLTAGE = 180V AC @ 500mA
MAXIMUM VOLTAGE = 1000V AC

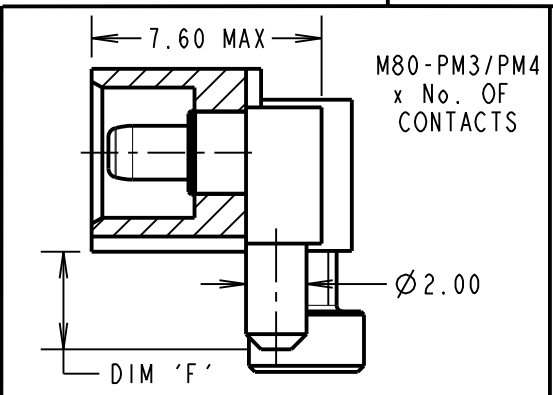
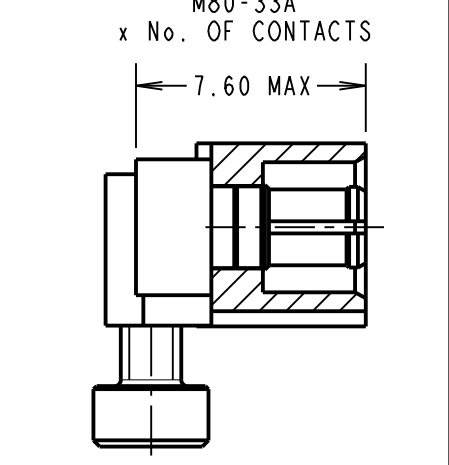
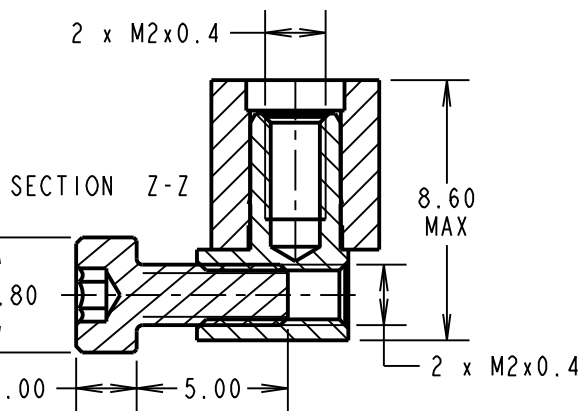
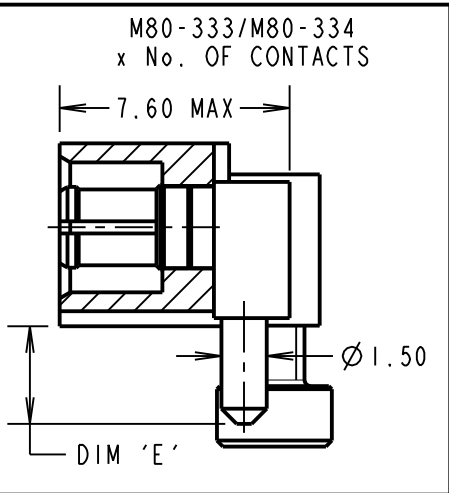
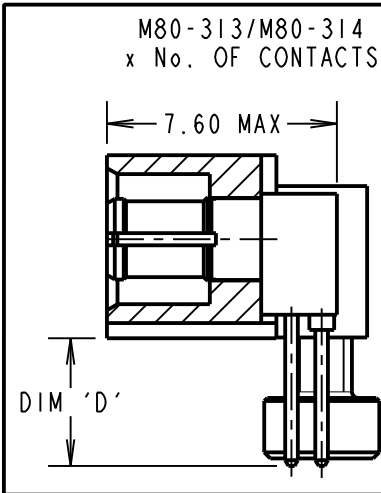
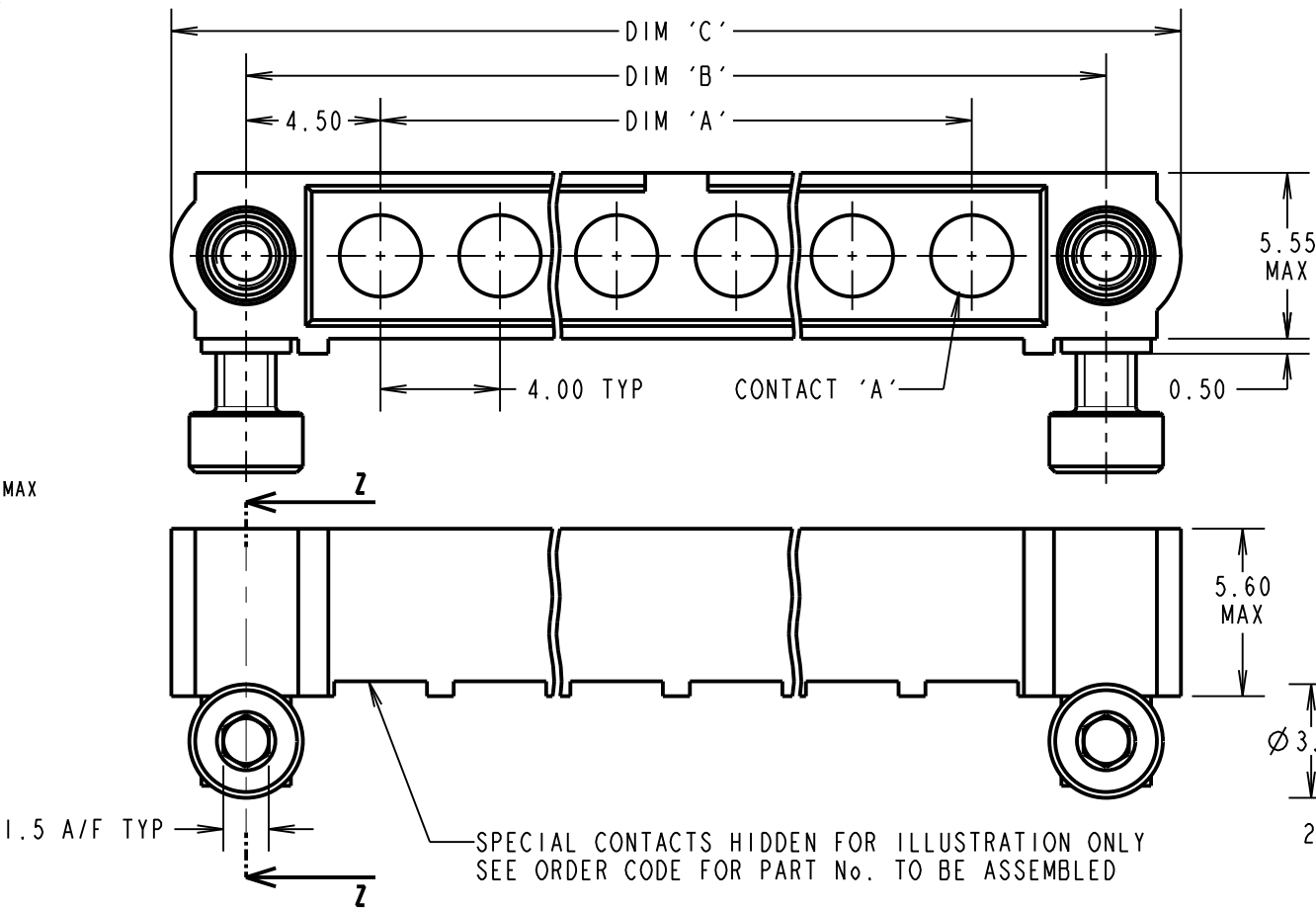
MECHANICAL:
DURABILITY = 500 OPERATIONS
POWER CONTACT:
INSERTION FORCE:
M80-333/334/33A = 8N MAX
M80-PM3/PM4 = 15N MAX
WITHDRAWAL FORCE = 0.5N MIN

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)

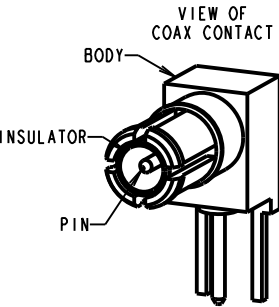
HORIZONTAL PC TAIL & SMT CONTACTS ONLY



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. = $\pm 1\text{mm}$
X.X = $\pm 0.50\text{mm}$
X.XX = $\pm 0.20\text{mm}$
X.XXX = $\pm 0.01\text{mm}$
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

MGP	6	09.12.19	21540
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: MR			
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 + 10.0
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' = 50.0mm
DIM 'E' = 3.5mm

Mouser Electronics

Authorized Distributor

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[M80-5000000M7-02-334-00-000](#) [M80-5000000M7-08-334-00-000](#) [M80-5000000M7-12-334-00-000](#) [M80-5000000M7-02-333-00-000](#) [M80-5000000M7-04-334-00-000](#) [M80-5000000M7-04-333-00-000](#) [M80-5000000M7-06-334-00-000](#)
[M80-5000000M7-08-PM4-00-000](#) [M80-5000000M7-06-313-00-000](#)