

Customer Information Sheet

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

IF IN DOUBT - ASK

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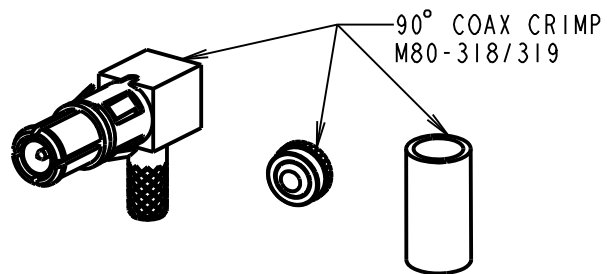
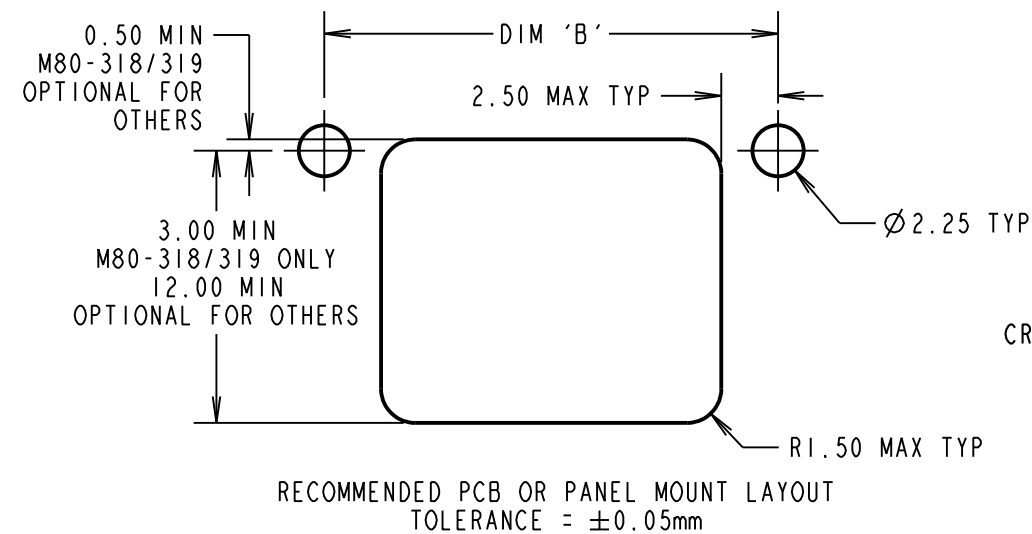
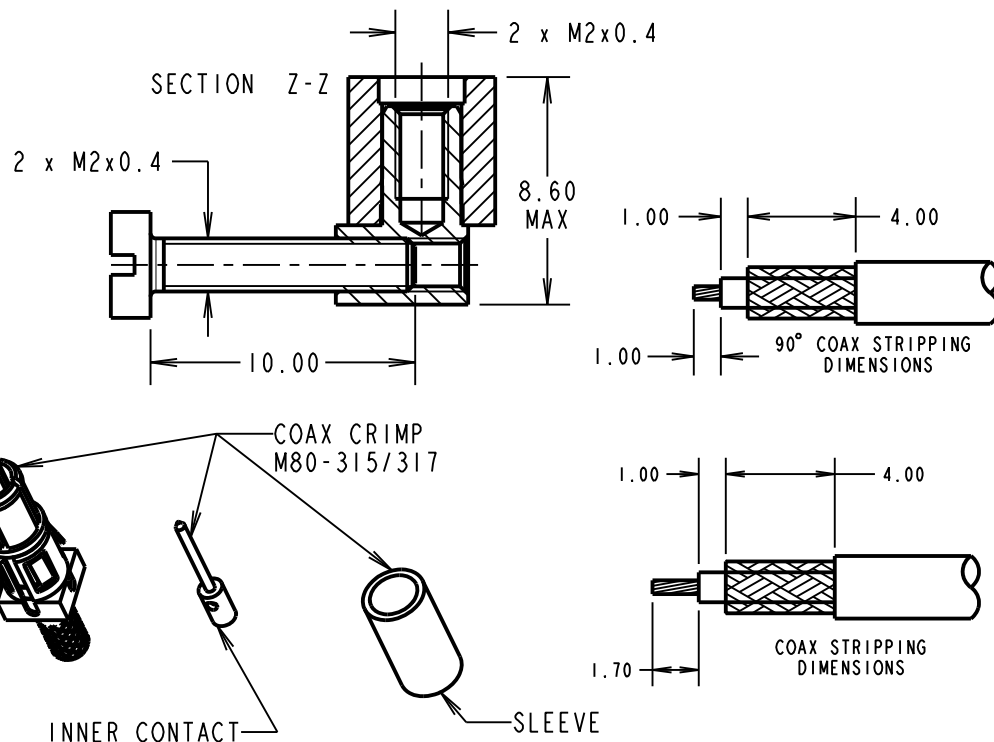
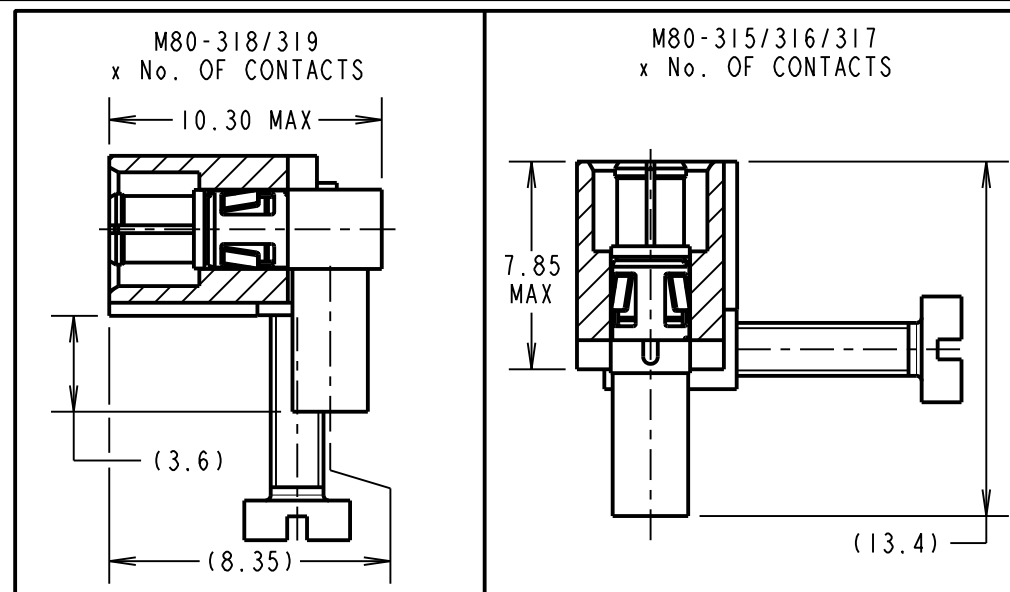
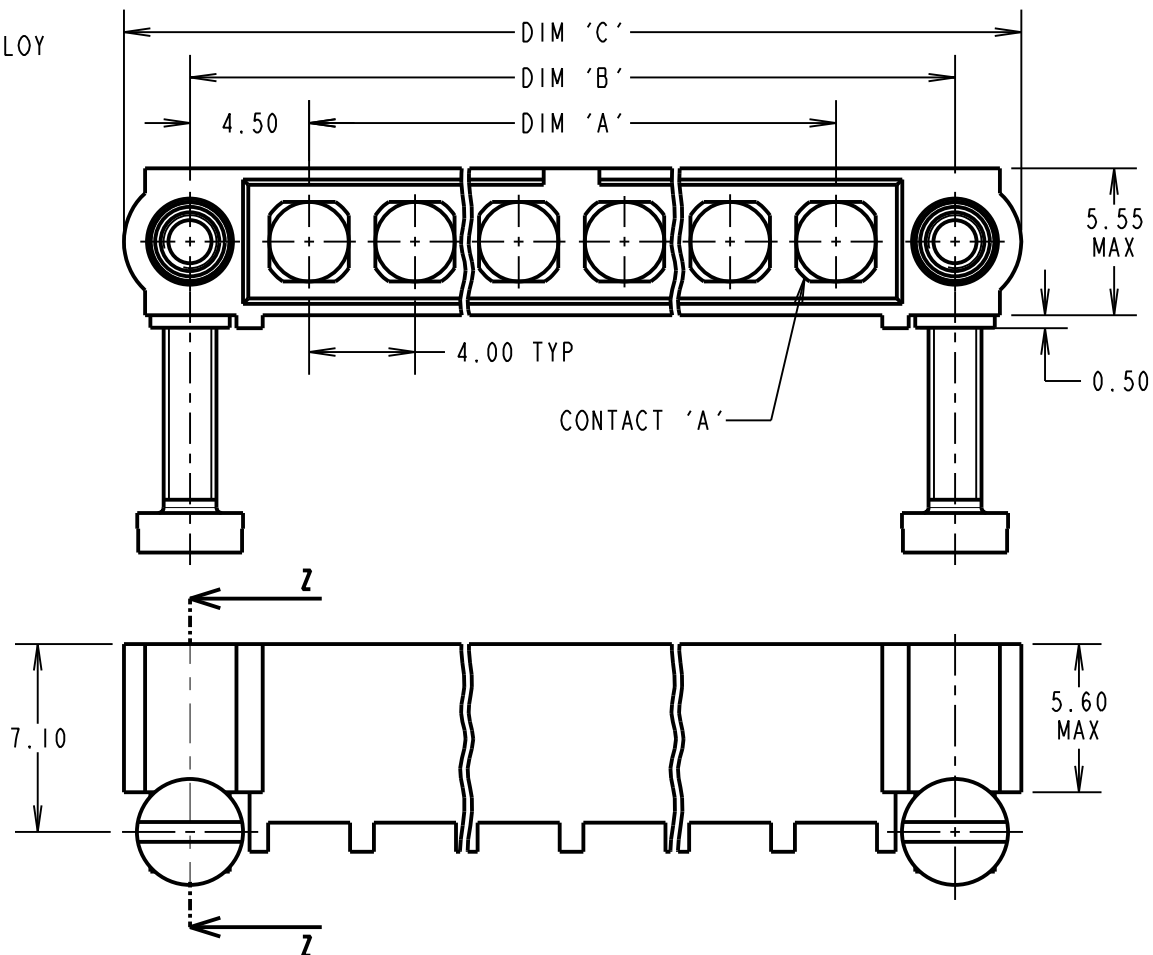
THIRD ANGLE PROJECTION

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:
 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 = 20N 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 M80-315/317/318/319.
 - 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)
M80-500000MN-XX-XXX-00-000
 TOTAL No. OF CONTACTS _____
 02 TO 12
 SPECIAL CONTACTS
 315 = COAX CONTACT 2.00mm CRIMP M80-315
 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

RTP	4	31.08.21	30815
NAME	ISS.	DATE	CN/CO
APPROVED: R.PORTLOCK			
CHECKED: R.ALEXANDER			
DRAWN: R.ADDE			
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 1: CONNECTOR WITH 08 COAX CONTACTS,
 M80-500000MN-08-315-00-000
 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.0mm

HARWIN
 www.harwin.com
 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
 PC TAIL MALE ASSY WITH
 BOARD MOUNT J/SCREWS
DRAWING NUMBER:
M80-500000MN-XX-XXX-00-000
 SHT 4 OF 6

Customer Information Sheet

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

IF IN DOUBT - ASK

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NOT TO SCALE

THIRD ANGLE PROJECTION

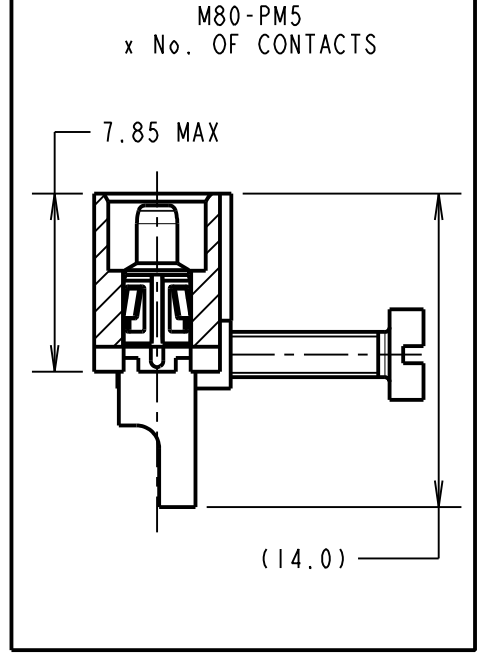
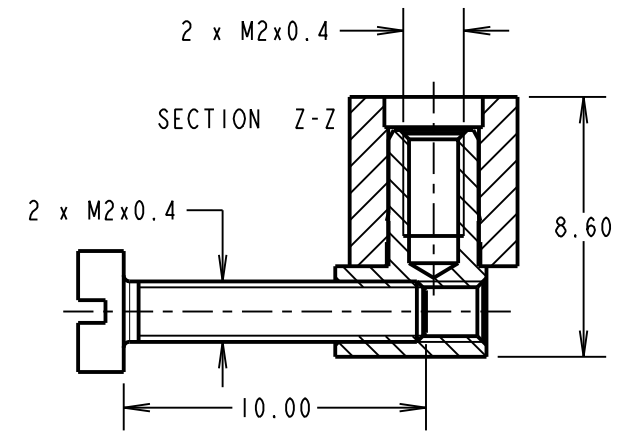
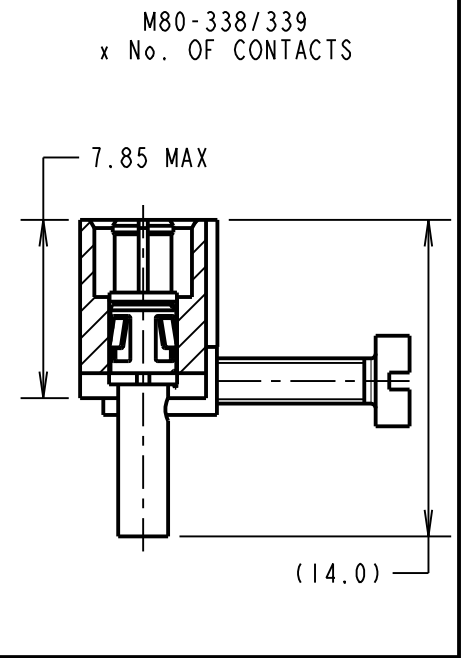
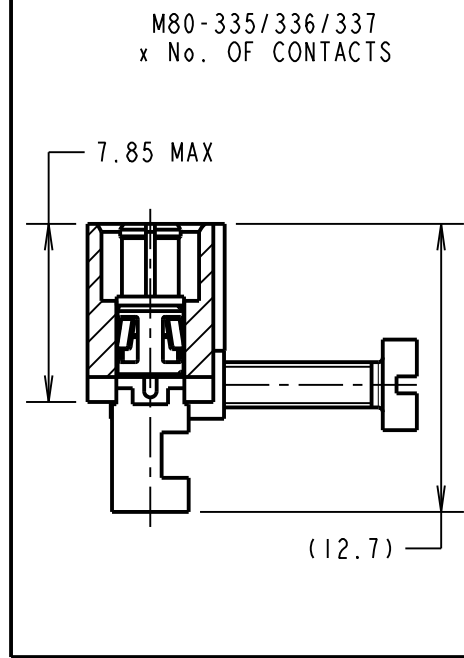
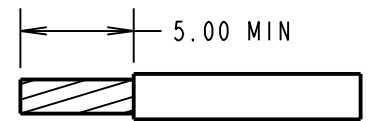
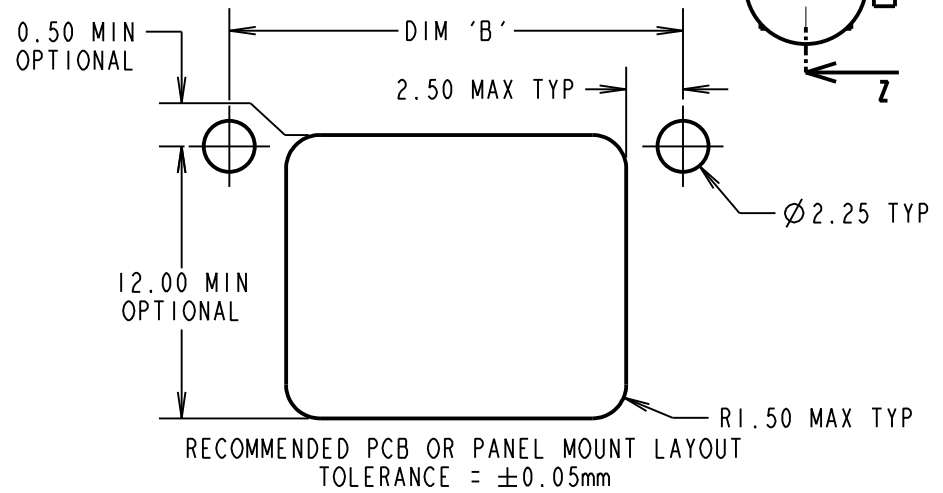
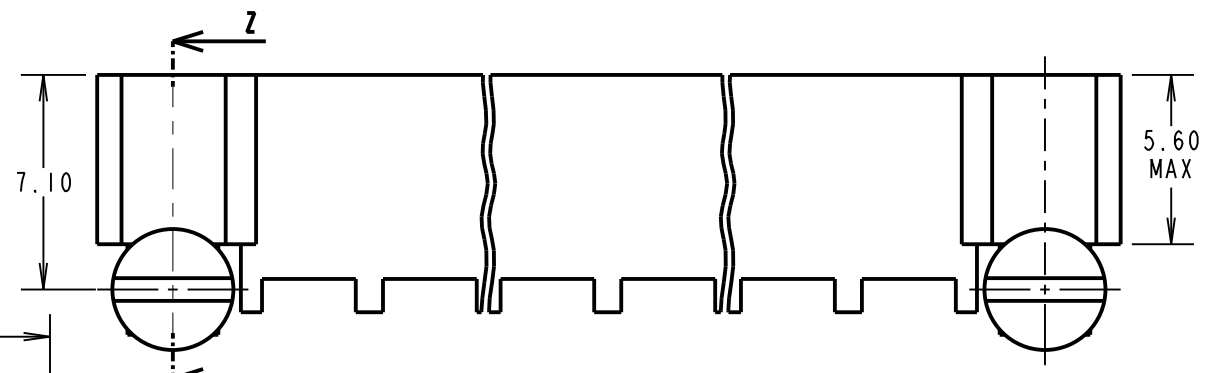
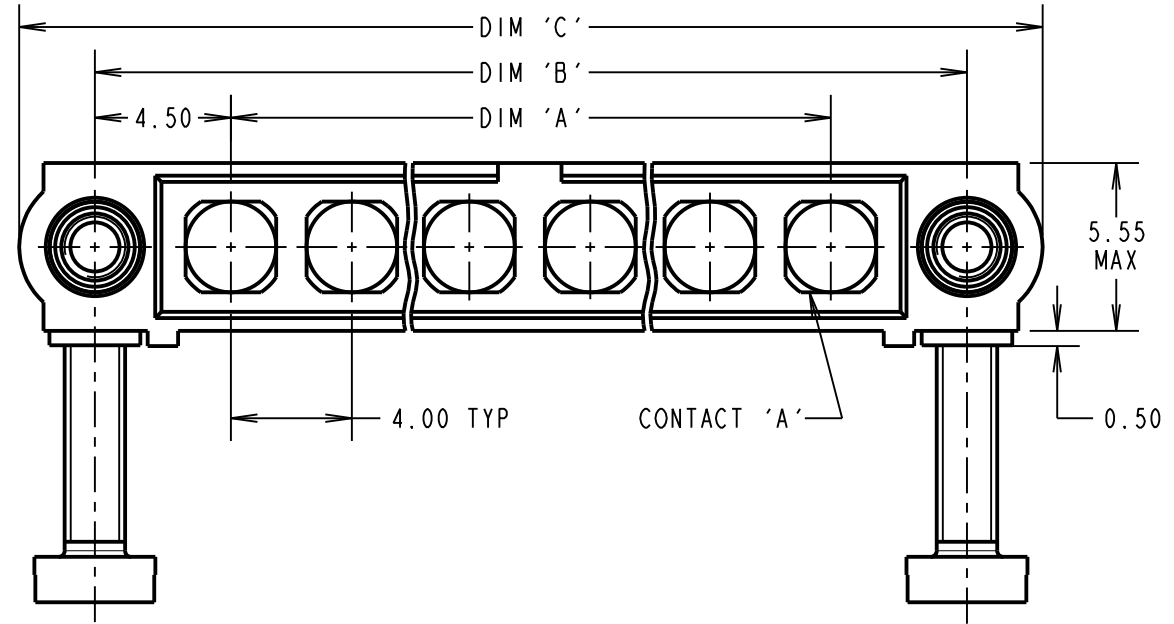
ALL DIMENSIONS IN mm

SPECIFICATIONS:

MATERIAL:
 MOULDING: GLASS FILLED PPS, UL94V-0, BLACK
POWER CONTACT:
 BODY, 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 = 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 & SOLDER CONTACTS ONLY



- 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 M80-338/339 = Z80-294 AND POSITIONER Z80-295.
 - INSTRUCTION SHEETS ARE AVAILABLE.

ORDER CODE: (POWER CRIMP/SOLDER CONTACTS)
M80-5000000MN-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

RTP	4	31.08.21	30815
NAME	ISS.	DATE	CN/CO
APPROVED: R. PORTLOCK			
CHECKED: R. ALEXANDER			
DRAWN: R. ADDE			
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

EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS,
 M80-5000000MN-10-335-00-000
 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm



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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
 PC TAIL MALE ASSY WITH
 BOARD MOUNT J/SCREWS
DRAWING NUMBER:
M80-5000000MN-XX-XXX-00-000
 SHT 5 OF 6

Customer Information Sheet

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

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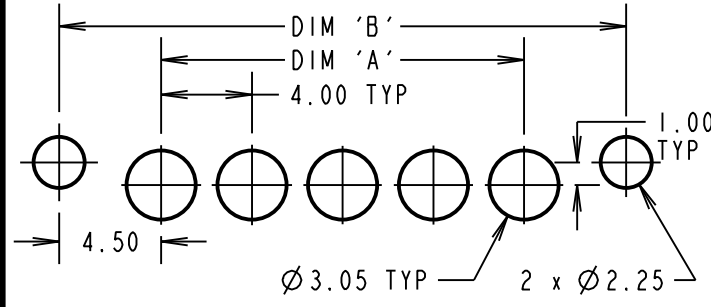
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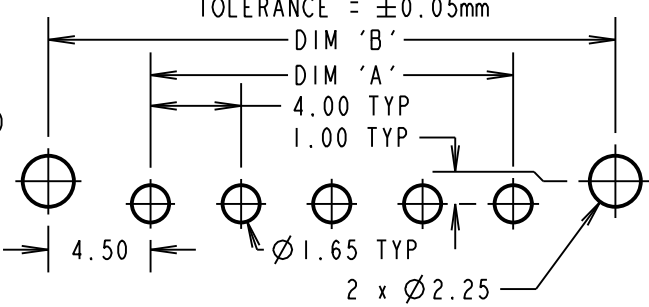
THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

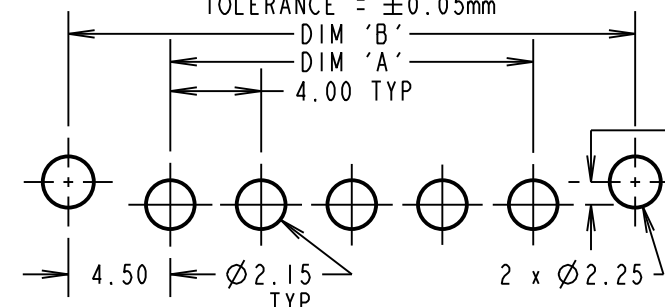
RECOMMENDED PCB LAYOUT FOR POWER SMT: M80-33A
TOLERANCE = ±0.05mm



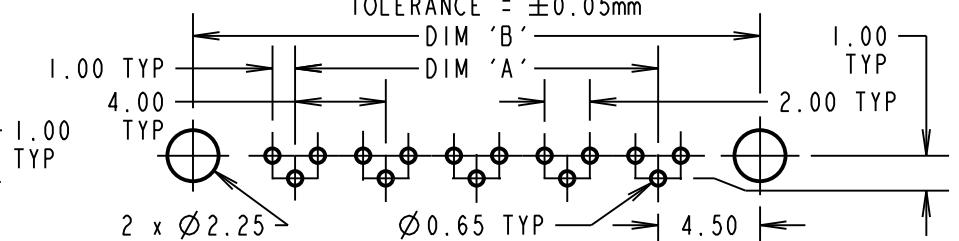
RECOMMENDED PCB LAYOUT FOR POWER CONTACTS: M80-333/334
TOLERANCE = ±0.05mm



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

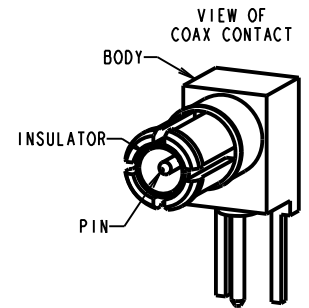
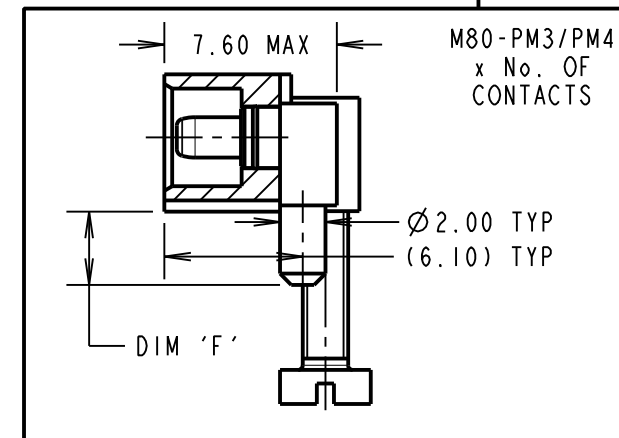
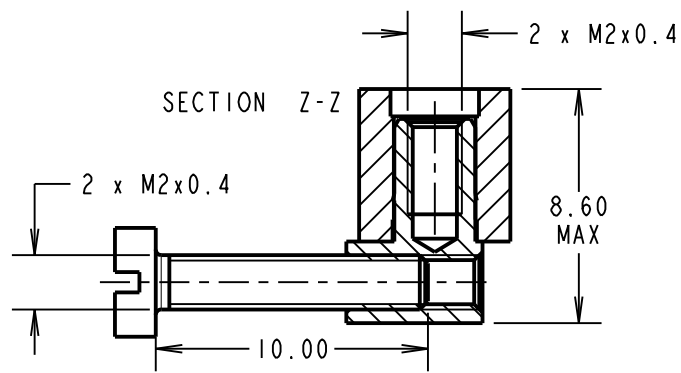
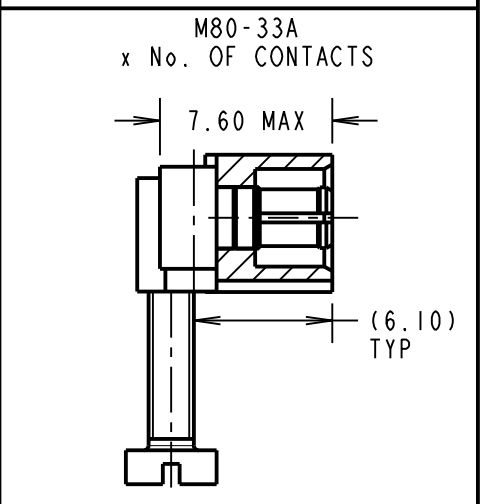
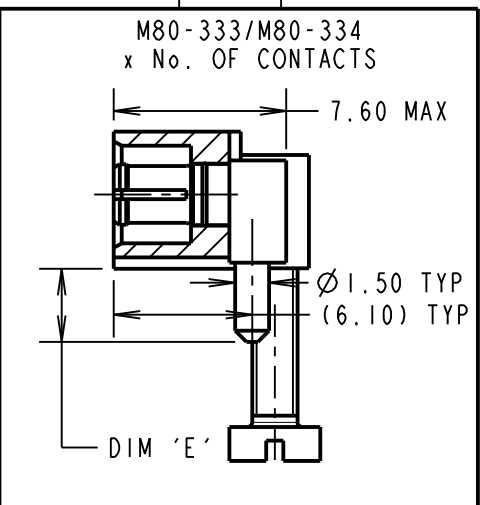
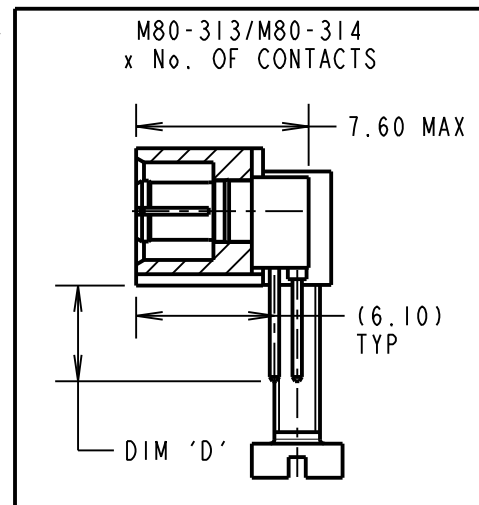
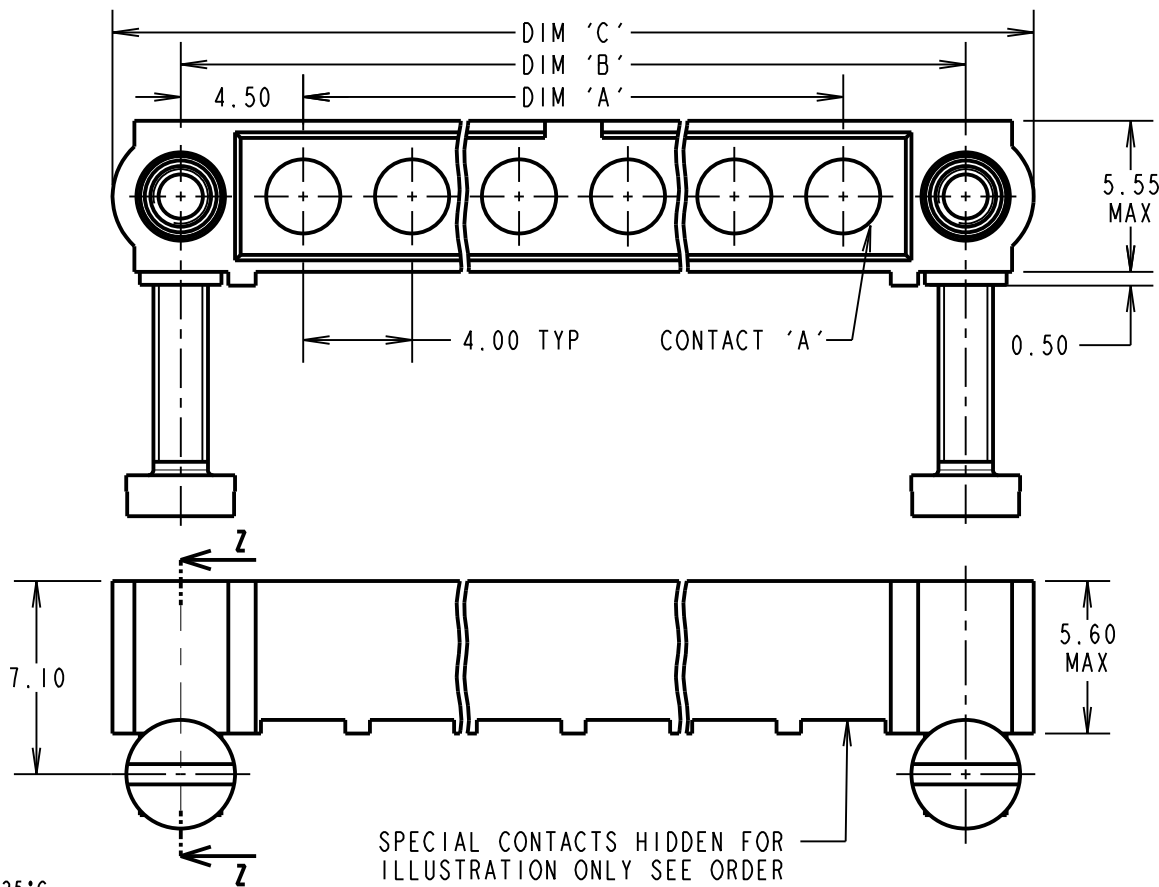


RECOMMENDED PCB LAYOUT FOR COAX CONTACTS: M80-313/314
TOLERANCE = ±0.05mm



- SPECIFICATIONS:**
- MATERIAL:**
HOUSING: GLASS FILLED PPS, UL94V-0, BLACK
POWER CONTACT: COPPER ALLOY
COAX CONTACT:
BODY = COPPER ALLOY
INNER CONTACT = COPPER ALLOY
INSULATOR = PTFE
BOARDMOUNT JACKSCREWS = 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 = 20N MAX
WITHDRAWAL FORCE = 0.5N MIN
- ENVIRONMENTAL:**
TEMPERATURE RANGE:
M80-313/314/333/334/33A/PM3/PM4 = -55°C TO +125°C
- PACKING:**
TUBE
FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)

HORIZONTAL PC TAIL & SMT CONTACTS ONLY



ORDER CODE:(PC TAIL CONTACTS ONLY)
M80-500000MN-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 HORIZ PC TAIL M80-333
334 = 20A POWER CONTACT 5.0mm HORIZ PC TAIL M80-334
PM3 = 40A POWER CONTACT 3.5mm HORIZ PC TAIL M80-PM3
PM4 = 40A POWER CONTACT 5.0mm HORIZ PC TAIL M80-PM4
33A = POWER CONTACT HORIZ 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'	M80-313 = 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,
M80-500000MN-10-333-00-000
DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.0mm
DIM 'E' = 3.5mm

HARWIN
www.harwin.com
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
PC TAIL MALE ASSY WITH
BOARD MOUNT J/SCREWS
DRAWING NUMBER: **M80-500000MN-XX-XXX-00-000**
SHT 6 OF 6

RTP	4	31.08.21	30815
NAME	ISS.	DATE	CN/CO
APPROVED:		R.PORTLOCK	
CHECKED:		R.ALEXANDER	
DRAWN:		R.ADDE	
CUSTOMER REF.:			
ASSEMBLY DRG:			