

Customer Information Sheet

DRAWING No.: M80-500000MH-06-311-00-000

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
 INSULATOR = PTFE
 JACKSCREW, NUT = STAINLESS STEEL

FINISH:
COAX & POWER CONTACT:
 BODY, SLEEVE, INNER CONTACT, END PLUG = GOLD
ELECTRICAL:
 WORKING VOLTAGE = 800V AC/DC
 VOLTAGE PROOF = 1200V AC/DC
 INSULATION RESISTANCE = 100MΩ MIN

POWER CONTACT:
 CONTACT RESISTANCE = 6mΩ MAX
 CURRENT RATING = M80-335 = 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

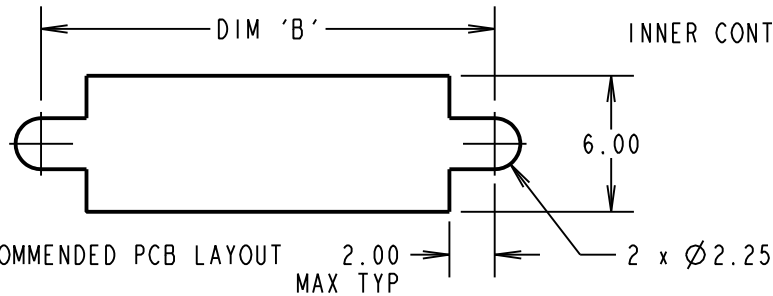
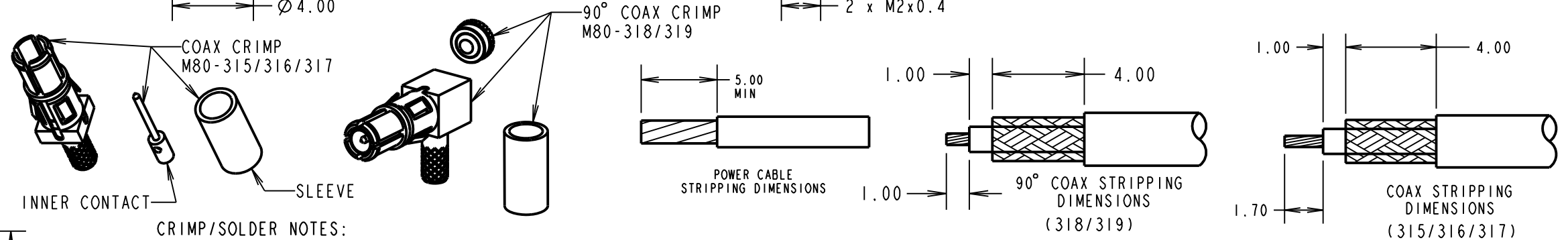
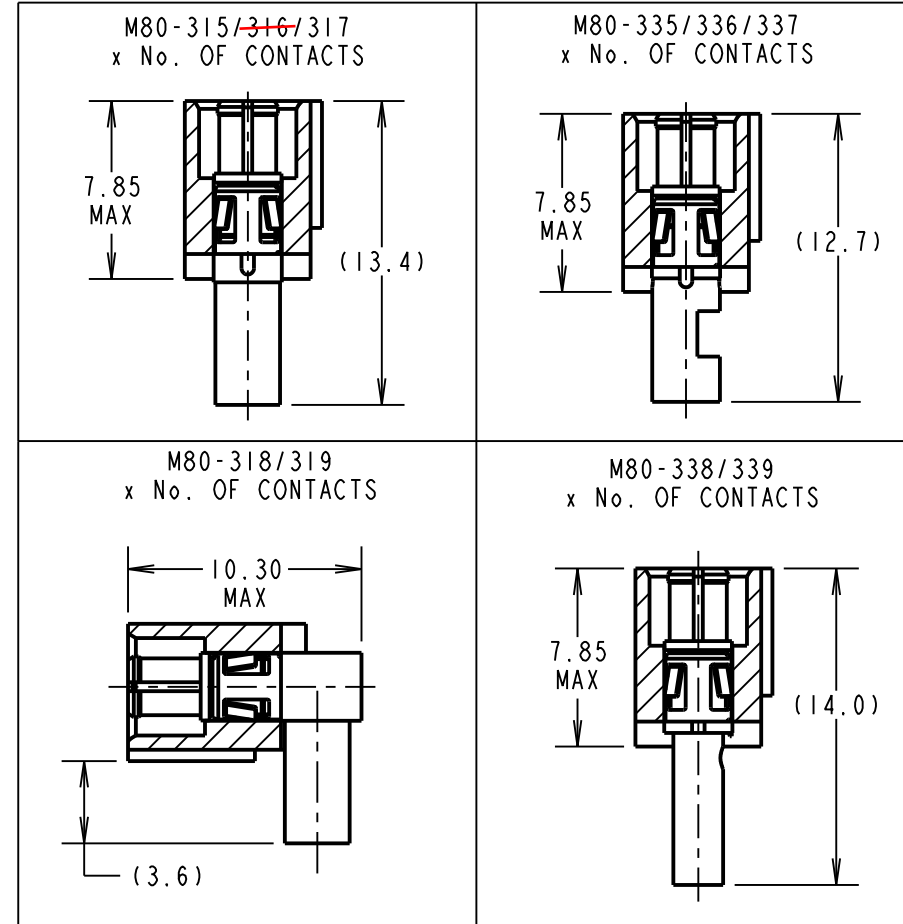
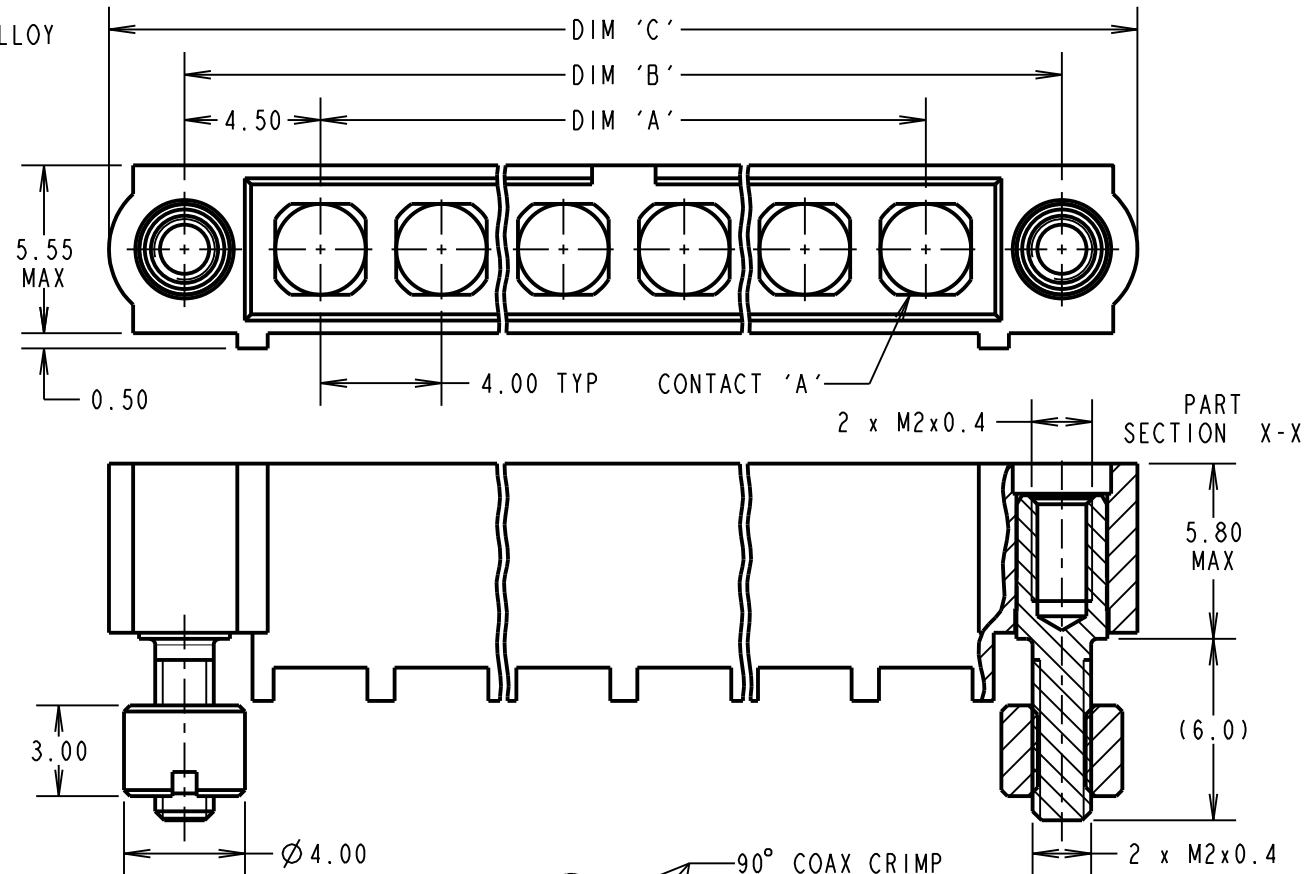
COAX CONTACT:
 FREQUENCY RANGE = 6GHz
 IMPEDANCE = 50Ω
 V.S.W.R = 1.05 + (0.04 x FREQUENCY) GHz MAX
 CONTACT RESISTANCE = 6mΩ MAX
 INSULATION RESISTANCE = 10⁶MΩ @ 250V AC
 OPERATING VOLTAGE = 180V AC @ 500mA
 MAXIMUM VOLTAGE = 1000V AC

MECHANICAL:
 DURABILITY = 500 OPERATIONS
COAX & POWER 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)

CRIMP AND SOLDER CONTACTS ONLY



CRIMP/SOLDER NOTES:

- CONTACTS AND BOARD MOUNT NUTS ARE SUPPLIED WITH CONNECTOR, BUT NOT ASSEMBLED AS SHOWN FOR ILLUSTRATION.
- 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.
- RECOMMENDED HAND CRIMP TOOL FOR CONTACTS 338/339 = Z80-294 AND POSITIONER Z80-295.
- 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.
- BOARD MOUNT NUTS AND CONTACTS ARE SUPPLIED WITH CONNECTOR BUT NOT ASSEMBLED AS SHOWN. SHOWN ASSEMBLED FOR ILLUSTRATION ONLY.

ORDER CODE: (CRIMP/SOLDER CONTACTS)

M80-500000MH-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

MGP	6	10.01.18	21020
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SB			
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 1: CONNECTOR WITH 08 COAX CONTACTS,
 M80-500000MH-08-315-00-000
 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.0mm

EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS,
 M80-500000MH-10-335-00-000
 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.0mm

HARWIN

www.harwin.com
 technical@harwin.com

THIS DRAWING AND ANY INFORMATION OR DESCRIPTIVE MATTER SET OUT HEREON ARE CONFIDENTIAL AND COPYRIGHT PROPERTY OF THE HARWIN GROUP AND MUST NOT BE DISCLOSED, LOANED, COPIED OR USED FOR MANUFACTURING, TENDERING OR FOR ANY OTHER PURPOSE WITHOUT THEIR WRITTEN PERMISSION.

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
 BOARD MOUNT J/SCREW

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

SHT
 3 OF 4

Customer Information Sheet

DRAWING No.: M80-500000MH-06-311-00-000

SHEET 4 OF 4

IF IN DOUBT - ASK

©

NOT TO SCALE

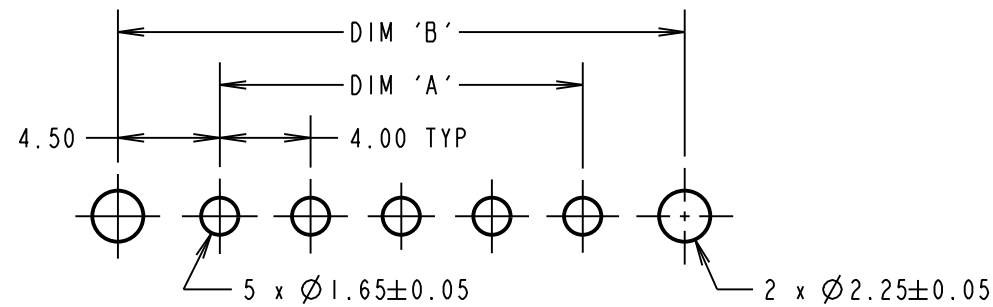
THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

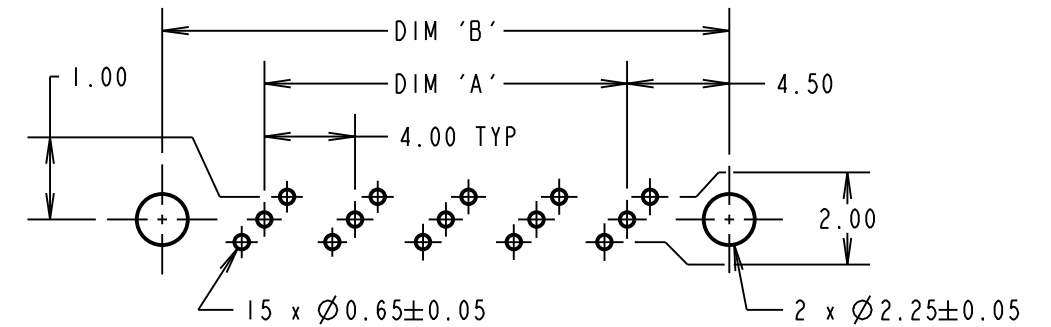
SPECIFICATIONS:

MATERIAL:
 MOULDING: GLASS FILLED PPS, UL94V-0, BLACK
 POWER CONTACT: COPPER ALLOY
 COAX CONTACT:
 BODY = COPPER ALLOY
 INNER CONTACT = COPPER ALLOY
 INSULATOR = PTFE
 JACKSCREW, NUT = 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 = 20A 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 = 8N MAX
 WITHDRAWAL FORCE = 0.5N MIN
COAX CONTACT:
 INSERTION FORCE = 8N 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)

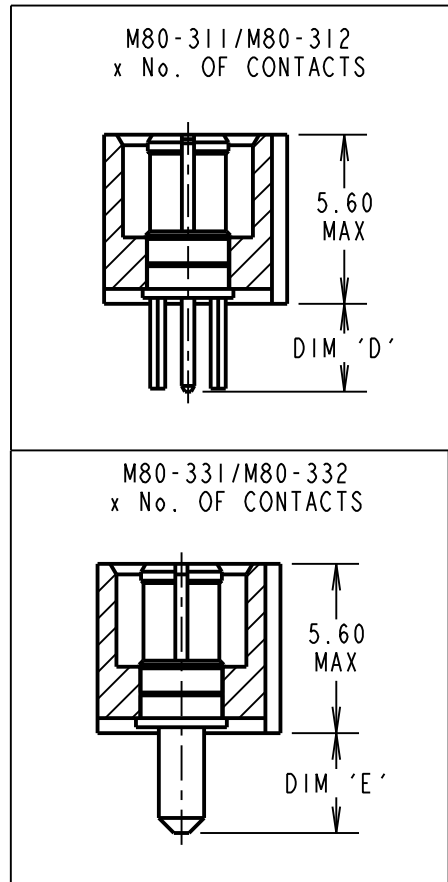
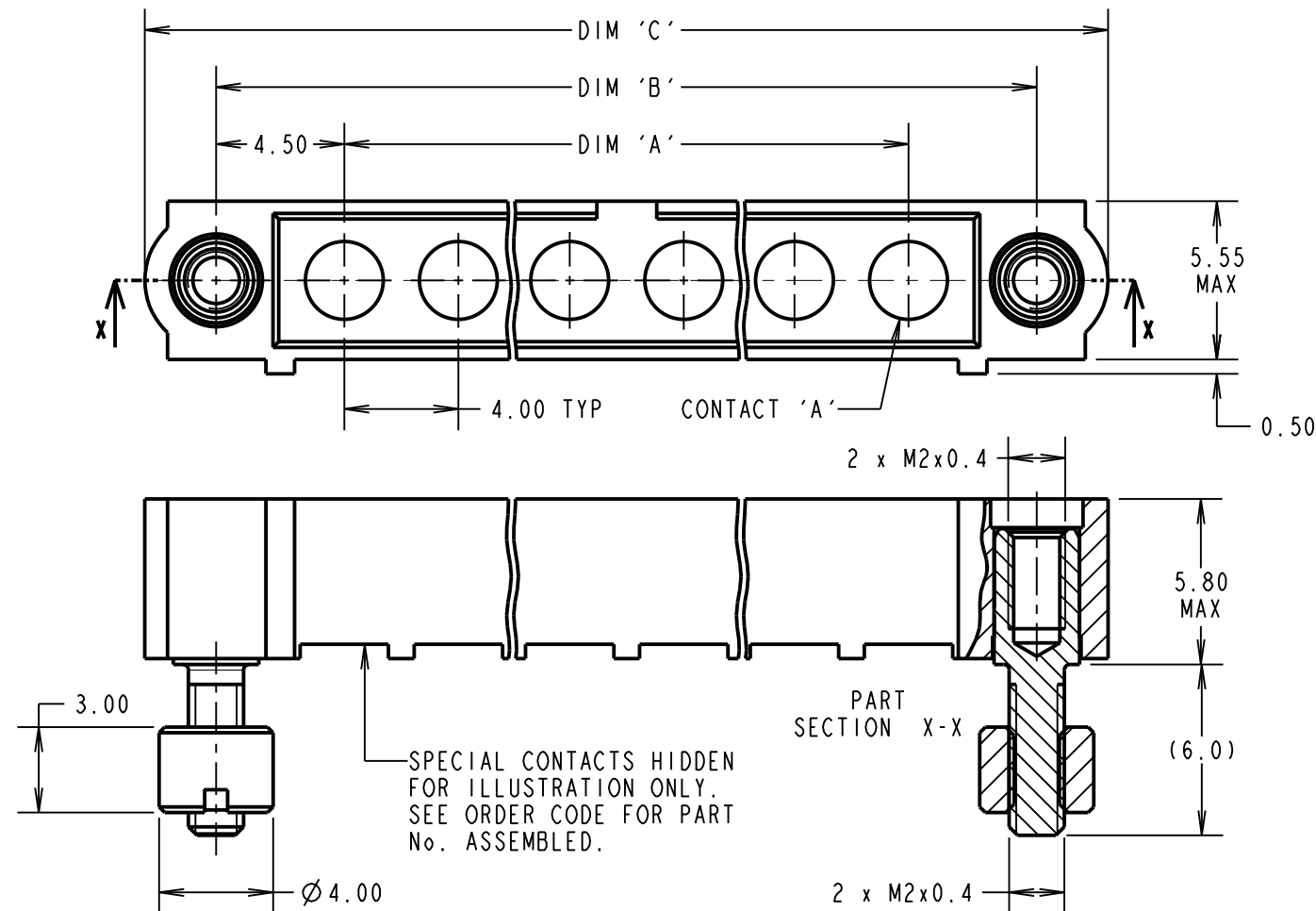
RECOMMENDED PCB LAYOUT FOR ALL POWER ONLY



RECOMMENDED PCB LAYOUT FOR ALL COAX ONLY



PC TAIL 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
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,
 M80-500000MH-08-311-00-000
 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.0mm
 DIM 'D' = 3.0mm

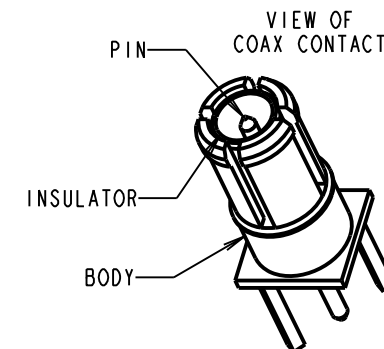
EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS,
 M80-500000MH-10-331-00-000
 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.0mm

ORDER CODE: (PC TAIL CONTACTS ONLY)
M80-500000MH-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 VERT' PC TAIL M80-331
 332 = POWER CONTACT 5.0mm VERT' PC TAIL M80-332

NOTES:
 1. BOARD MOUNT NUTS ARE SUPPLIED WITH CONNECTOR BUT NOT ASSEMBLED AS SHOWN. SHOWN ASSEMBLED FOR ILLUSTRATION ONLY.



MGP	6	10.01.18	21020
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SB			
DRAWN: S. MCCULLAGH			
CUSTOMER REF.:			
ASSEMBLY DRG:			

HARWIN
 www.harwin.com
 technical@harwin.com

THIS DRAWING AND ANY INFORMATION OR DESCRIPTIVE MATTER SET OUT HEREON ARE CONFIDENTIAL AND COPYRIGHT PROPERTY OF THE HARWIN GROUP AND MUST NOT BE DISCLOSED, LOANED, COPIED OR USED FOR MANUFACTURING, TENDERING OR FOR ANY OTHER PURPOSE WITHOUT THEIR WRITTEN PERMISSION.

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 BOARD MOUNT J/SCREW

DRAWING NUMBER:
M80-500000MH-XX-XXX-00-000 SHT 4 OF 4