

Customer Information Sheet

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

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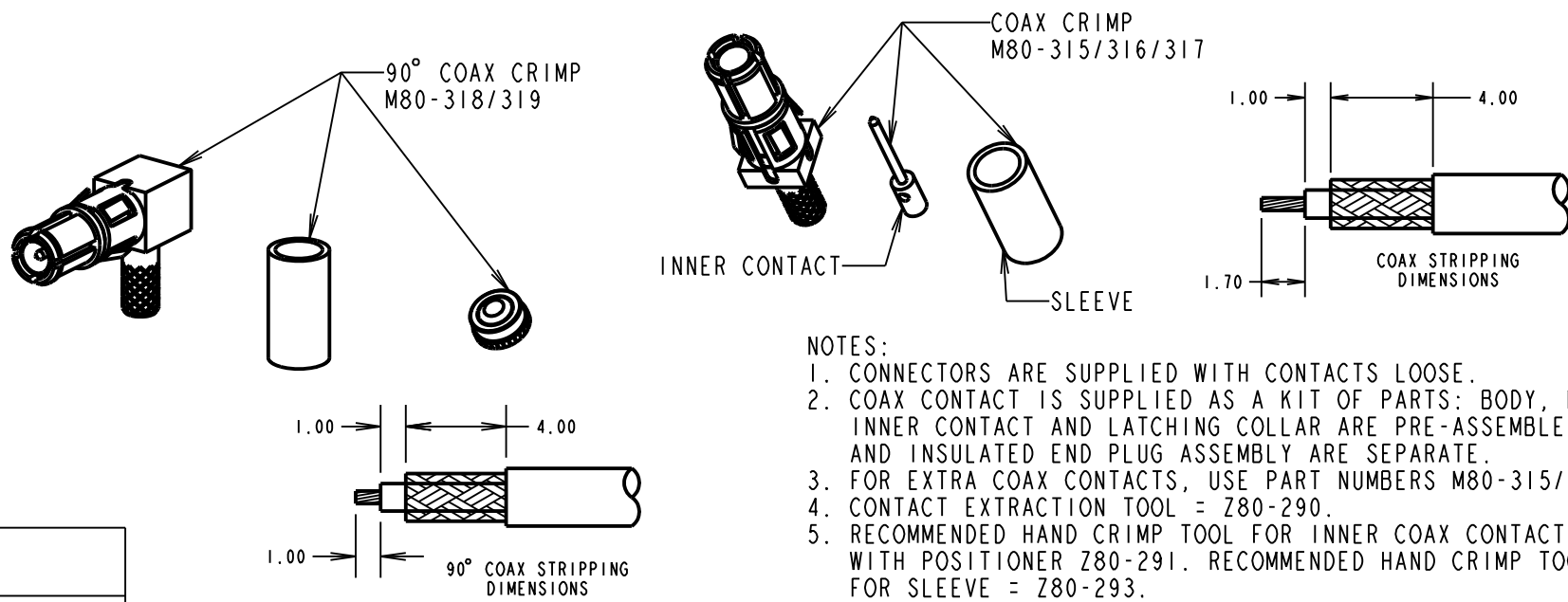
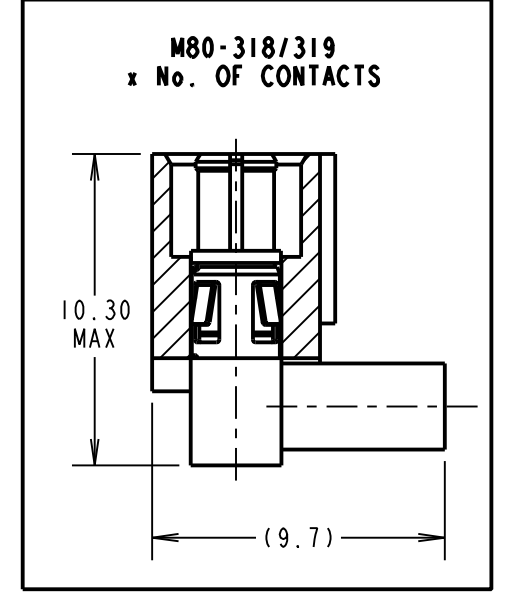
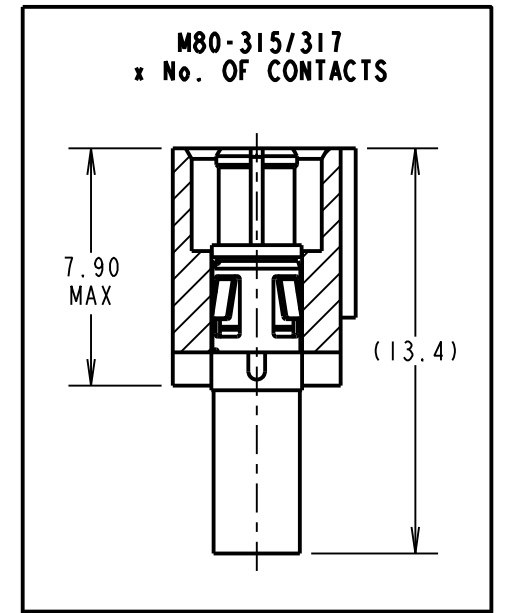
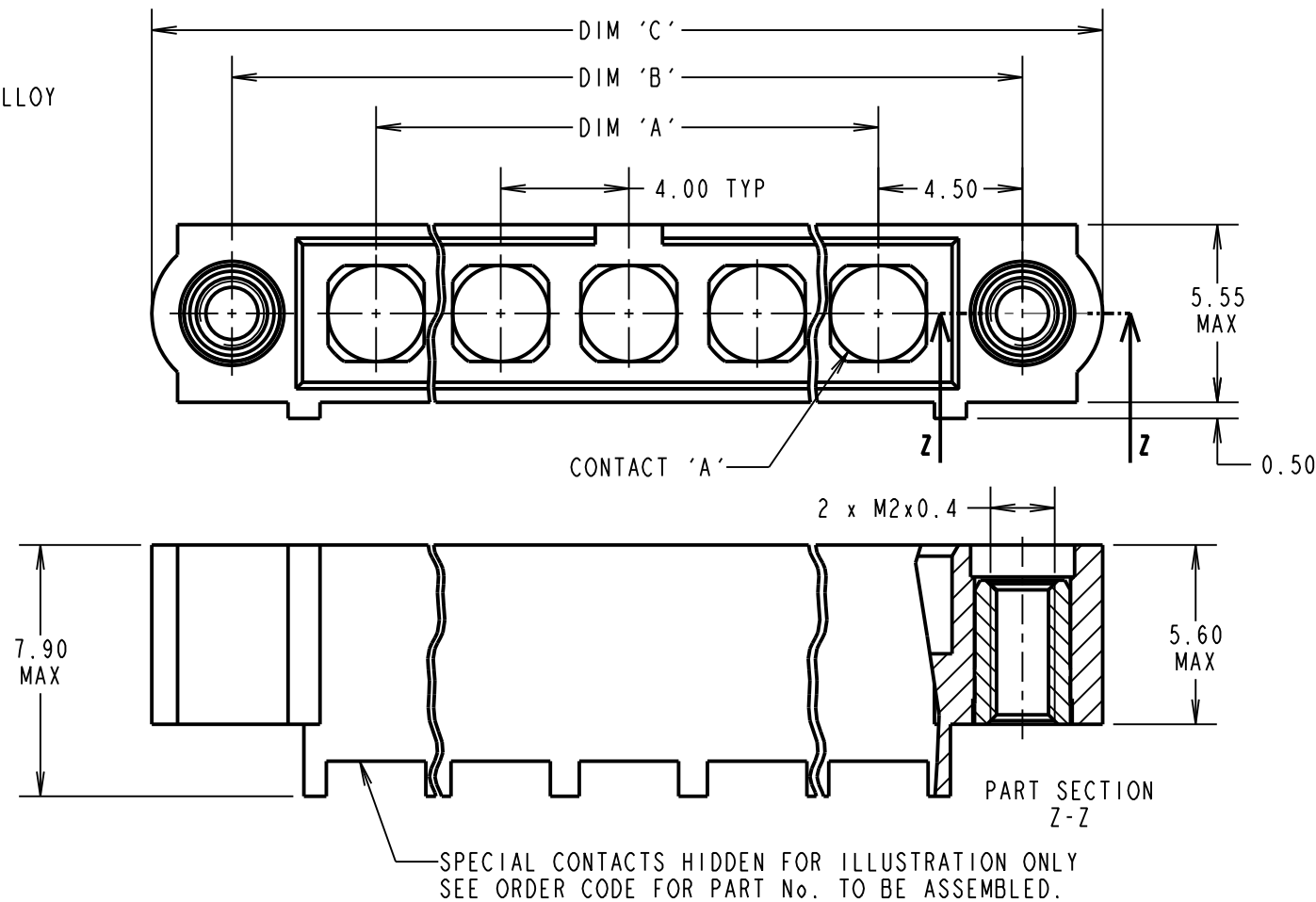
THIRD ANGLE PROJECTION

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
 JACKSCREW = STAINLESS STEEL
FINISH:
COAX CONTACT
 BODY, SLEEVE, INNER CONTACT, END PLUG = GOLD
 LATCHING COLLAR: = NICKEL
ELECTRICAL:
 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/SOLDER CONTACTS ONLY



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

TOTAL No. OF CONTACTS _____
 02 TO 12

SPECIAL CONTACTS (CRIMP)
 315 = COAX CONTACT 2.0mm CRIMP M80-315
 317 = COAX CONTACT 2.7mm CRIMP M80-317
 318 = COAX CONTACT 2.0mm HORZ' CRIMP M80-318
 319 = COAX CONTACT 2.7mm HORZ' 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 + 10.0

EXAMPLE: CONNECTOR WITH 08 COAX CONTACTS,
 M80-5000000MI-08-315-00-000
 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm

- 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.
 - 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.

MGP	7	22.11.18	21265
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SB			
DRAWN: R.ADDE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

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			FINISH: SEE ABOVE S/AREA: mm ²	DRAWING NUMBER: M80-5000000MI-XX-XXX-00-000

Customer Information Sheet

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THIRD ANGLE PROJECTION

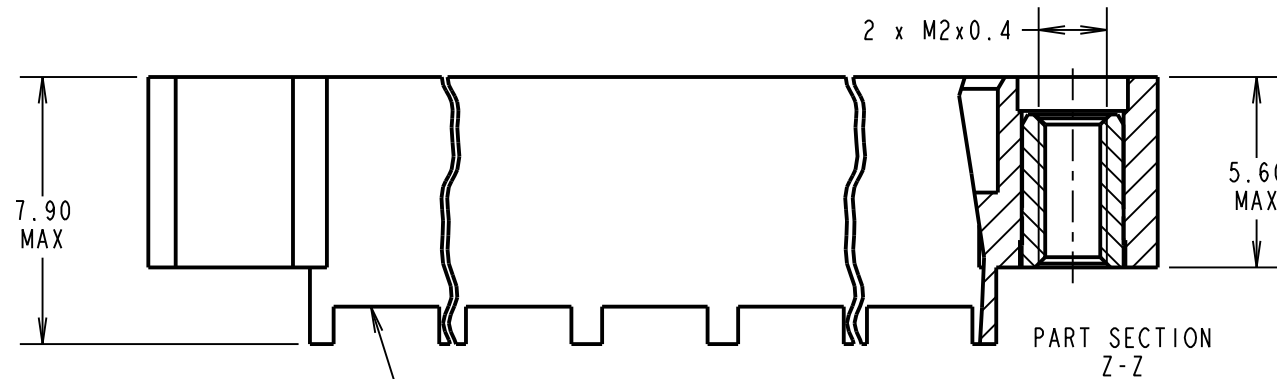
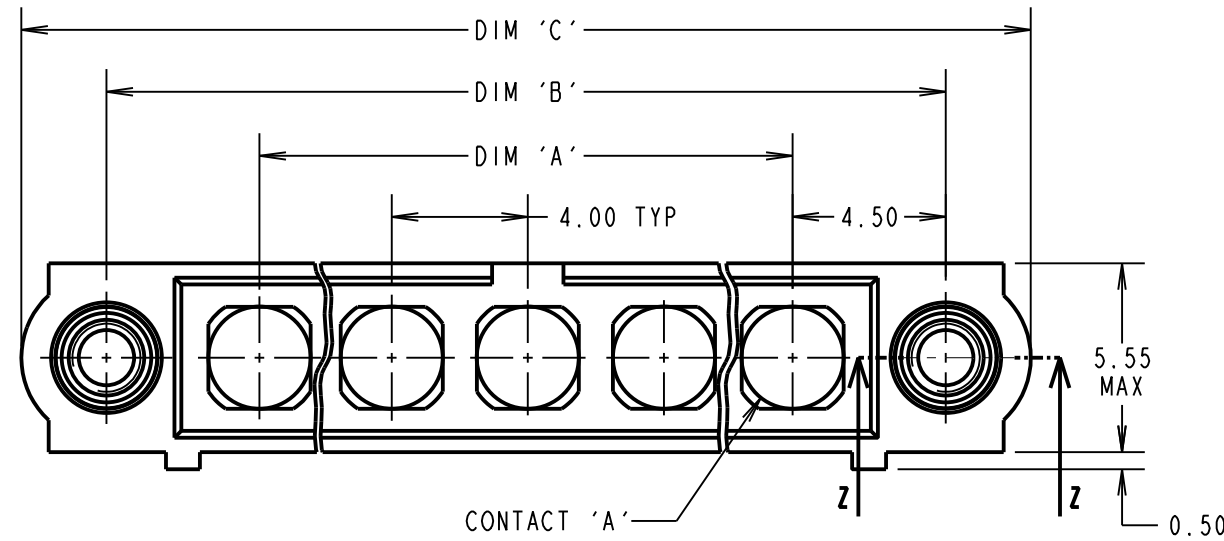
ALL DIMENSIONS IN mm

SPECIFICATIONS:

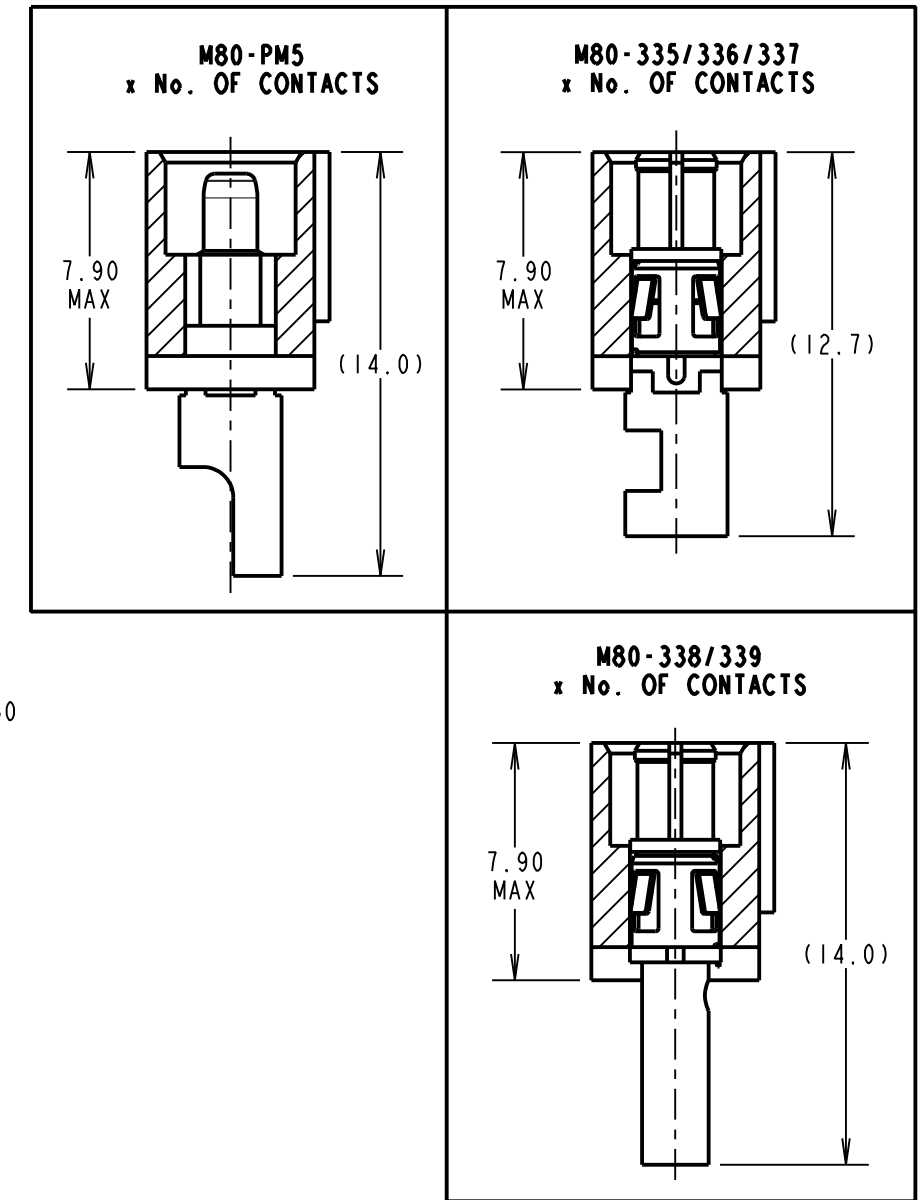
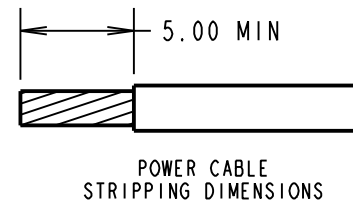
MATERIAL:
 MOULDING: GLASS FILLED PPS, UL94V-0, BLACK
POWER CONTACT:
 BODY = COPPER ALLOY
 LATCHING COLLAR = BERYLLIUM COPPER
 JACKSCREW: STAINLESS STEEL
FINISH:
POWER CONTACT:
 8 TO 20A = 0.25µm MIN GOLD OVER NICKEL
 40A = 0.76µm MIN GOLD OVER NICKEL
 LATCHING COLLAR: = NICKEL
ELECTRICAL:
 WORKING VOLTAGE = 800V AC/DC
 VOLTAGE PROOF = 1200V AC/DC
 INSULATION RESISTANCE = 100MΩ MIN
POWER CONTACT:
 CONTACT RESISTANCE = 6mΩ MAX
CURRENT RATING:
 M80-PM5 = 40A MAX WITH 10AWG,
 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.

MECHANICAL:
 DURABILITY = 500 OPERATIONS
POWER CONTACT:
 INSERTION FORCE:
 8 TO 20A = 8N MAX
 40A = 15N MAX
 WITHDRAWAL FORCE = 0.5N MIN
ENVIRONMENTAL:
 TEMPERATURE RANGE = -55°C TO +150°C
PACKING:
 BAG
 FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)

POWER CRIMP/SOLDER CONTACTS ONLY



SPECIAL CONTACTS HIDDEN FOR ILLUSTRATION ONLY
 SEE ORDER CODE FOR PART No. TO BE ASSEMBLED.



ORDER CODE: (POWER CRIMP/SOLDER CONTACTS)

M80-500000MI-XX-XXX-00-000

TOTAL No. OF CONTACTS _____
 02 TO 12

SPECIAL CONTACTS (CRIMP)
 PM5 = POWER CONTACT 10AWG SOLDER M80-PM5
 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 + 10.0
EXAMPLE: CONNECTOR WITH 10 POWER CONTACTS, M80-500000MI-10-335-00-000 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.0mm	

NOTES:

- CONNECTORS ARE SUPPLIED WITH CONTACTS LOOSE.
- FOR EXTRA POWER CONTACTS USE PART NUMBERS:
 M80-PF5/335/336/337/338/339.
- CONTACT EXTRACTION TOOL = Z80-290.
- RECOMMENDED HAND CRIMP TOOL FOR CONTACTS 338/339 = Z80-294
 AND POSITIONER Z80-295.
- INSTRUCTION SHEETS ARE AVAILABLE.

MGP	7	22.11.18	21265
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SB			
DRAWN: R.ADDE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

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 technical@harwin.com

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

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

TITLE: DATAMATE MIX-TEK
 MALE ASSEMBLY
 WITH JACKSCREW

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

SHT
 6 OF 8

Customer Information Sheet

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

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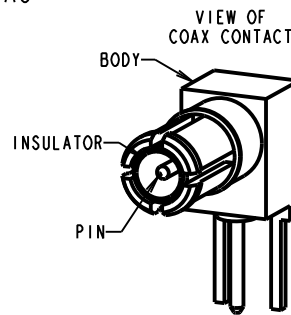
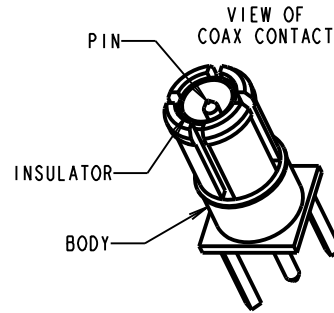
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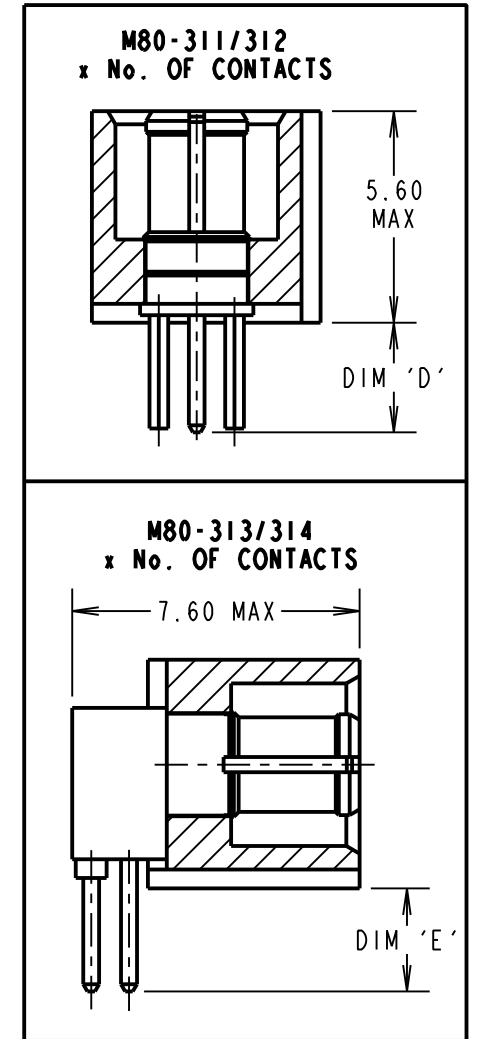
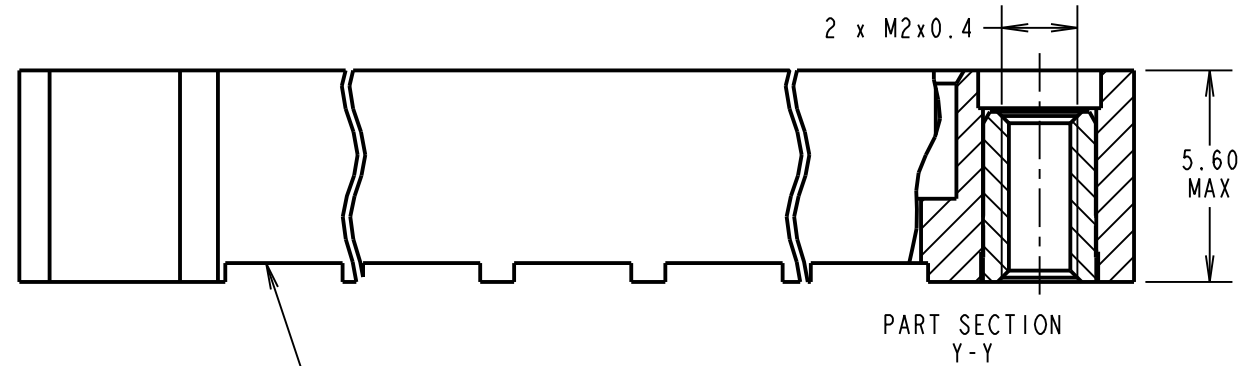
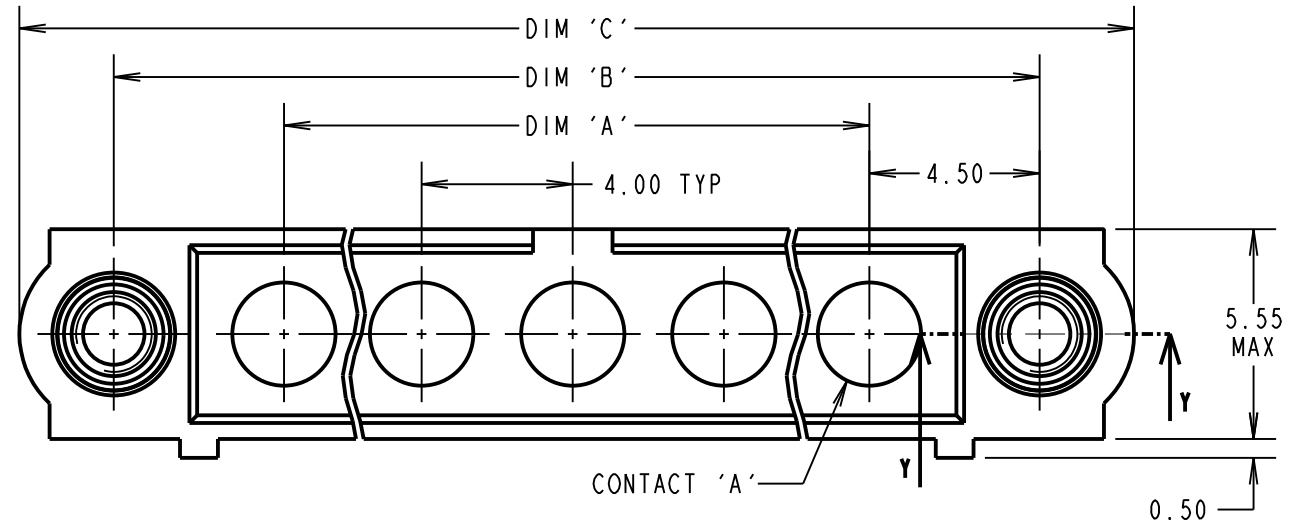
THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

- SPECIFICATIONS:**
MATERIAL:
 MOULDING: GLASS FILLED PPS, UL94V-0, BLACK
COAX CONTACT:
 BODY, INNER CONTACT, = COPPER ALLOY
 INSULATOR = PTFE
 JACKSCREW: STAINLESS STEEL
FINISH:
 COAX CONTACT:
 BODY, INNER CONTACT, = GOLD
ELECTRICAL:
 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:
 TUBE
 FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)



COAX PC TAIL CONTACTS ONLY



ORDER CODE:
 (COAX PC TAIL CONTACTS ONLY)
M80-5000000MI-XX-XXX-00-000

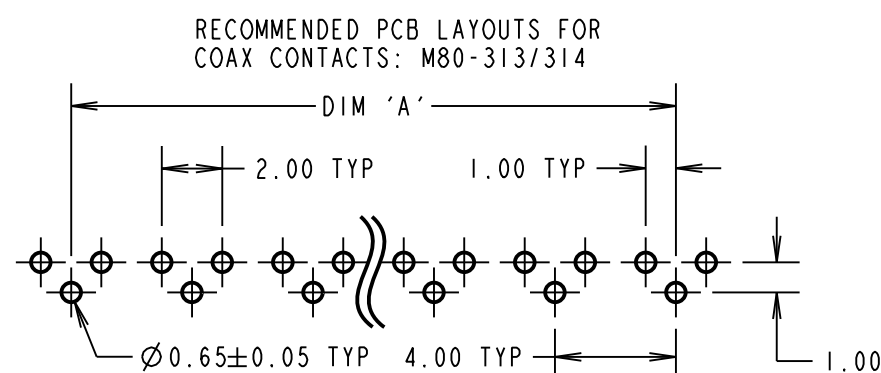
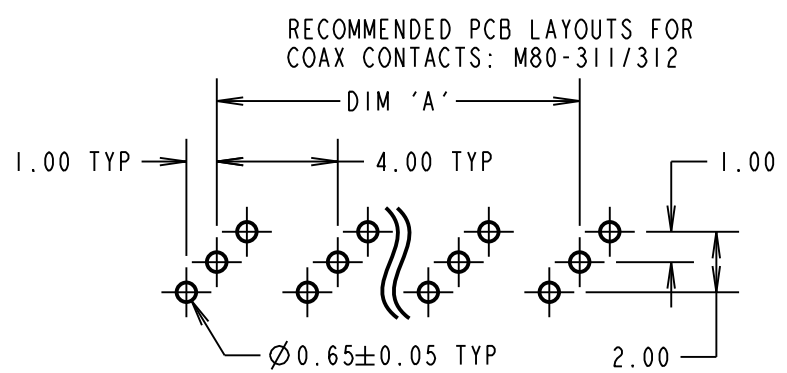
TOTAL No. OF CONTACTS ———
 02 TO 12

SPECIAL CONTACTS (PC TAIL) ———
 311 = COAX CONTACT 3.0mm PC TAIL M80-311
 312 = COAX CONTACT 4.5mm PC TAIL M80-312
 313 = COAX CONTACT 3.0mm HORZ' PC TAIL M80-313
 314 = COAX CONTACT 4.5mm HORZ' PC TAIL M80-314

SPECIAL CONTACTS HIDDEN FOR ILLUSTRATION ONLY
 SEE ORDER CODE FOR PART No. ASSEMBLED

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'	M80-313 = 3.0mm, M80-314 = 4.5mm

EXAMPLE: CONNECTOR WITH 08 COAX CONTACTS,
 M80-5000000MI-08-313-00-000
 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.0mm
 DIM 'E' = 3.0mm



MGP	7	22.11.18	21265
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SB			
DRAWN: R.ADDE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

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Customer Information Sheet

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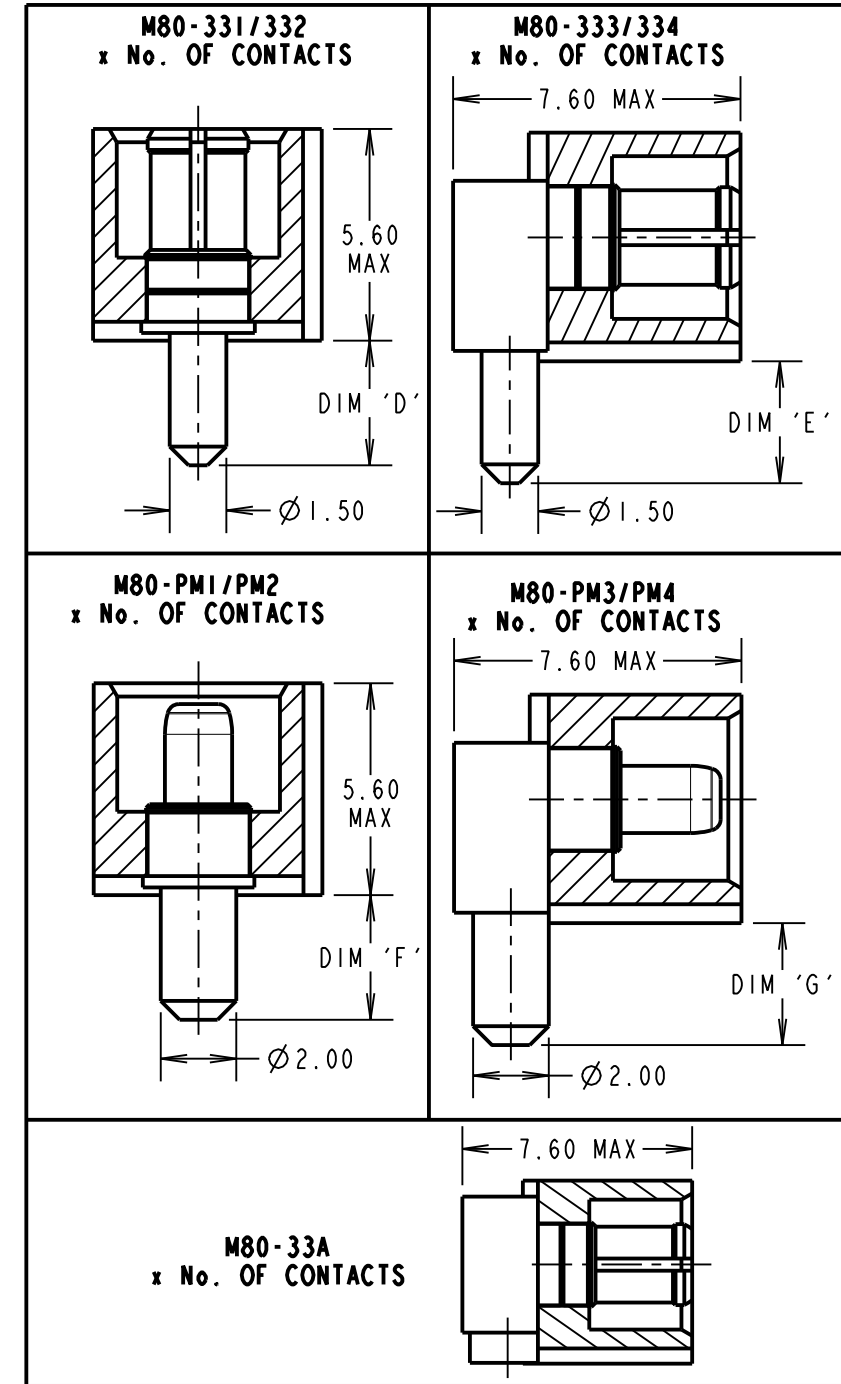
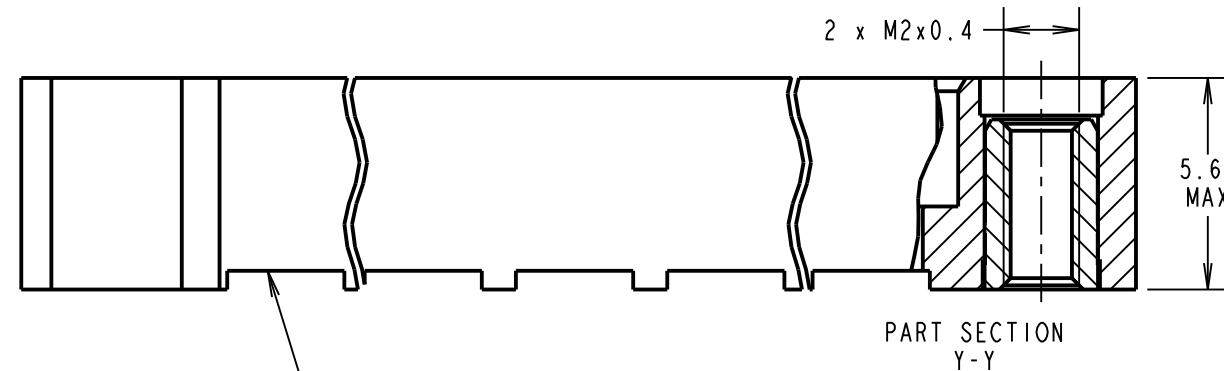
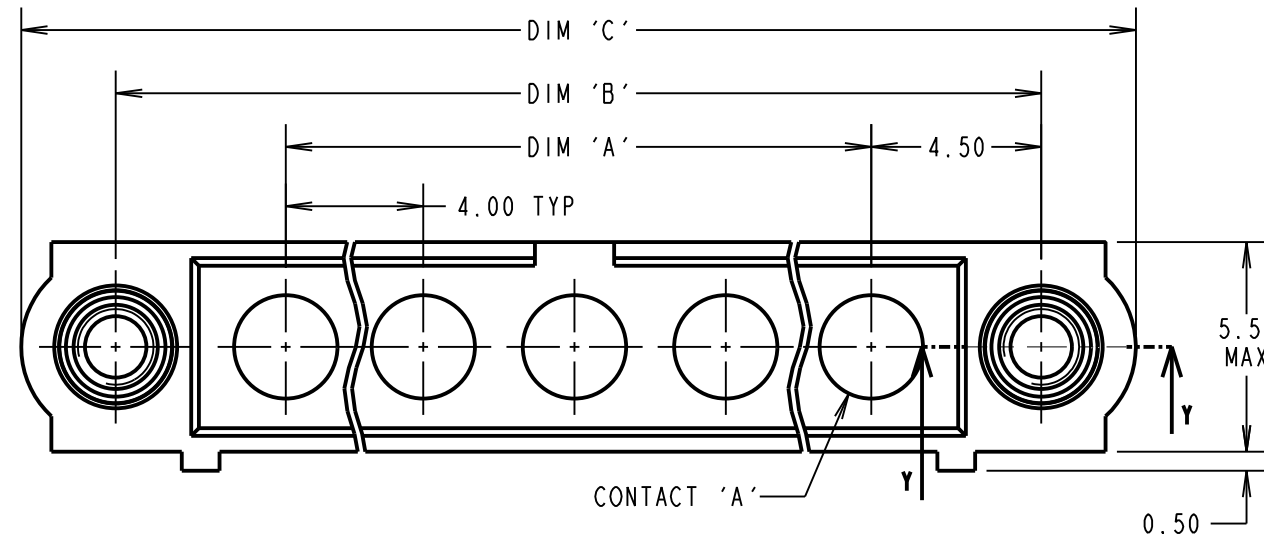
THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

SPECIFICATIONS:

MATERIAL:
 MOULDING: GLASS FILLED PPS, UL94V-0, BLACK
 POWER CONTACT: COPPER ALLOY
 JACKSCREW: STAINLESS STEEL
FINISH:
 POWER CONTACT:
 20A = 0.25µm MIN GOLD OVER NICKEL
 40A = 0.76µm MIN GOLD OVER NICKEL
ELECTRICAL:
 WORKING VOLTAGE = 800V AC/DC
 VOLTAGE PROOF = 1200V AC/DC
 INSULATION RESISTANCE = 100MΩ MIN
POWER CONTACT:
 CONTACT RESISTANCE 6mΩ MAX
CURRENT RATING:
 M80-331/332/333/334/33A = 20A MAX
 M80-PM1/PM2/PM3/PM4 = 40A MAX
MECHANICAL:
 DURABILITY = 500 OPERATIONS
POWER CONTACT:
 INSERTION FORCE:
 M80-331/332/323/324/33A = 8N MAX
 M80-PM1/PM2/PM3/PM4 = 15N MAX
 WITHDRAWAL FORCE = 0.5N MIN
ENVIRONMENTAL:
 TEMPERATURE RANGE = -55°C TO +150°C
PACKING:
 TUBE
 FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)

POWER PC TAIL AND SMT CONTACTS ONLY



ORDER CODE:
 (POWER PC TAIL AND SMT CONTACTS ONLY)
M80-5000000MI-XX-XXX-00-000

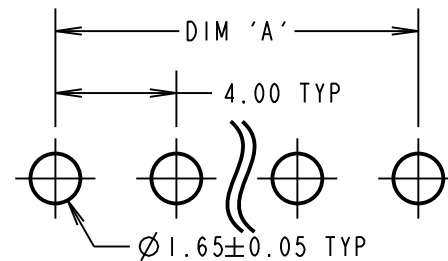
TOTAL No. OF CONTACTS
 02 TO 12

SPECIAL CONTACTS (PC TAIL)
 331 = 20A POWER CONTACT 3.0mm VERT' PC TAIL M80-331
 332 = 20A POWER CONTACT 4.5mm VERT' PC TAIL M80-332
 333 = 20A POWER CONTACT 3.0mm HORZ' PC TAIL M80-333
 334 = 20A POWER CONTACT 4.5mm HORZ' PC TAIL M80-334
 33A = 20A POWER CONTACT HORIZONTAL SMT M80-33A
 PM1 = 40A POWER CONTACT 3.0mm VERT' PC TAIL M80-PM1
 PM2 = 40A POWER CONTACT 4.5mm VERT' PC TAIL M80-PM2
 PM3 = 40A POWER CONTACT 3.0mm HORZ' PC TAIL M80-PM3
 PM4 = 40A POWER CONTACT 4.5mm HORZ' PC TAIL M80-PM4

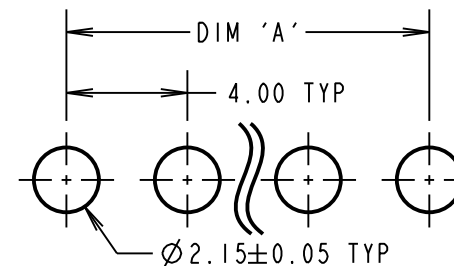
DIMENSION	CALCULATION
DIM 'A'	4 x No. OF CONTACTS - 4.00
DIM 'B'	4 x No. OF CONTACTS + 5.00
DIM 'C'	4 x No. OF CONTACTS + 10.0
DIM 'D'	M80-331 = 3.5mm, M80-332 = 5.0mm
DIM 'E'	M80-333 = 3.5mm, M80-334 = 5.0mm
DIM 'F'	M80-PM1 = 3.5mm, M80-PM2 = 5.0mm
DIM 'G'	M80-PM3 = 3.5mm, M80-PM4 = 5.0mm

EXAMPLE: CONNECTOR WITH 10 POWER CONTACTS,
 M80-5000000MI-10-334-00-000
 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.0mm
 DIM 'E' = 4.5mm

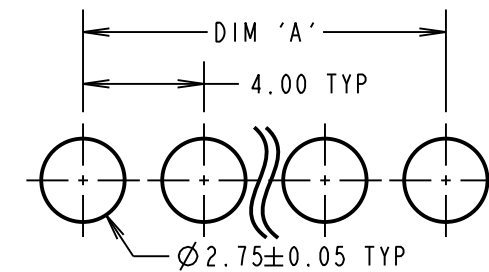
RECOMMENDED PCB LAYOUT FOR
 M80-331/332/333/334
 PC TAIL POWER CONTACTS



RECOMMENDED PCB LAYOUT FOR
 M80-PM1/PM2/PM3/PM4
 PC TAIL POWER CONTACTS



RECOMMENDED PCB LAYOUT FOR
 M80-33A SMT POWER CONTACTS



MGP	7	22.11.18	21265
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SB			
DRAWN: R.ADDE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

HARWIN

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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 ASSEMBLY WITH JACKSCREW

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

SHT 8 OF 8

Mouser Electronics

Authorized Distributor

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[M80-5000000M1-02-331-00-000](#) [M80-5000000M1-04-331-00-000](#) [M80-5000000M1-06-312-00-000](#) [M80-5000000M1-04-312-00-000](#) [M80-5000000M1-06-PM1-00-000](#) [M80-5000000M1-02-PM1-00-000](#) [M80-5000000M1-04-PM1-00-000](#) [M80-5000000M1-08-331-00-000](#) [M80-5000000M1-10-PM1-00-000](#) [M80-5000000M1-08-PM1-00-000](#) [M80-5000000M1-06-331-00-000](#) [M80-5000000M1-06-336-00-000](#) [M80-5000000M1-02-337-00-000](#) [M80-5000000M1-04-PM3-00-000](#) [M80-5000000M1-03-PM5-00-000](#) [M80-5000000M1-04-333-00-000](#) [M80-5000000M1-06-335-00-000](#) [M80-5000000M1-02-336-00-000](#) [M80-5000000M1-05-331-00-000](#) [M80-5000000M1-03-333-00-000](#) [M80-5000000M1-08-335-00-000](#) [M80-5000000M1-10-335-00-000](#)