

Customer Information Sheet

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

IF IN DOUBT - ASK

©

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

JACKSCREW = STAINLESS STEEL

FINISH:

COAX CONTACT

BODY, SLEEVE, INNER CONTACT, END PLUG = GOLD

LATCHING COLLAR: = NICKEL

ELECTRICAL:

INSULATION RESISTANCE = $100M\Omega$ MIN

COAX CONTACT:

FREQUENCY RANGE = 6GHz

IMPEDANCE = 50Ω

V.S.W.R = $1.05 + (0.04 \times \text{FREQUENCY})$ GHz MAX

CONTACT RESISTANCE $6m\Omega$ MAX

INSULATION RESISTANCE = $10^6M\Omega$ @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

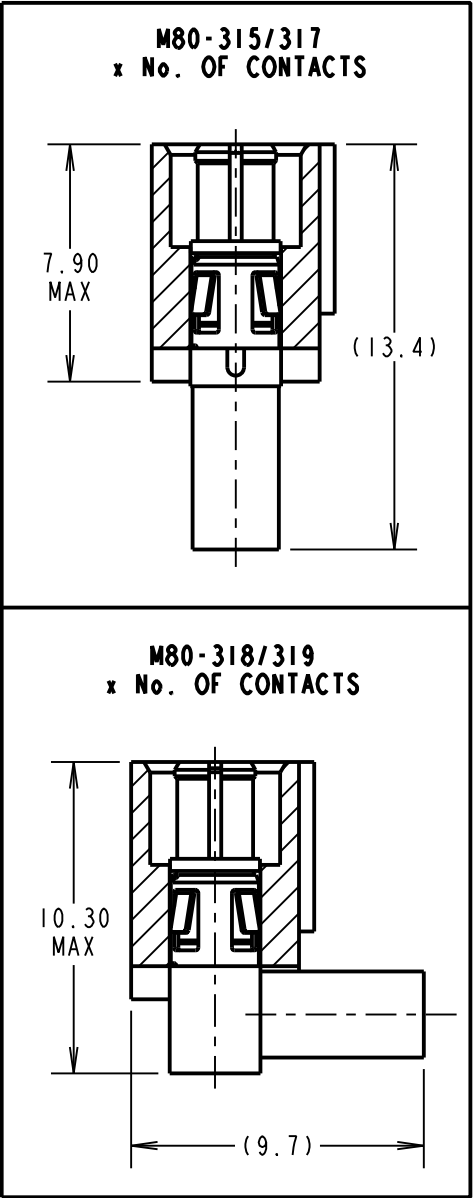
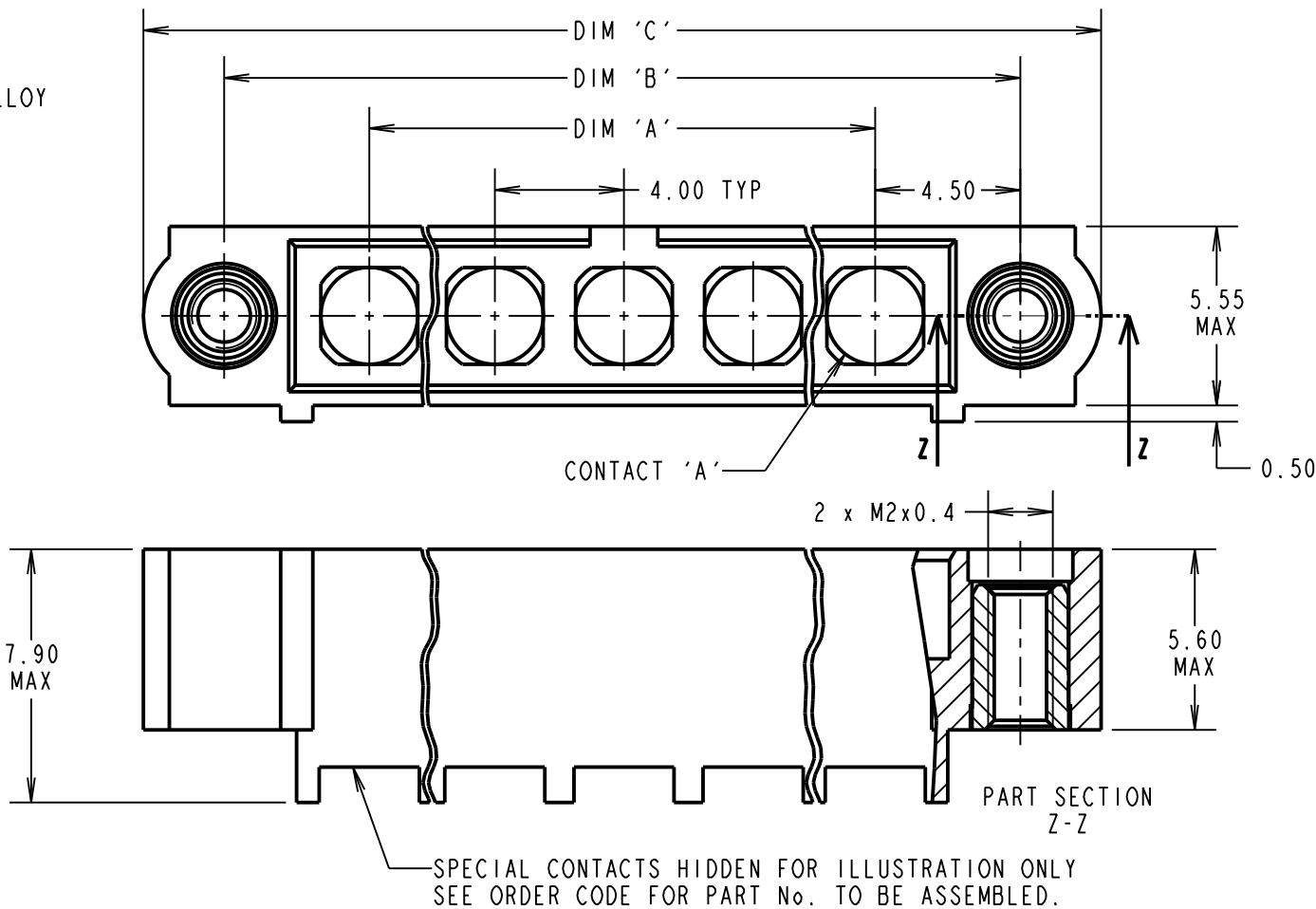
PACKING:

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

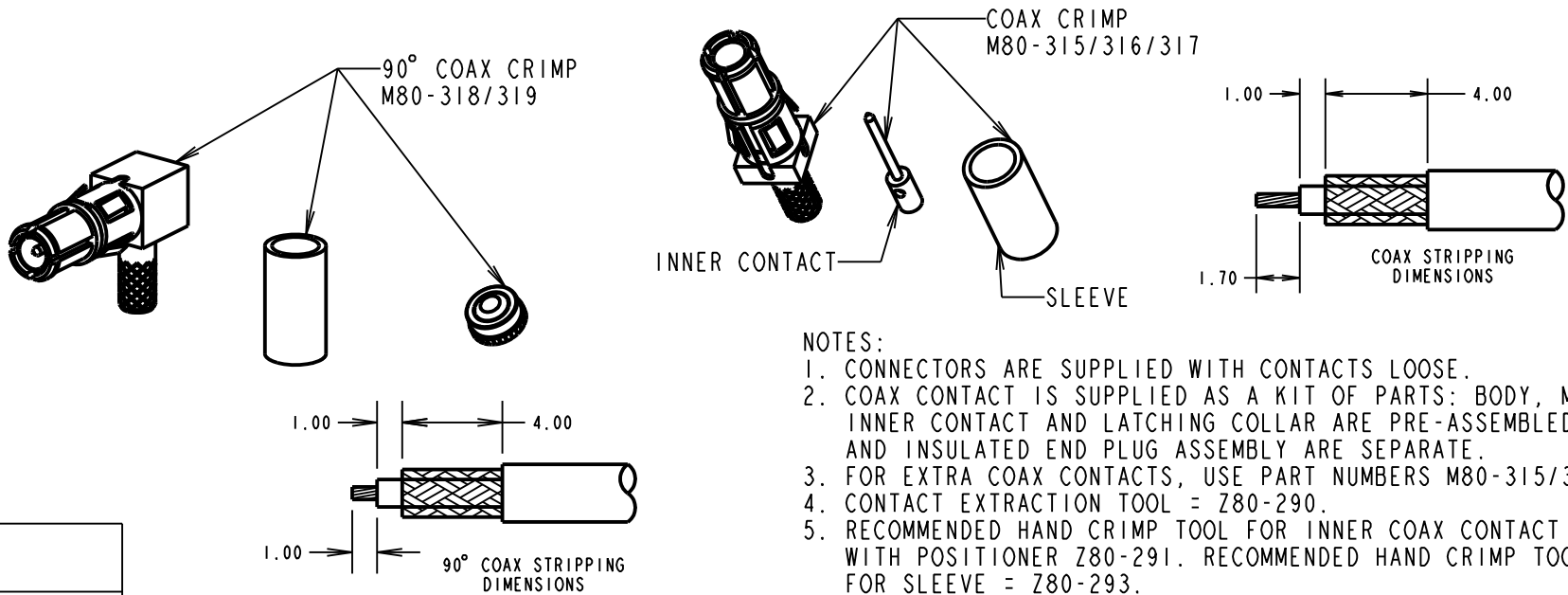
SPECIAL CONTACTS (CRIMP)

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



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.

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	

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TOLERANCES
X. = $\pm 1mm$
X.X = $\pm 0.50mm$
X.XX = $\pm 0.10mm$
X.XXX = $\pm 0.01mm$
ANGLES = $\pm 5^\circ$
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
5 OF 8

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

Customer Information Sheet

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

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:

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

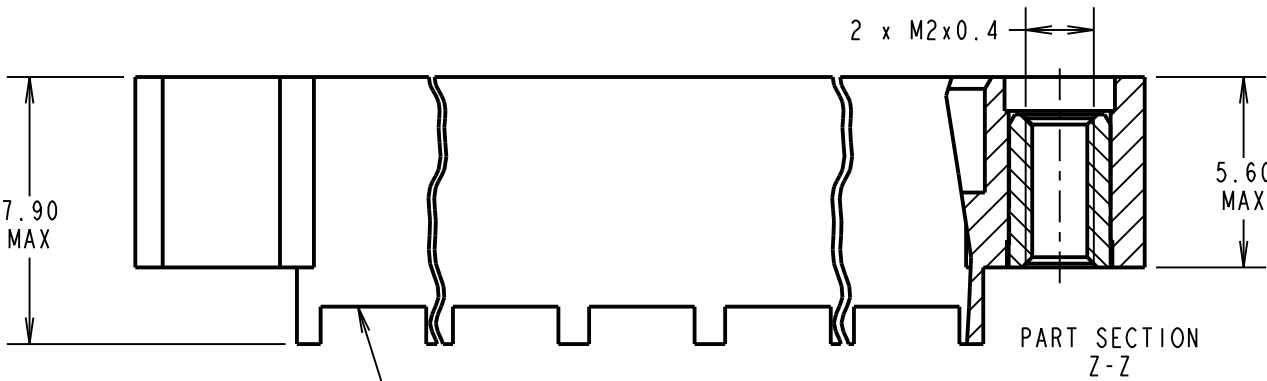
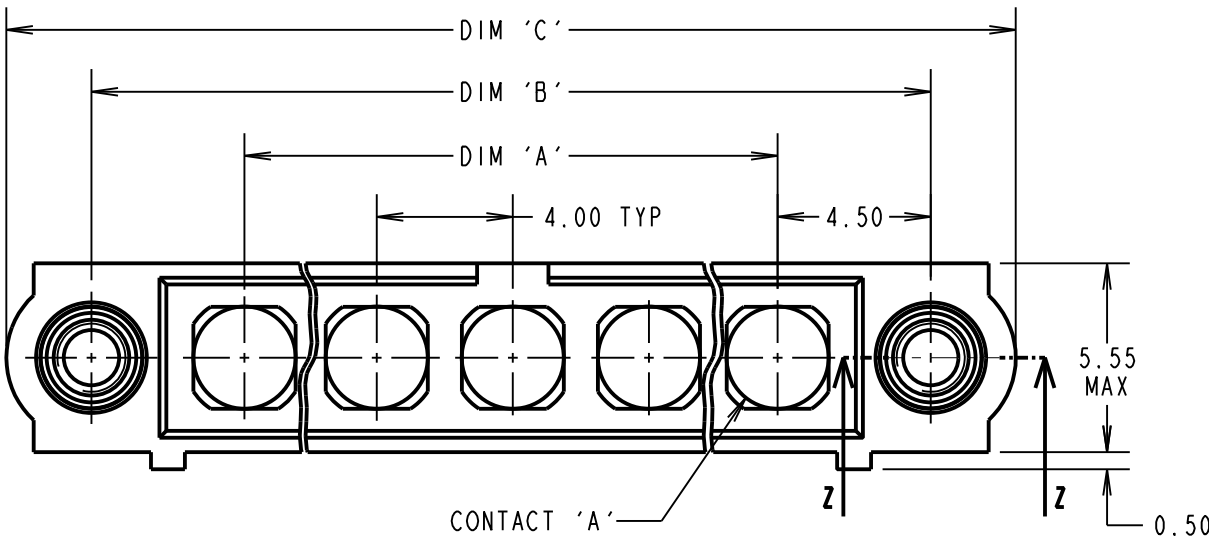
PACKING:

BAG

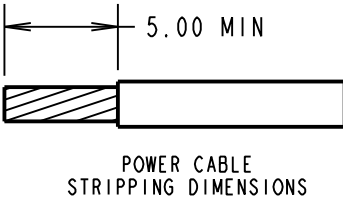
FOR COMPLETE SPECIFICATION SEE COMPONENT

SPECIFICATION C005XX (LATEST ISSUE)

POWER CRIMP/SOLDER CONTACTS ONLY

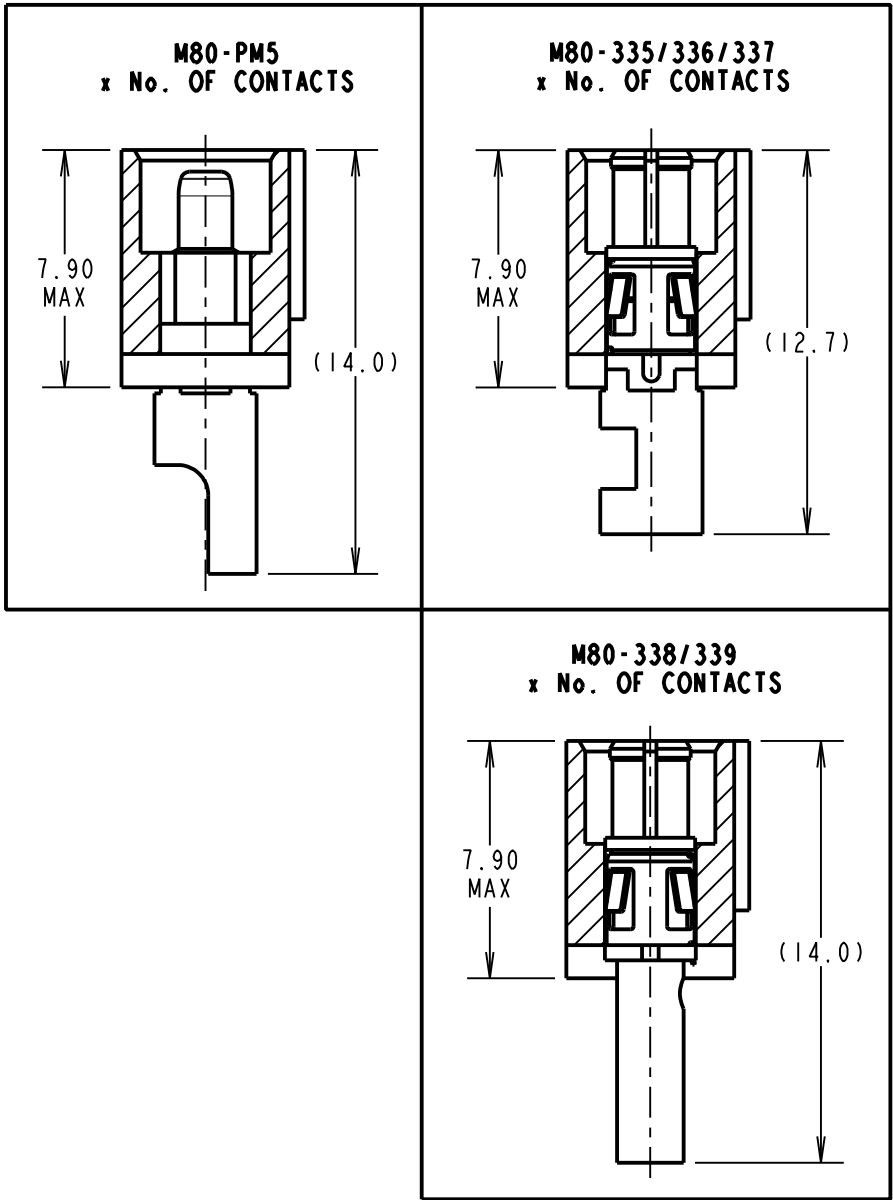


SPECIAL CONTACTS HIDDEN FOR ILLUSTRATION ONLY
SEE ORDER CODE FOR PART No. TO BE ASSEMBLED.



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.



ORDER CODE: (POWER CRIMP/SOLDER CONTACTS)

M80-5000000MI-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, M80-5000000MI-10-335-00-000 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.0mm	

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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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

6 OF 8

Customer Information Sheet

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

IF IN DOUBT - ASK

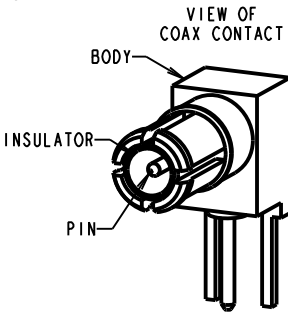
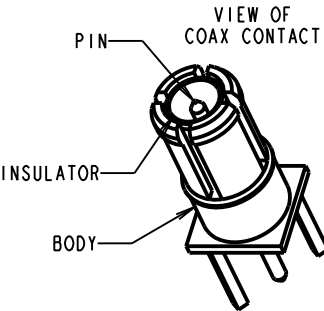
©

NOT TO SCALE

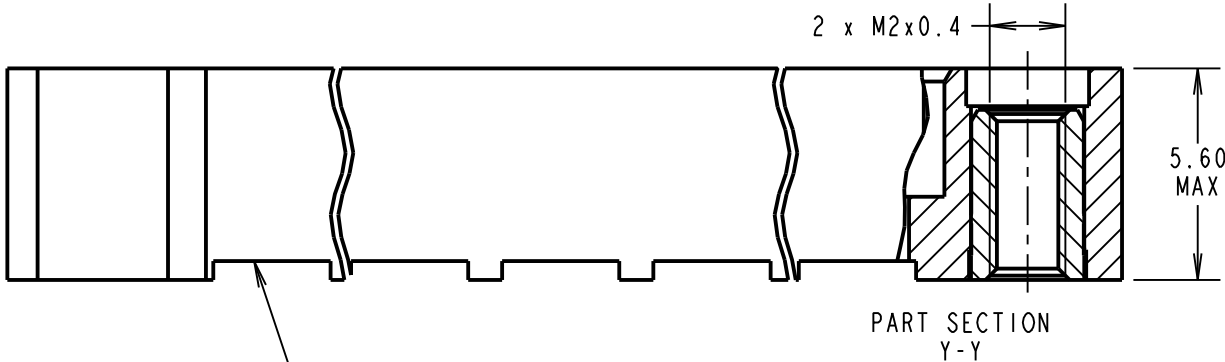
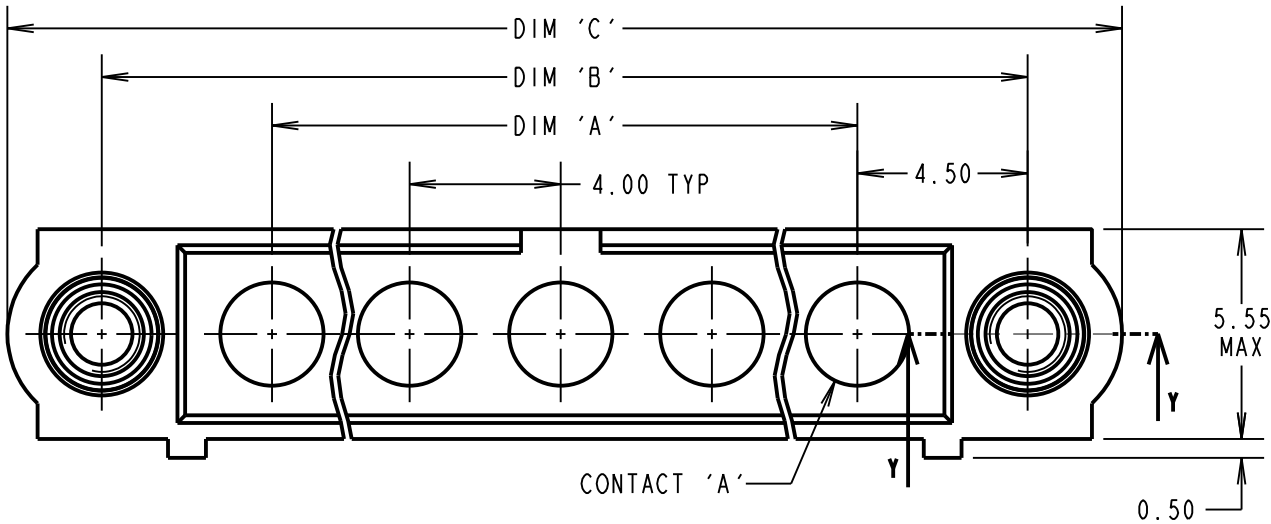
THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

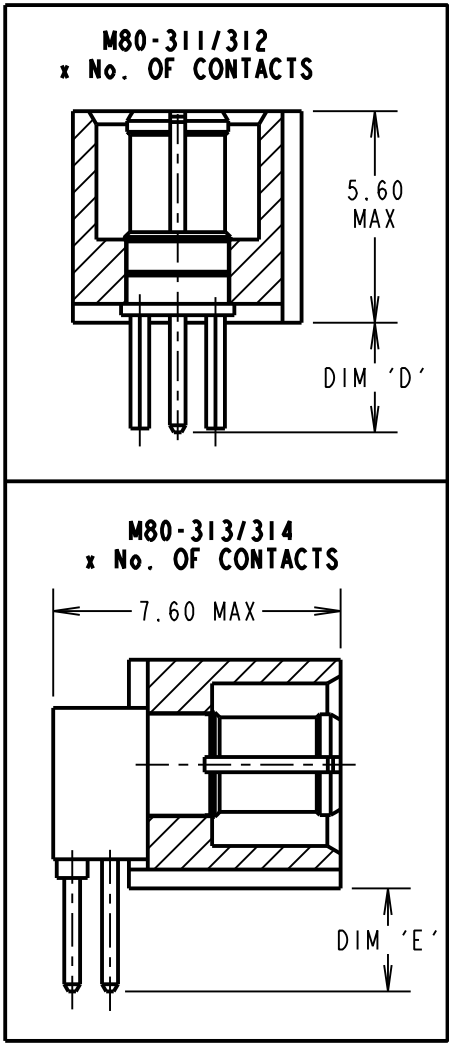
SPECIFICATIONS:
MATERIAL:
MOULDING: GLASS FILLED PPS, UL94V-0, BLACK
COAX CONTACT:
BODY, INNER CONTACT, = COPPER ALLOY
INSULATOR = PTFE
JACKSCREW: STAINLESS STEEL
FINISH:
COAX CONTACT:
BODY, INNER CONTACT, = GOLD
ELECTRICAL:
INSULATION RESISTANCE = 100MΩ MIN
COAX CONTACT:
FREQUENCY RANGE = 6GHz
IMPEDANCE = 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



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

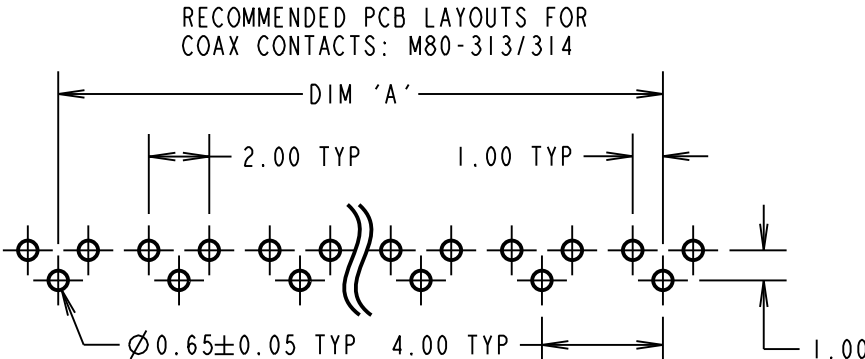
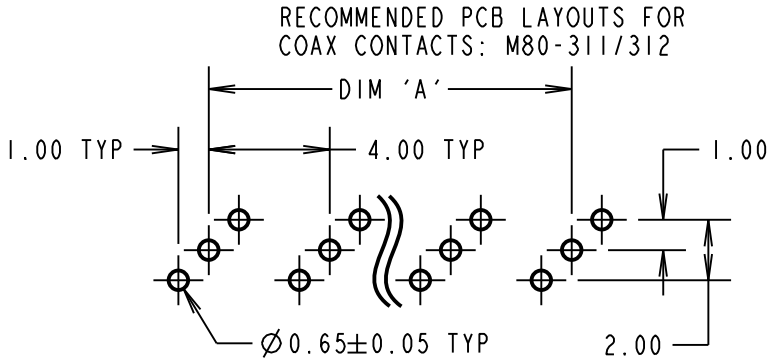


ORDER CODE:
(COAX PC TAIL CONTACTS ONLY)
M80-5000000MI-XX-XXX-00-000

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

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	



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

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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 7 OF 8

Customer Information Sheet

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

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

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

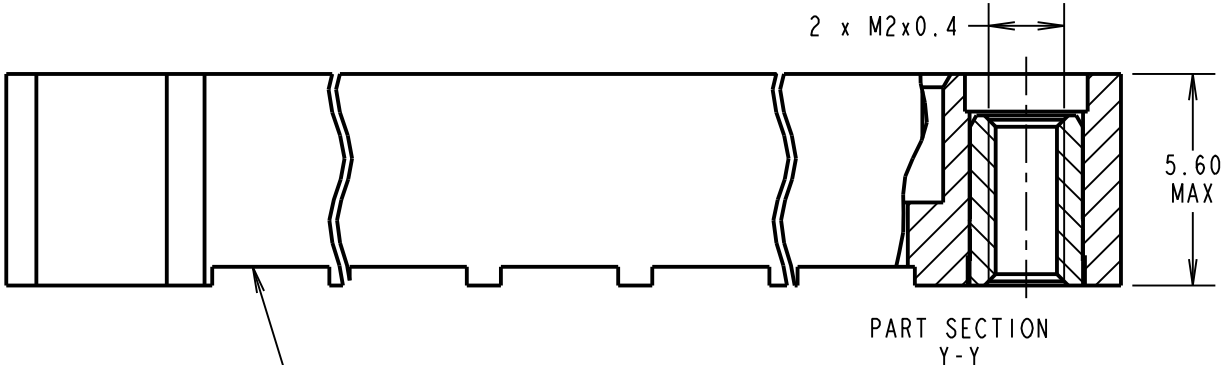
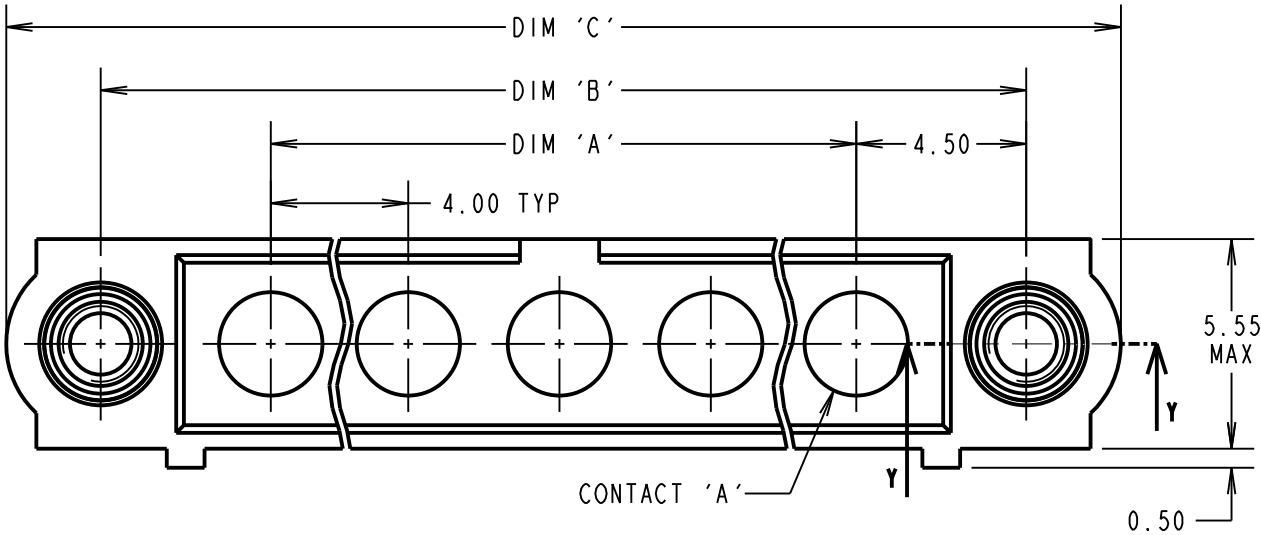
PACKING:

TUBE

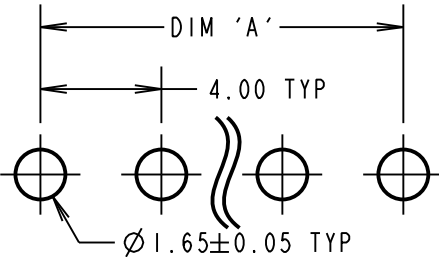
FOR COMPLETE SPECIFICATION SEE COMPONENT

SPECIFICATION C005XX (LATEST ISSUE)

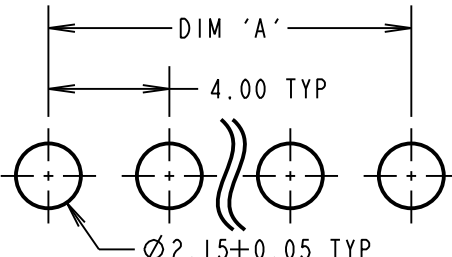
POWER PC TAIL AND SMT CONTACTS ONLY



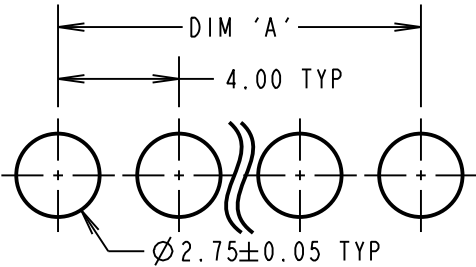
RECOMMENDED PCB LAYOUT FOR
M80-331/332/333/334
PC TAIL POWER CONTACTS



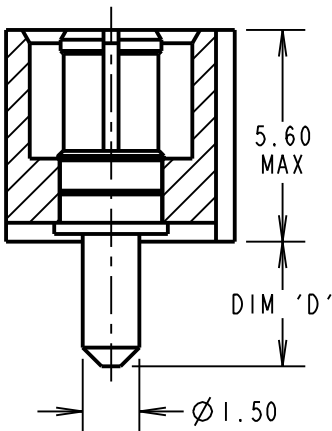
RECOMMENDED PCB LAYOUT FOR
M80-PM1/PM2/PM3/PM4
PC TAIL POWER CONTACTS



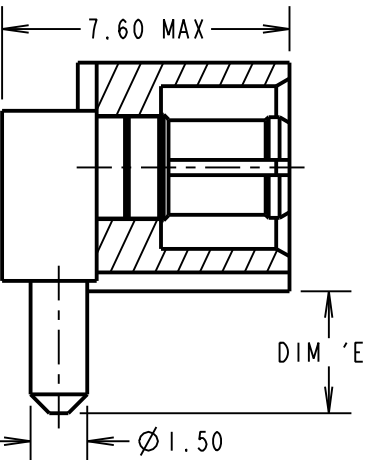
RECOMMENDED PCB LAYOUT FOR
M80-33A SMT POWER CONTACTS



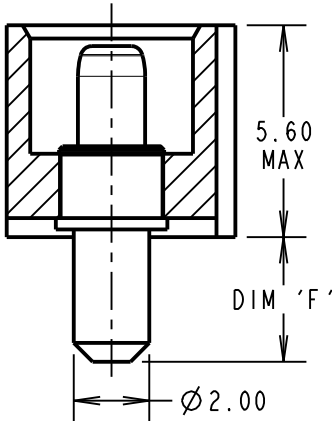
M80-331/332
x No. OF CONTACTS



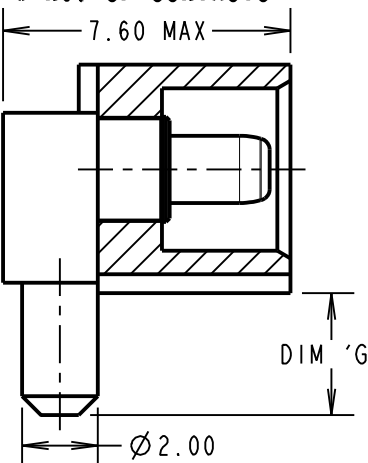
M80-333/334
x No. OF CONTACTS



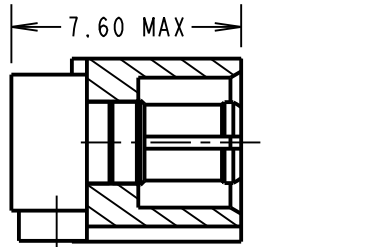
M80-PM1/PM2
x No. OF CONTACTS



M80-PM3/PM4
x No. OF CONTACTS



M80-33A
x No. OF CONTACTS



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

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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

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