

Customer Information Sheet

DRAWING No.: M80-4000000F9-XX-XXX-00-000

SHEET 4 OF 6

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, NUT = 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:

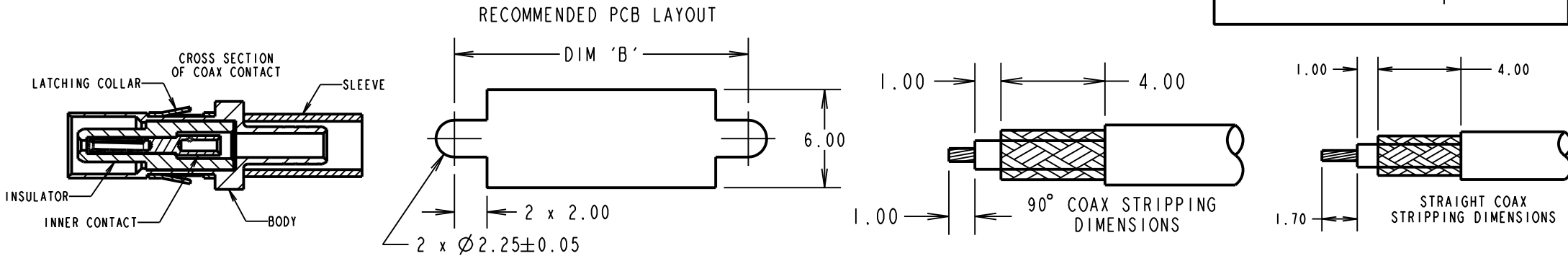
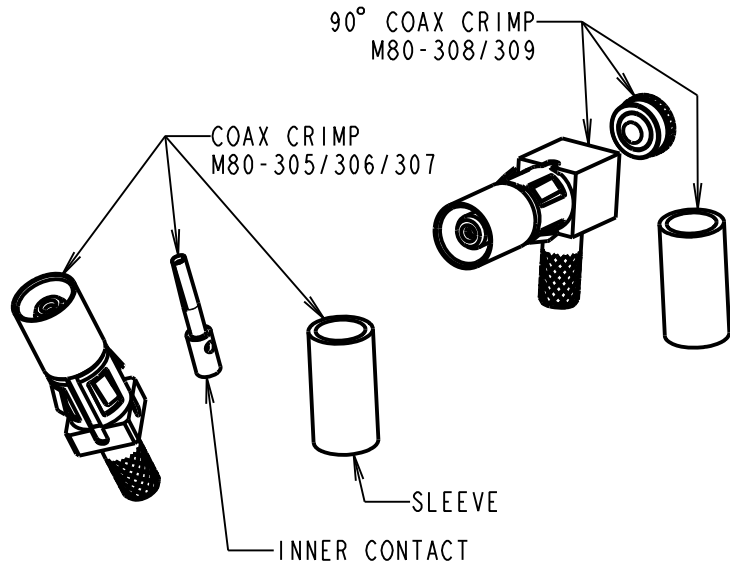
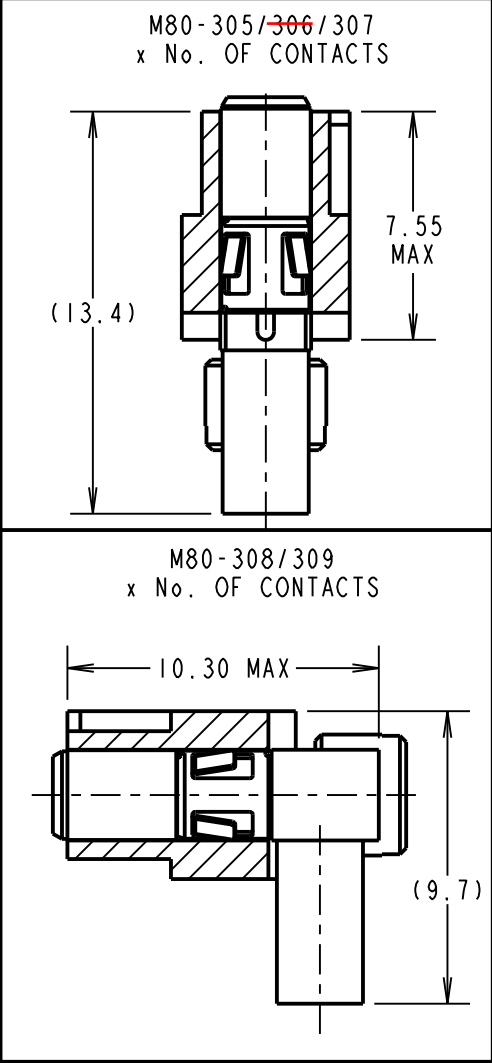
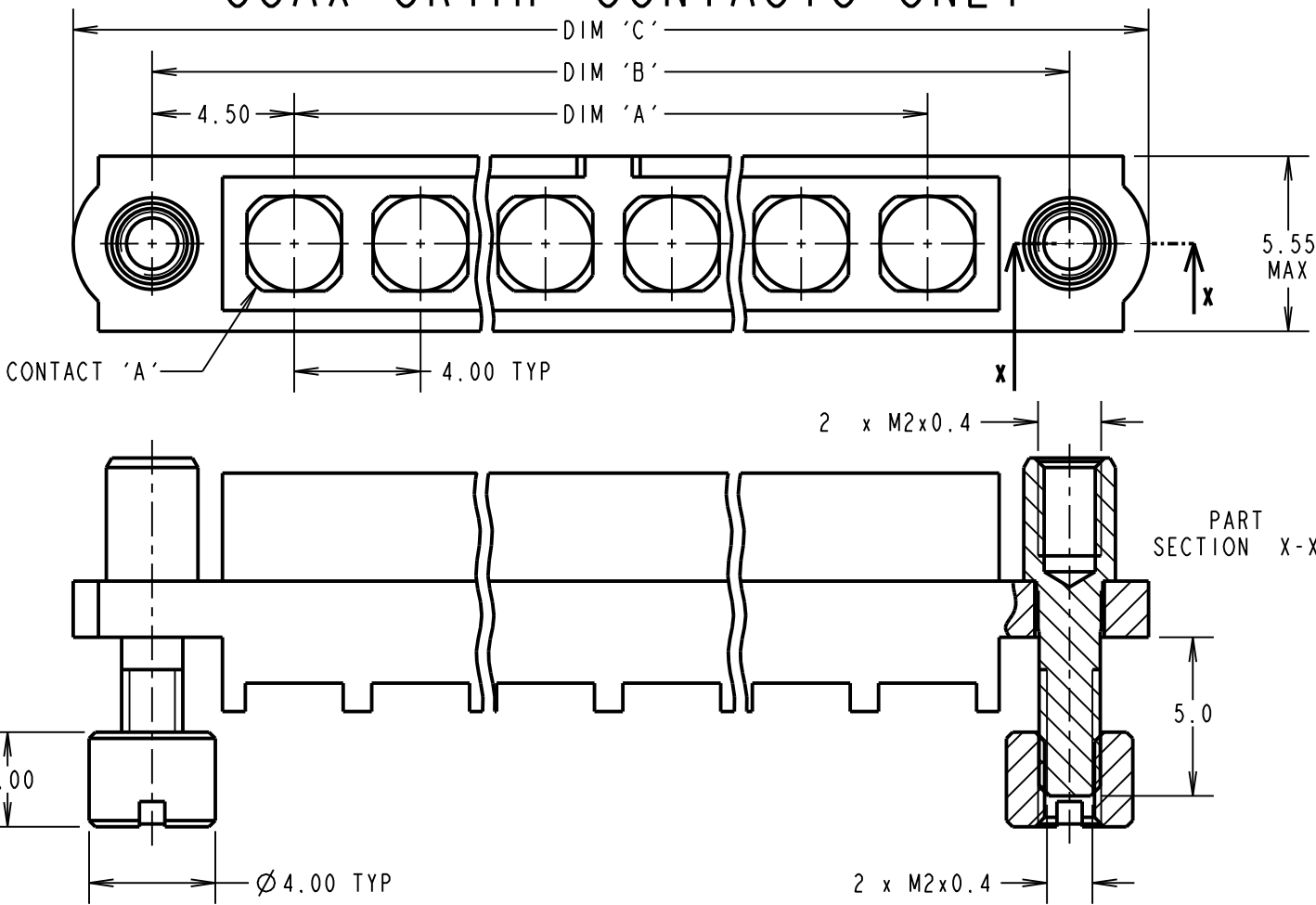
TEMPERATURE RANGE = -55°C TO +125°C

PACKING:

BAG

FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)

COAX CRIMP CONTACTS ONLY



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 M80-305/~~306~~/307/308/309.
- 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 ONLY)

M80-4000000F9-XX-XXX-00-000

TOTAL No. OF CONTACTS
02 TO 12

SPECIAL CONTACTS

305 = COAX CONTACT 2.00mm CRIMP M80-305
~~306 = COAX CONTACT 2.40mm CRIMP M80-306~~
307 = COAX CONTACT 2.70mm CRIMP M80-307
308 = COAX CONTACT 2.00mm HORIZ' CRIMP M80-308
309 = COAX CONTACT 2.70mm HORIZ' CRIMP M80-309

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,
M80-4000000F9-08-305-00-000
DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.0mm

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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
FEMALE ASSEMBLY WITH
BOARDMOUNT JACKSCREWS

DRAWING NUMBER:

M80-4000000F9-XX-XXX-00-000

SHT
4 OF 6

MGP	5	10.01.18	21020
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SB			
DRAWN: C.PENROSE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

Customer Information Sheet

DRAWING No.: M80-4000000F9-XX-XXX-00-000

SHEET 5 OF 6

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, SLEEVE, INNER CONTACT, END PLUG = COPPER ALLOY
LATCHING COLLAR = BERYLLIUM COPPER
INSULATOR = PTFE
JACKSCREW, NUT = 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

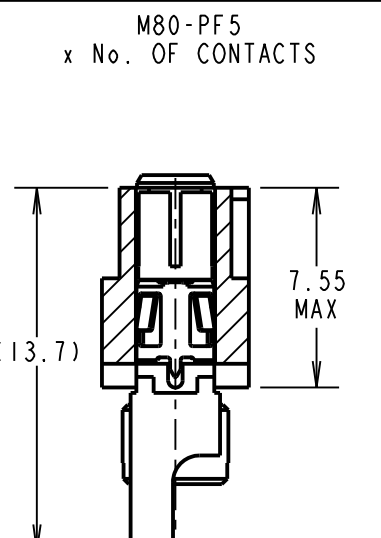
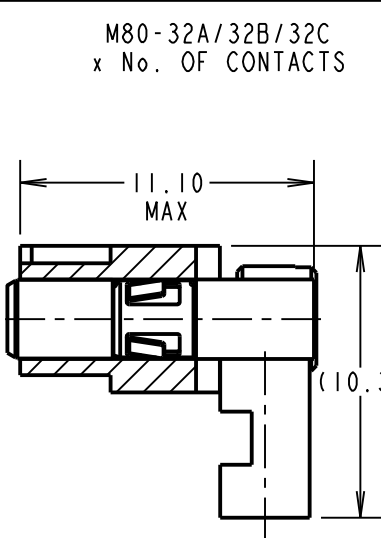
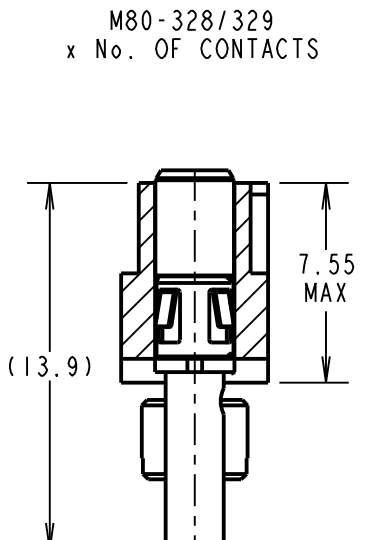
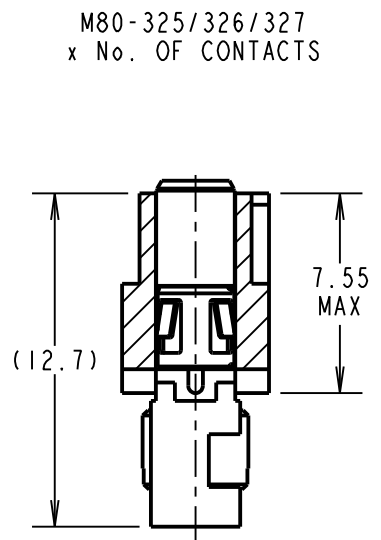
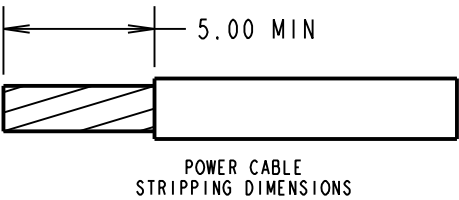
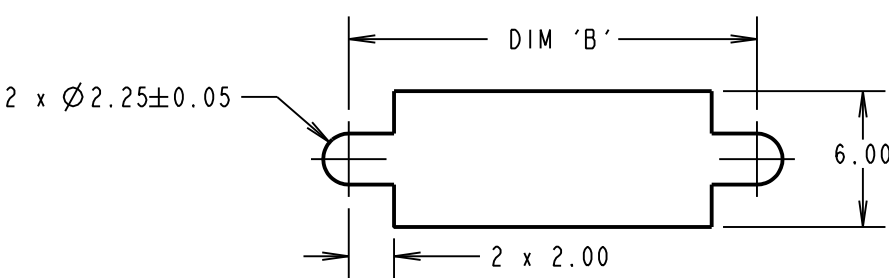
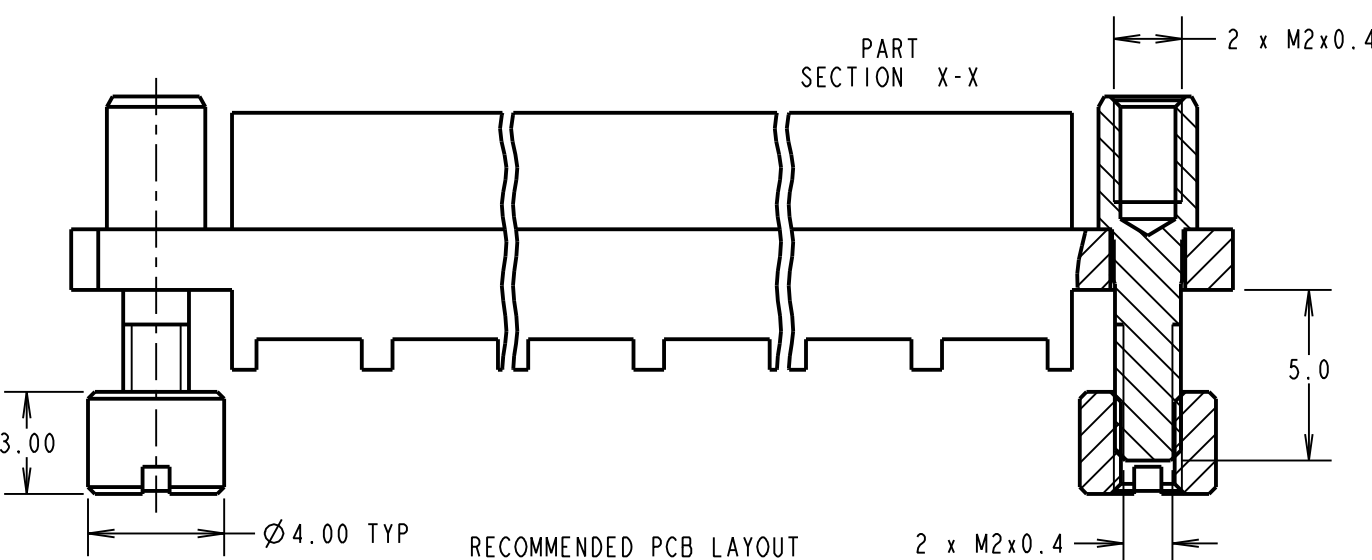
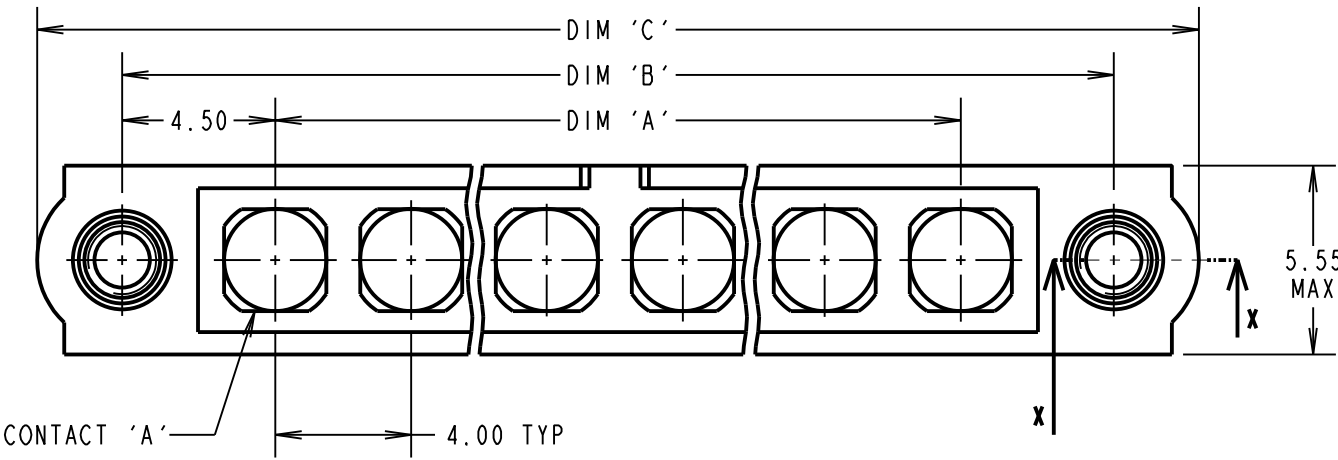
POWER CONTACT:
CONTACT RESISTANCE = 6mΩ MAX
CURRENT RATING = M80-325 = 20A MAX WITH 12AWG
M80-326 = 15A MAX WITH 14AWG
M80-327 = 10A MAX WITH 16AWG
M80-328 = 8A MAX WITH 18AWG
M80-329 = 5A MAX WITH 20AWG
M80-32A = 20A MAX WITH 12AWG
M80-32B = 15A MAX WITH 14AWG
M80-32C = 10A MAX WITH 16AWG
M80-PF5 = 40A MAX WITH 10AWG
CONTACT AS SPECIFIED

MECHANICAL:
DURABILITY = 500 OPERATIONS
POWER CONTACT:
INSERTION FORCE:
M80-325/326/327/328/329/
32A/32B/32C = 8N MAX
M80-PF5 = 15N MAX
WITHDRAWAL FORCE = 0.5N MIN

ENVIRONMENTAL:
TEMPERATURE RANGE:
M80-325/326/327/328/329/
32A/32B/32C = -55°C TO +125°C
M80-PF5 = -55°C TO +150°C

PACKING:
BAG
FOR COMPLETE SPECIFICATION SEE COMPONENT
SPECIFICATION C005XX (LATEST ISSUE)

POWER CRIMP & SOLDER CONTACTS ONLY



ORDER CODE: (POWER CRIMP/SOLDER CONTACTS ONLY)
M80-4000000F9-XX-XXX-00-000

TOTAL No. OF CONTACTS
02 TO 12

SPECIAL CONTACTS
325 = POWER CONTACT 12AWG SOLDER M80-325
326 = POWER CONTACT 14AWG SOLDER M80-326
327 = POWER CONTACT 16AWG SOLDER M80-327
328 = POWER CONTACT 18AWG SOLDER/CRIMP M80-328
329 = POWER CONTACT 20AWG SOLDER/CRIMP M80-329
32A = POWER CONTACT 12AWG HORIZ' SOLDER M80-32A
32B = POWER CONTACT 14AWG HORIZ' SOLDER M80-32B
32C = POWER CONTACT 16AWG HORIZ' SOLDER M80-32C
PF5 = POWER CONTACT 10AWG SOLDER M80-PF5

- CRIMP/SOLDER NOTES:**
- CONTACTS AND BOARD MOUNT NUTS ARE SUPPLIED WITH CONNECTOR, BUT NOT ASSEMBLED AS SHOWN FOR ILLUSTRATION.
 - FOR EXTRA POWER CONTACTS USE PART NUMBERS M80-325/326/327/328/329/32A/32B/32C/PM5.
 - POWER CONTACT EXTRACTION TOOL = Z80-290.
 - RECOMMENDED HAND CRIMP TOOL FOR CONTACTS 328/329 = Z80-294 AND POSITIONER Z80-295.
 - 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 2: CONNECTOR WITH 10 POWER CONTACTS,
M80-4000000F9-10-325-00-000
DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.0mm

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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
FEMALE ASSEMBLY WITH
BOARDMOUNT JACKSCREWS

DRAWING NUMBER:

M80-4000000F9-XX-XXX-00-000

SHT

5

OF

6

MGP	5	10.01.18	21020
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SB			
DRAWN: C.PENROSE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

Customer Information Sheet

DRAWING No.: M80-400000F9-XX-XXX-00-000

SHEET 6 OF 6

IF IN DOUBT - ASK

©

NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

RECOMMENDED PCB LAYOUT FOR
POWER CONTACTS: M80-321/322

RECOMMENDED PCB LAYOUT FOR
COAX CONTACTS: M80-301/302

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:

M80-321/322 = 20A MAX

M80-PF1/PF2 = 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:

M80-321/322 = 8N MAX

M80-PF1/PF2 = 15N MAX

WITHDRAWAL FORCE = 0.5N MIN

COAX CONTACT:

INSERTION FORCE = 8N MAX

WITHDRAWAL FORCE = 0.5N MIN

ENVIRONMENTAL:

TEMPERATURE RANGE:

M80-301/302/321/322 = -55°C TO +125°C

M80-PF1/PF2 = -55°C TO +150°C

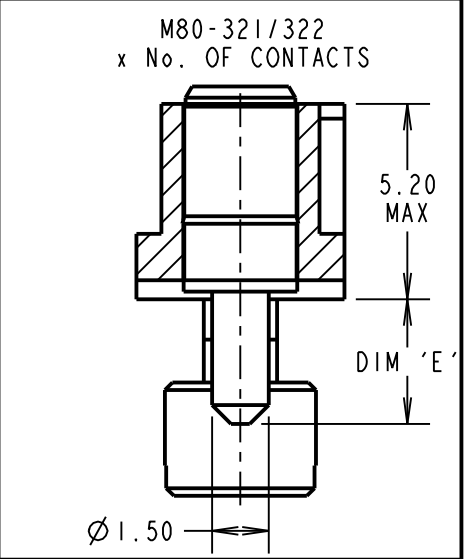
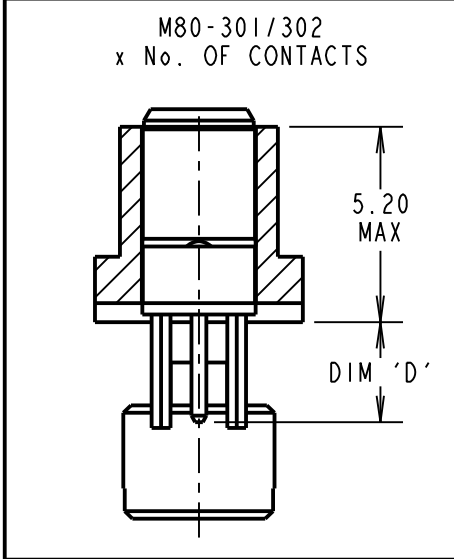
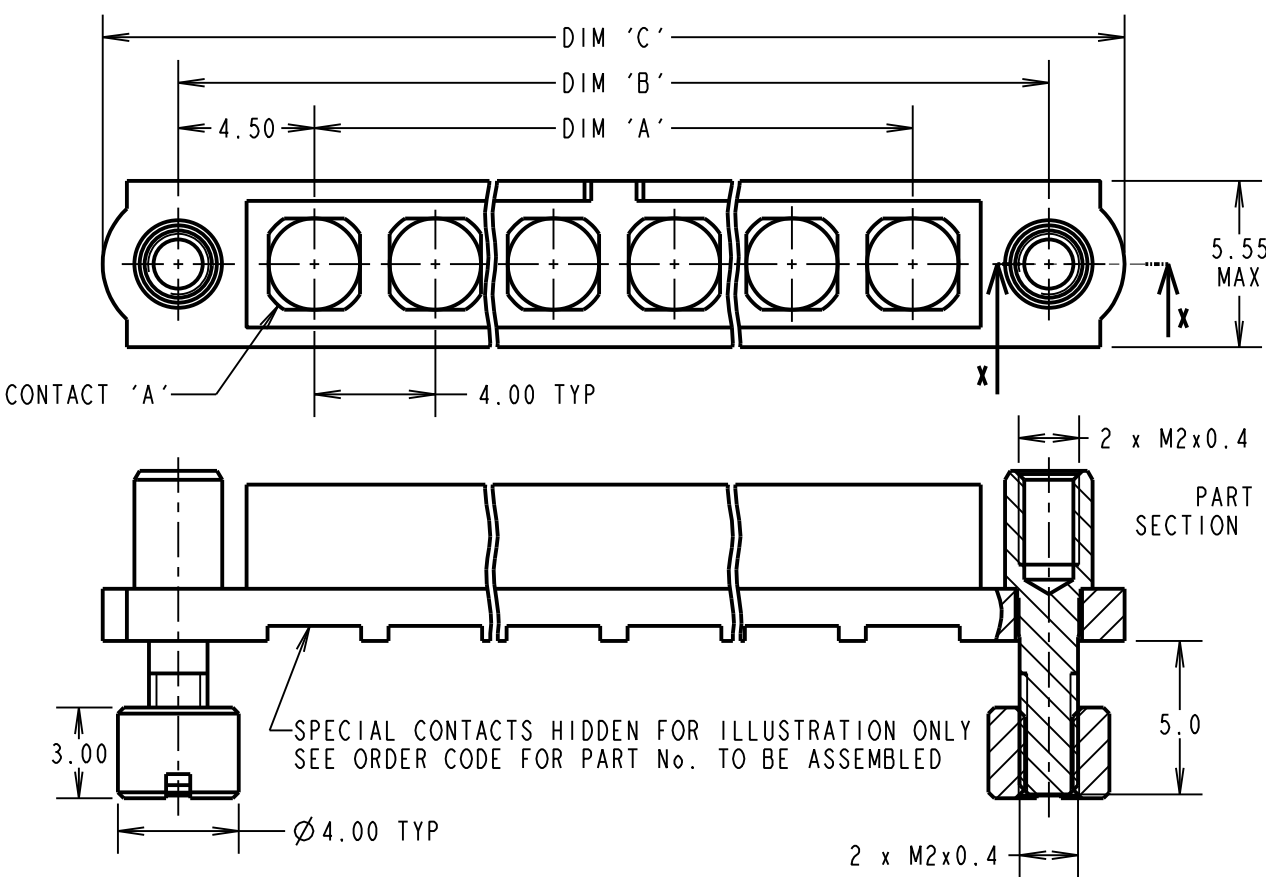
PACKING:

TUBE

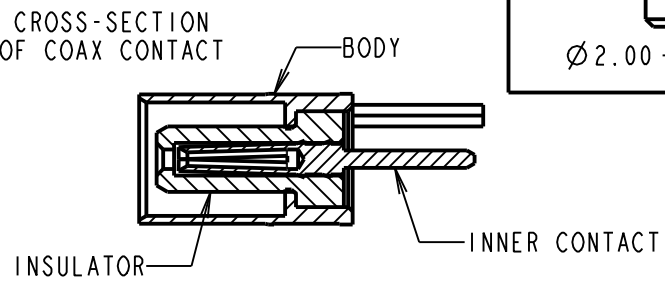
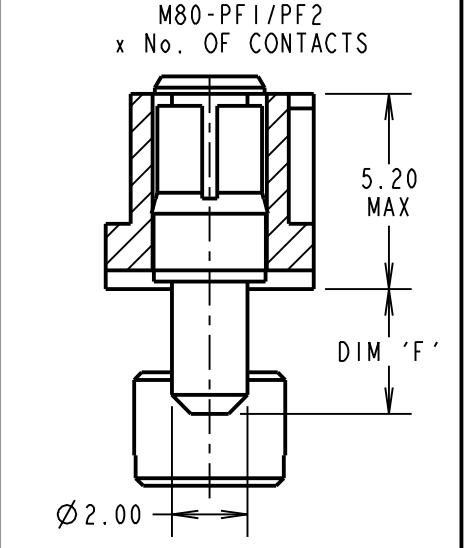
FOR COMPLETE SPECIFICATION SEE COMPONENT

SPECIFICATION C005XX (LATEST ISSUE)

VERTICAL PC TAIL CONTACTS ONLY



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



ORDER CODE: (PC TAIL CONTACTS ONLY)
M80-400000F9-XX-XXX-00-000

TOTAL No. OF CONTACTS
02 TO 12

SPECIAL CONTACTS

301 = COAX CONTACT 3.0mm PC TAIL M80-301

302 = COAX CONTACT 4.5mm PC TAIL M80-302

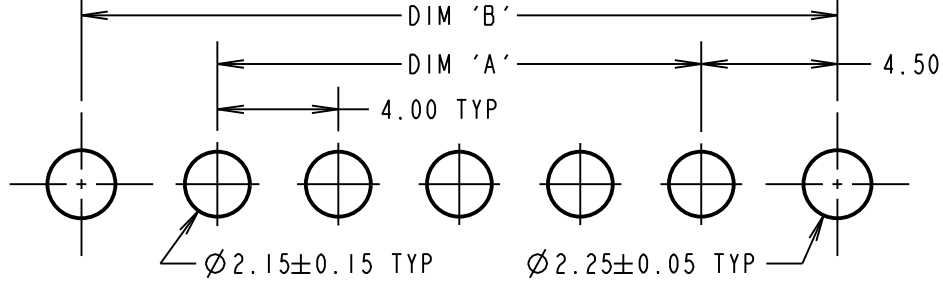
321 = 20A POWER CONTACT 3.5mm VERT' PC TAIL M80-321

322 = 20A POWER CONTACT 5.0mm VERT' PC TAIL M80-322

PF1 = 40A POWER CONTACT 3.5mm VERT' PC TAIL M80-PF1

PF2 = 40A POWER CONTACT 5.0mm VERT' PC TAIL M80-PF2

RECOMMENDED PCB LAYOUT FOR
POWER CONTACTS: M80-PF1/PF2



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'	M80-301 = 3.0mm, M80-302 = 4.5mm
DIM 'E'	M80-321 = 3.5mm, M80-322 = 5.0mm
DIM 'F'	M80-PF1 = 3.5mm, M80-PF2 = 5.0mm

EXAMPLE 1: CONNECTOR WITH 08 COAX CONTACTS,
M80-400000F9-08-301-00-000
DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.0mm
DIM 'D' = 3.0mm

EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS,
M80-400000F9-10-PF1-00-000
DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.0mm
DIM 'F' = 3.5mm

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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
FEMALE ASSEMBLY WITH
BOARDMOUNT JACKSCREWS
DRAWING NUMBER: **M80-400000F9-XX-XXX-00-000**
SHT 6 OF 6

MGP	5	10.01.18	21020
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SB			
DRAWN: C.PENROSE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

Mouser Electronics

Authorized Distributor

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[M80-4000000F9-03-322-00-000](#) [M80-4000000F9-02-321-00-000](#) [M80-4000000F9-03-321-00-000](#) [M80-4000000F9-06-321-00-000](#) [M80-4000000F9-04-321-00-000](#) [M80-4000000F9-02-322-00-000](#) [M80-4000000F9-09-322-00-000](#) [M80-4000000F9-09-321-00-000](#)