

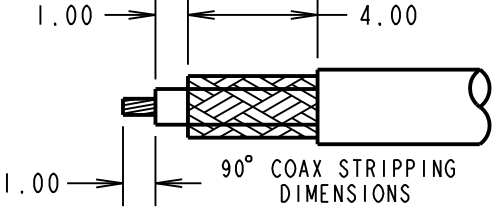
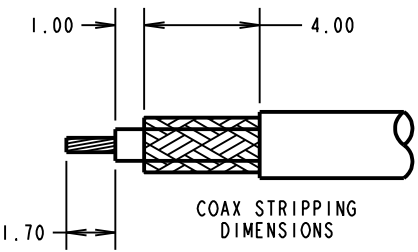
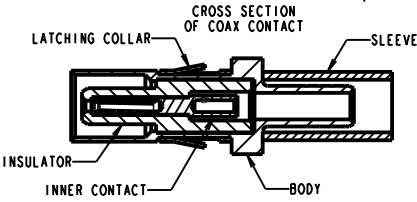
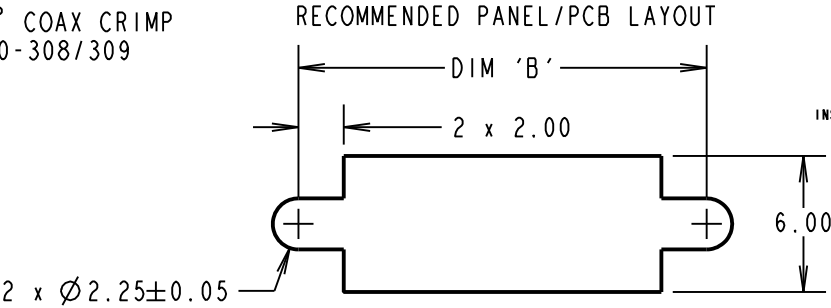
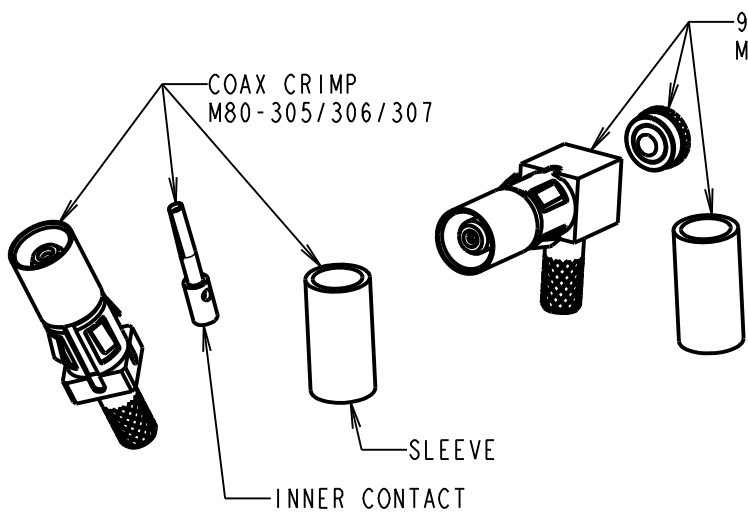
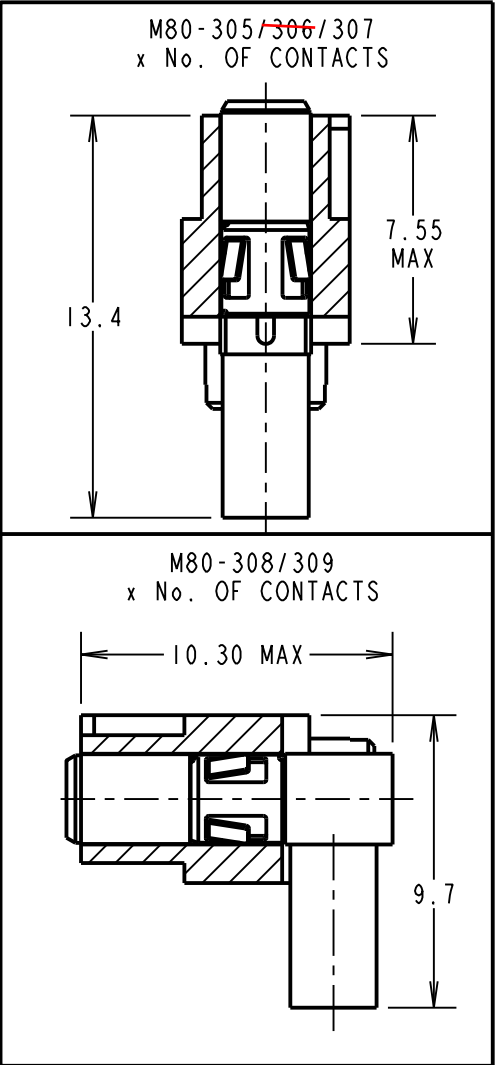
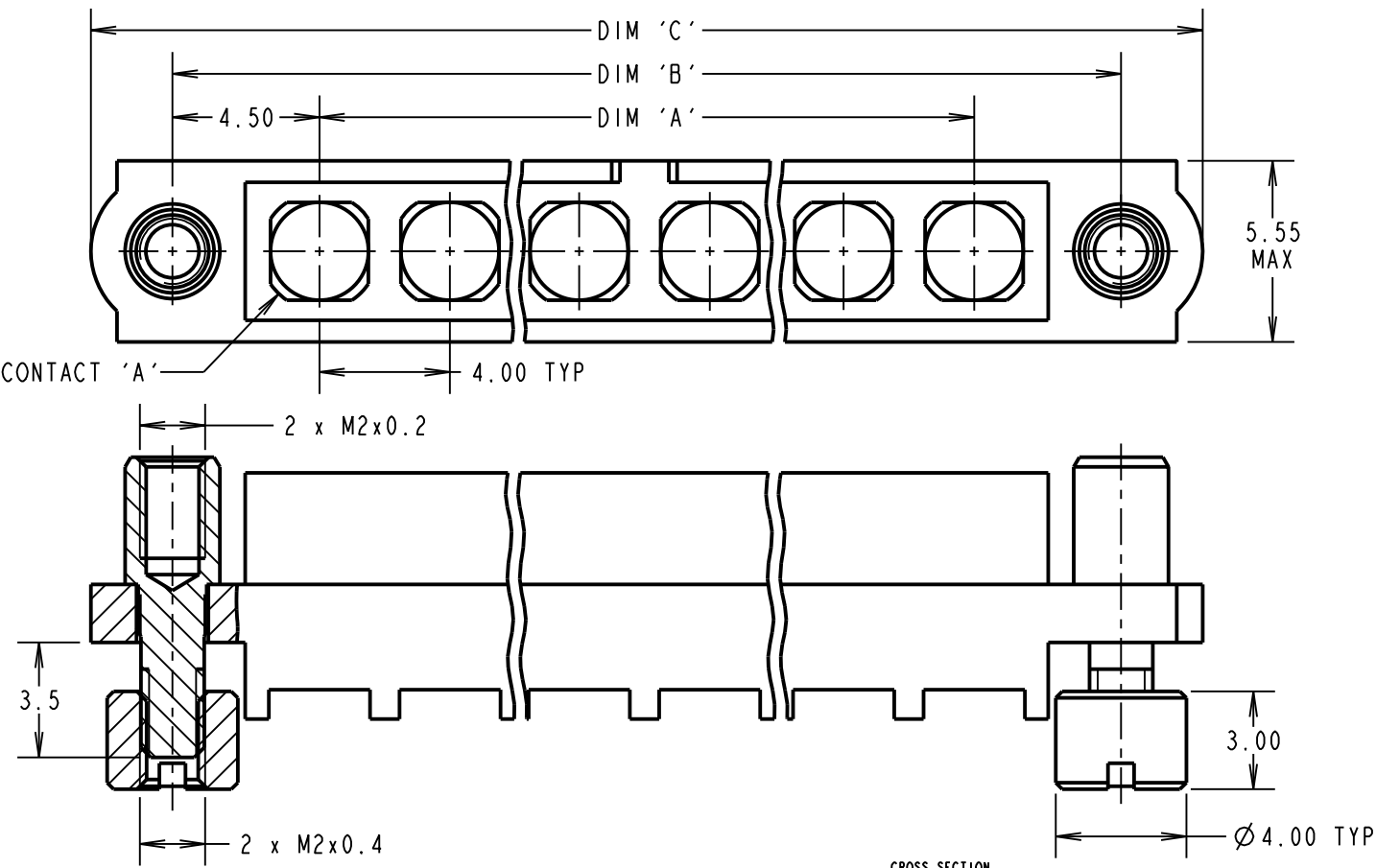
Customer Information Sheet

DRAWING No.: M80-4000000F8-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:
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 = 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:
- 1. CONTACTS AND BOARD MOUNT NUTS ARE SUPPLIED WITH CONNECTOR, BUT NOT ASSEMBLED AS SHOWN FOR ILLUSTRATION.
 - 2. 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.
 - 3. FOR EXTRA COAX CONTACTS, USE PART NUMBERS M80-305/~~306~~/307/308/309.
 - 4. COAX CONTACT EXTRACTION TOOL = Z80-290.
 - 5. 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.
 - 6. INSTRUCTION SHEETS ARE AVAILABLE.
 - 7. RECOMMENDED PANEL/PCN THICKNESS = 1.3 - 1.6mm.

ORDER CODE: (COAX CRIMP CONTACTS ONLY)
M80-4000000F8-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, M80-4000000F8-08-305-00-000 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.0mm	

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 FEMALE ASSEMBLY WITH BOARDMOUNT JACKSCREWS
DRAWING NUMBER: **M80-4000000F8-XX-XXX-00-000**
SHT 4 OF 6

MGP	5	12.01.18	21020
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SB			
DRAWN: C.PENROSE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

Customer Information Sheet

DRAWING No.: M80-4000000F8-XX-XXX-00-000

SHEET 6 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

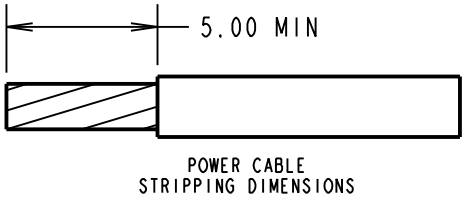
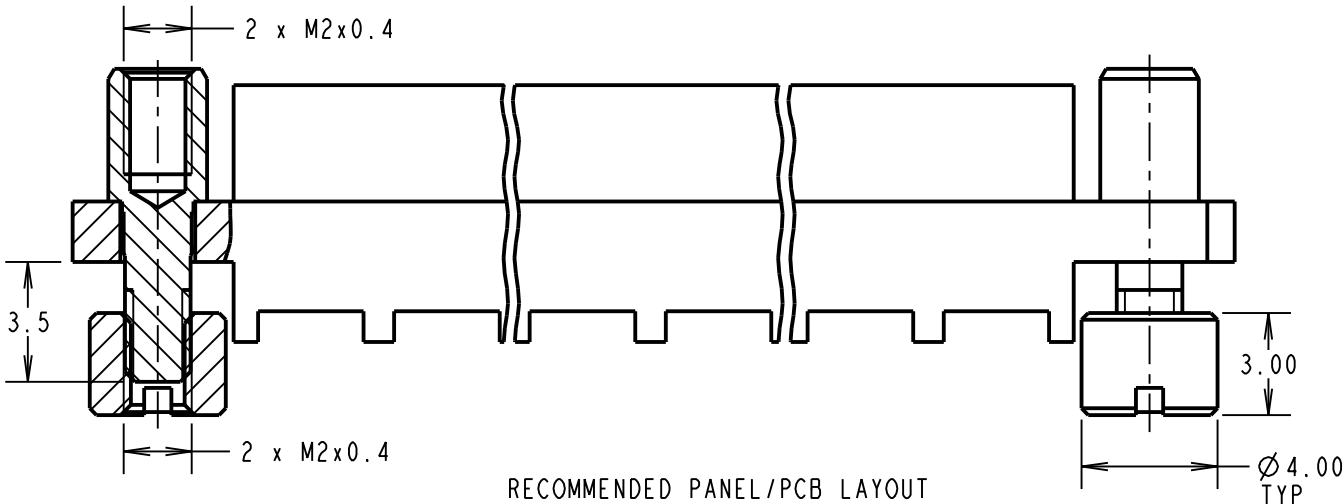
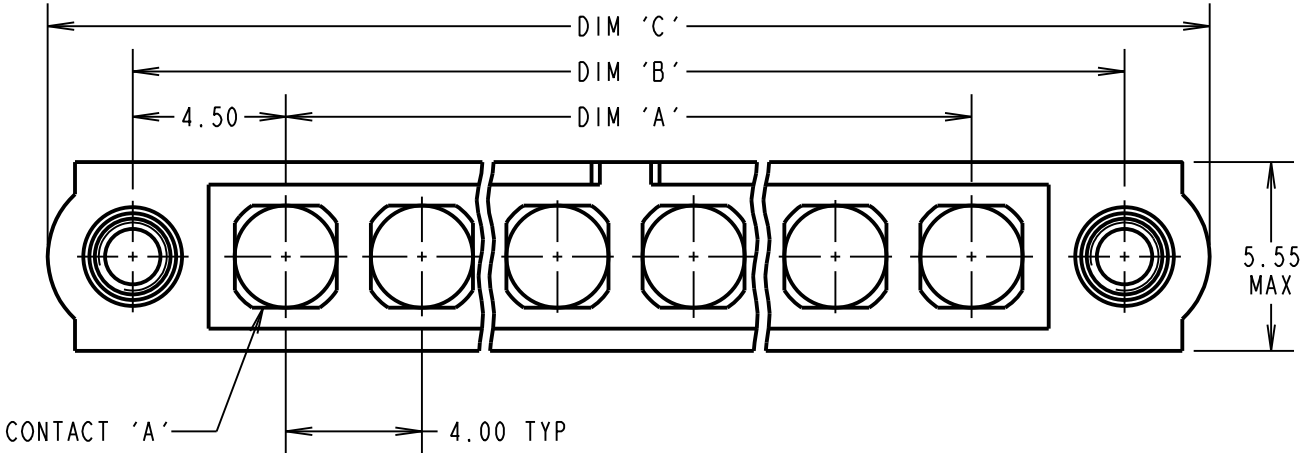
POWER CONTACT:
CONTACT RESISTANCE = 6mΩ MAX
CURRENT RATING = M80-325 = 20A MAX WITH 12AWG
M80-326 = 15A MAX WITH 14AWG
M80-327 = 10A MAX WITH 16AWG
M80-328 = 8A MAX WITH 18AWG
M80-329 = 5A MAX WITH 20AWG
M80-32A = 20A MAX WITH 12AWG
M80-32B = 15A MAX WITH 14AWG
M80-32C = 10A MAX WITH 16AWG
M80-PF5 =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

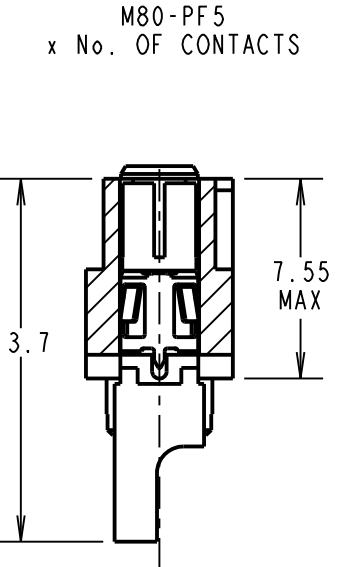
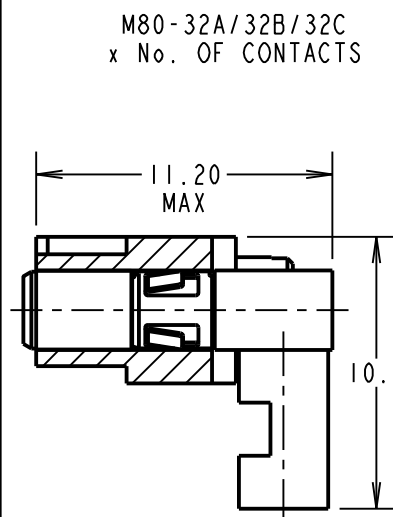
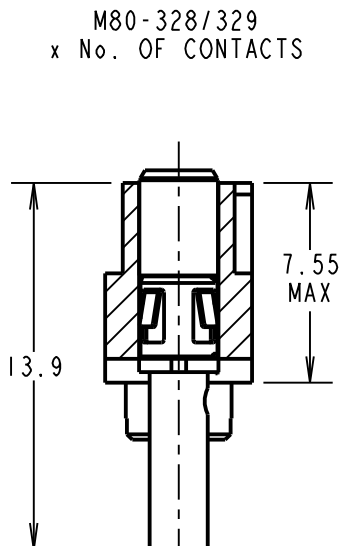
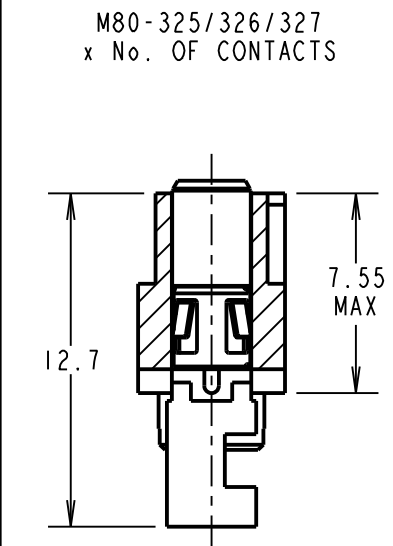
ENVIRONMENTAL:
TEMPERATURE RANGE:
M80-325/326/327/328/329/
32A/32B/32C = -55°C TO +125°C
M80-PF5 = -55°C TO +150°C

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

POWER CRIMP & SOLDER CONTACTS ONLY



POWER CABLE
STRIPPING DIMENSIONS



ORDER CODE: (POWER CRIMP/SOLDER CONTACTS ONLY)

M80-4000000F8-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.
 - RECOMMENDED PANL/PCB THICKNESS = 1.3 - 1.6mm.

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,
M80-4000000F8-10-325-00-000
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
FEMALE ASSEMBLY WITH
BOARDMOUNT JACKSCREWS

DRAWING NUMBER:

M80-4000000F8-XX-XXX-00-000

SHT

5 OF 6

MGP	5	12.01.18	21020
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SB			
DRAWN: C.PENROSE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

Customer Information Sheet

DRAWING No.: M80-4000000F8-XX-XXX-00-000

SHEET 6 OF 6

IF IN DOUBT - ASK

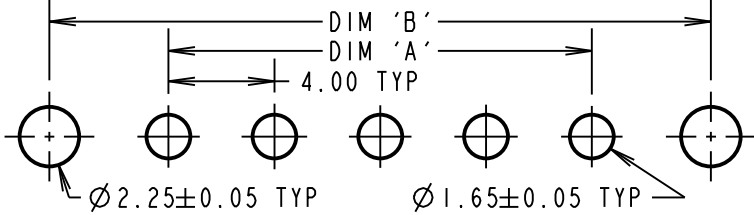
©

NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

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



SPECIFICATIONS:

MATERIAL:

MOULDING: GLASS FILLED PPS, UL94V-0, BLACK

POWER CONTACT: COPPER ALLOY

COAX CONTACT:

BODY = COPPER ALLOY

INNER CONTACT = COPPER ALLOY

INSULATOR = PTFE

JACK SCREW, 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

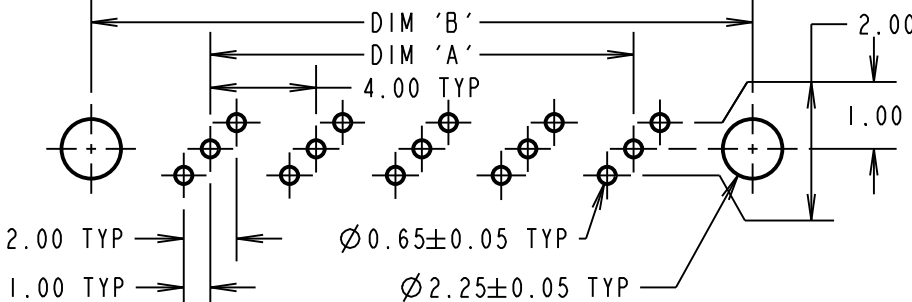
SPECIFICATION C005XX (LATEST ISSUE)

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

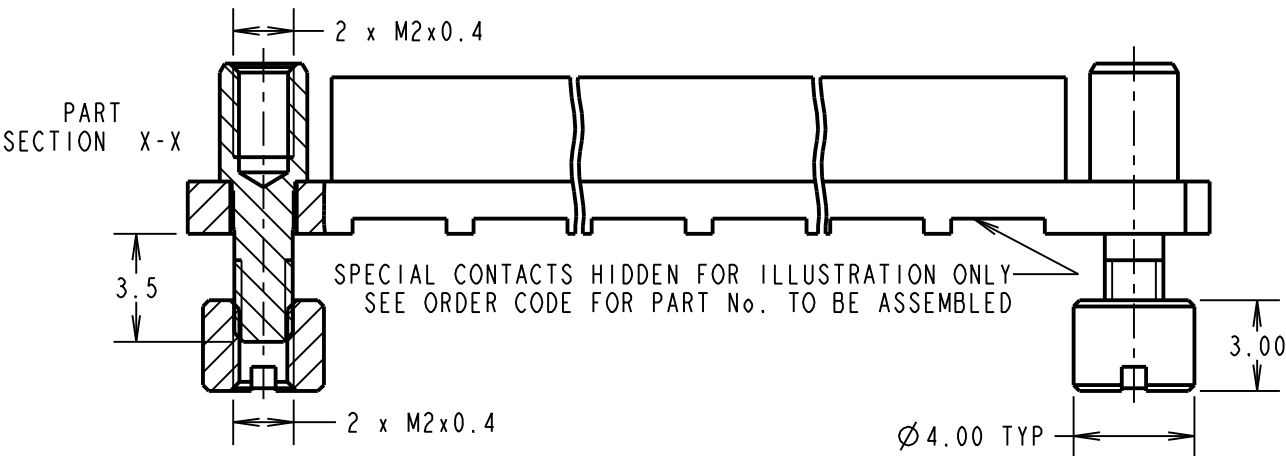
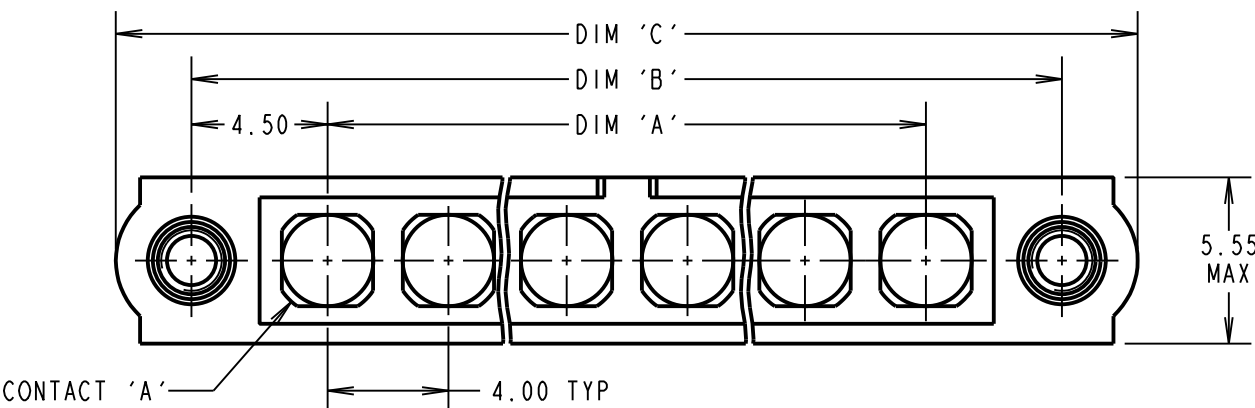
EXAMPLE 1: CONNECTOR WITH 08 COAX CONTACTS,
M80-4000000F8-08-301-00-000
DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.0mm
DIM 'D' = 3.0mm

EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS,
M80-4000000F8-10-PF1-00-000
DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.0mm
DIM 'F' = 3.5mm

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



VERTICAL PC TAIL CONTACTS ONLY



ORDER CODE: (PC TAIL CONTACTS ONLY)

M80-4000000F8-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

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
FEMALE ASSEMBLY WITH
BOARDMOUNT JACKSCREWS

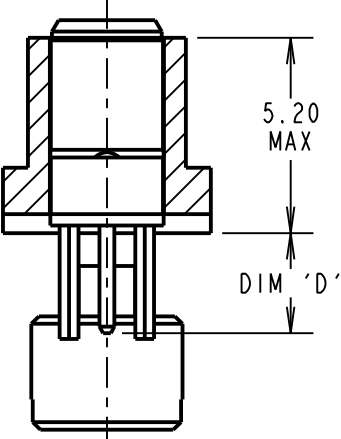
DRAWING NUMBER:

M80-4000000F8-XX-XXX-00-000

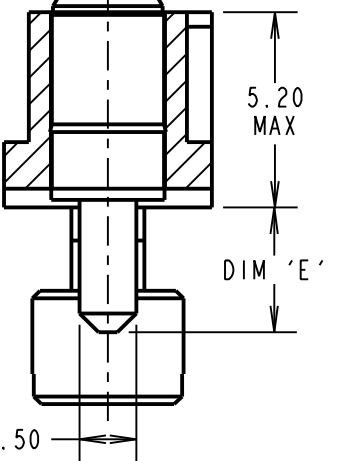
SHT

6 OF 6

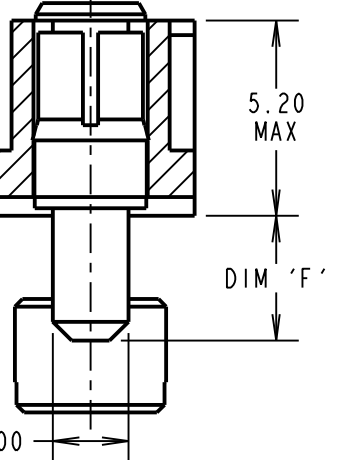
M80-301/302 x No. OF CONTACTS



M80-321/322 x No. OF CONTACTS



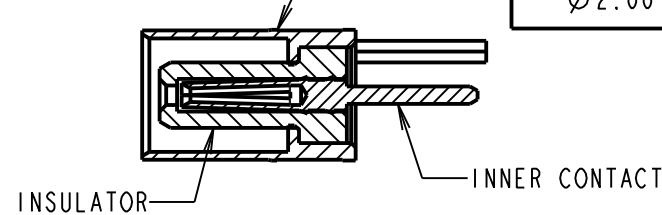
M80-PF1/PF2 x No. OF CONTACTS



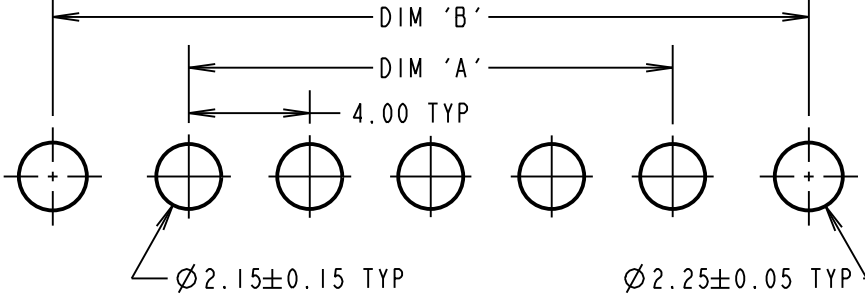
NOTE:

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

CROSS-SECTION OF COAX CONTACT



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



MGP	5	12.01.18	21020
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SB			
DRAWN: C.PENROSE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Harwin:

[M80-4000000F8-04-321-00-000](#) [M80-4000000F8-03-321-00-000](#) [M80-4000000F8-02-321-00-000](#)