

Customer Information Sheet

DRAWING No.: M80-4000000FI-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, END PLUG = COPPER ALLOY

INNER CONTACT, LATCHING COLLAR = BERYLLIUM COPPER

INSULATOR = PTFE

JACKSCREW, CIRCLIP = 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

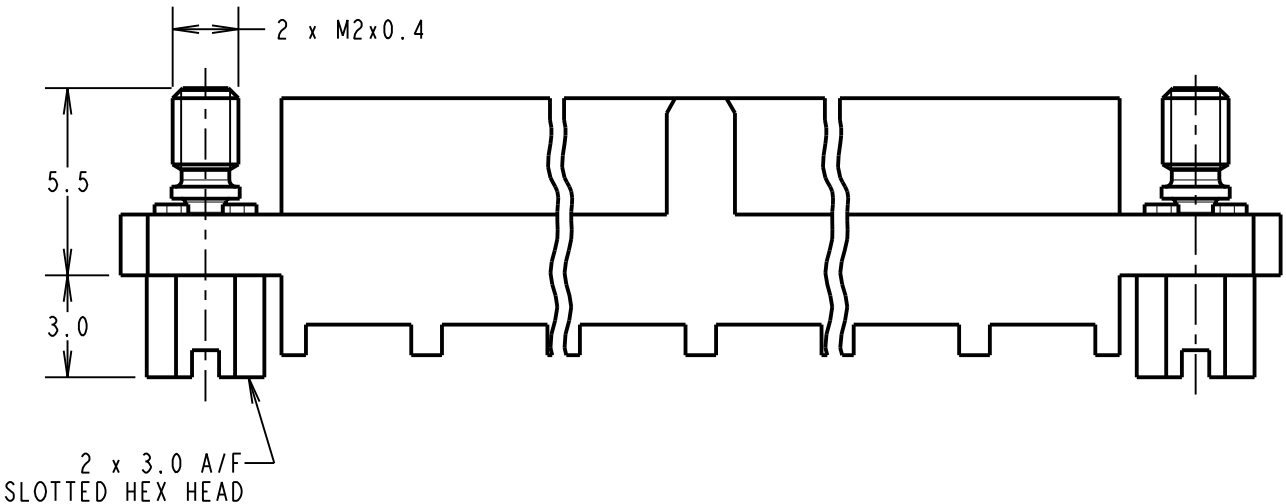
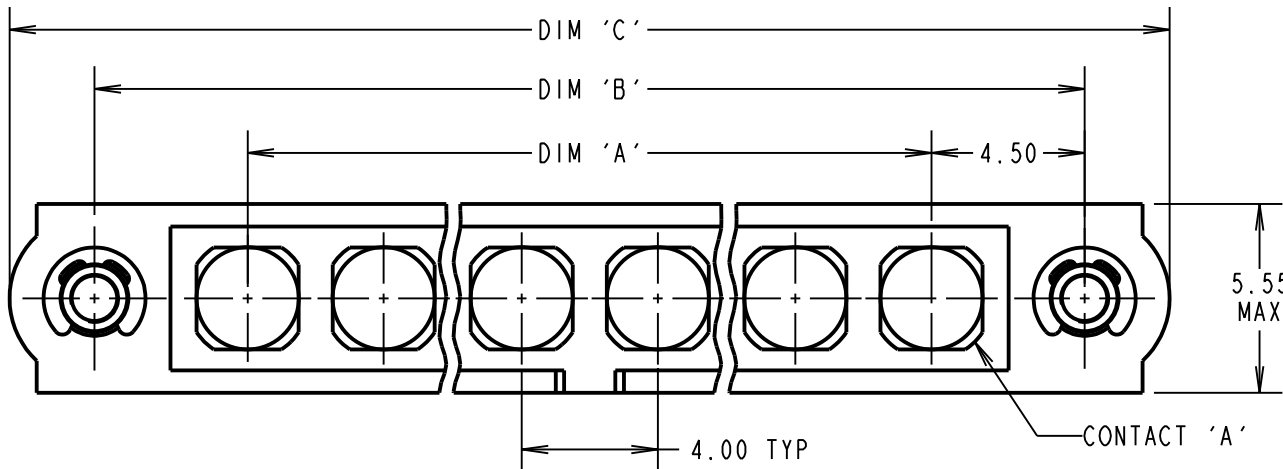
PACKING:

BAG

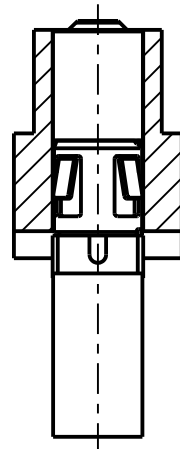
FOR COMPLETE SPECIFICATION SEE COMPONENT

SPECIFICATION C005XX (LATEST ISSUE)

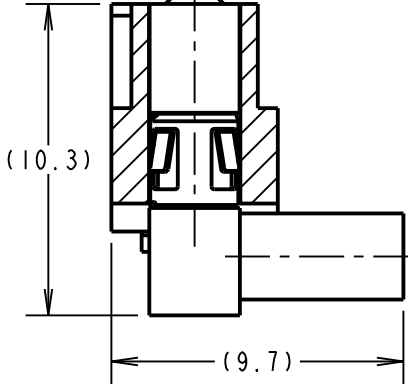
COAX CRIMP/SOLDER CONTACTS ONLY



M80-305/~~306~~/307
x No. OF CONTACTS



M80-308/309
x No. OF CONTACTS



ORDER CODE: (COAX CRIMP/SOLDER)

M80-4000000FI-XX-XXX-00-000

TOTAL No. OF CONTACTS
02 TO 12

SPECIAL CONTACTS

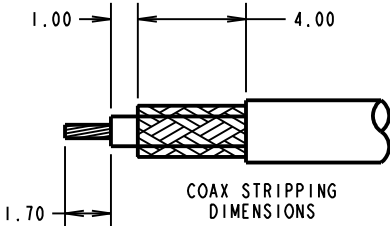
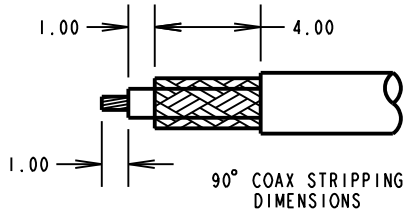
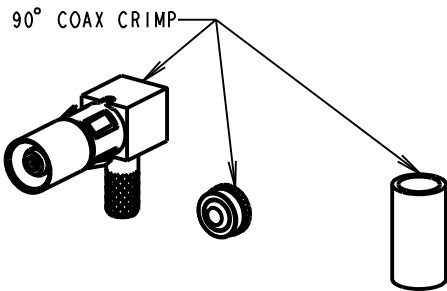
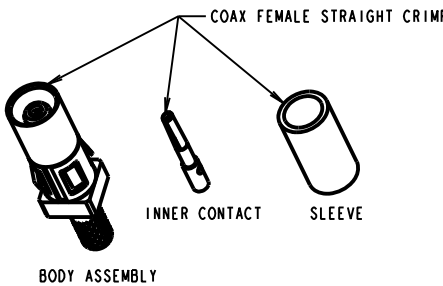
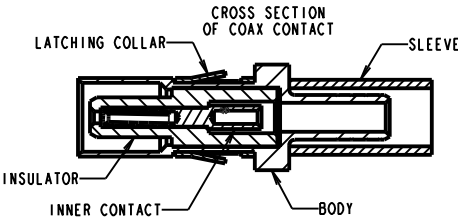
305 = COAX CONTACT CRIMP 2.0mm M80-305

~~306 = COAX CONTACT CRIMP 2.4mm M80-306~~

307 = COAX CONTACT CRIMP 2.7mm M80-307

308 = 90° COAX CONTACT CRIMP/SOLDER 2.0mm M80-308

309 = 90° COAX CONTACT CRIMP/SOLDER 2.7mm M80-309



NOTES:

- CONNECTORS ARE SUPPLIED WITH CONTACTS LOOSE.
- COAX CONTACT IS SUPPLIED AS A KIT OF PARTS: BODY, INSULATOR AND LATCHING COLLAR ARE PRE-ASSEMBLED. SLEEVE AND INNER CONTACT ARE SEPARATE.
- FOR EXTRA COAX CONTACTS, USE PART NUMBER M80-305/~~306~~/307/308/309
- RECOMMENDED HAND CRIMP TOOL FOR COAX INNER CONTACT = Z80-292 WITH POSITIONER Z80-291 AND RECOMMENDED HAND CRIMP TOOL AND DIE SET FOR COAX SLEEVE = Z80-293.
- COAX CONTACT EXTRACTION TOOL = Z80-290.
- INSTRUCTION SHEETS ARE AVAILABLE.

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 = ±0.20mm
X.XXX = ±0.01mm
ANGLES = ±5°
UNLESS STATED

MATERIAL:

SEE ABOVE

FINISH:

SEE ABOVE

S/AREA:

mm²

TITLE:

DATAMATE MIX-TEK
FEMALE ASSEMBLY
WITH JACKSCREW

DRAWING NUMBER:

M80-4000000FI-XX-XXX-00-000

SHT
5
OF
8

MGP	9	04.12.19	21540
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: MR			
DRAWN: R.ADDE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

Customer Information Sheet

DRAWING No.: M80-4000000FI-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, CIRCLIP = 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

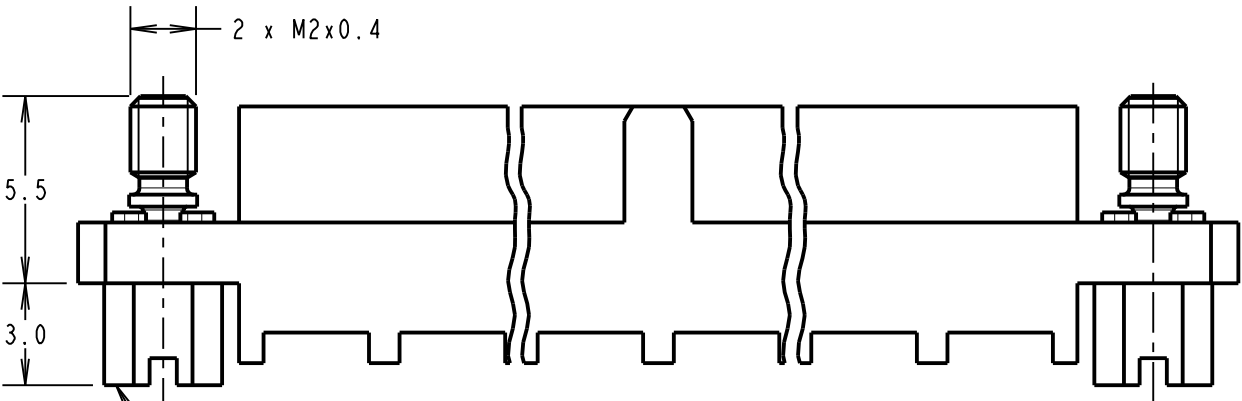
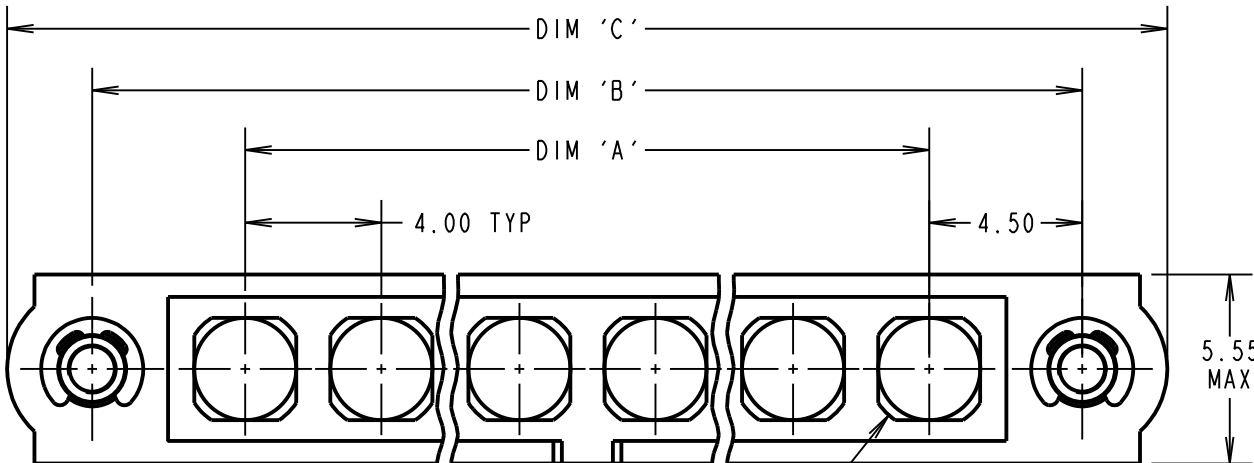
PACKING:

BAG

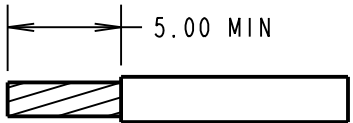
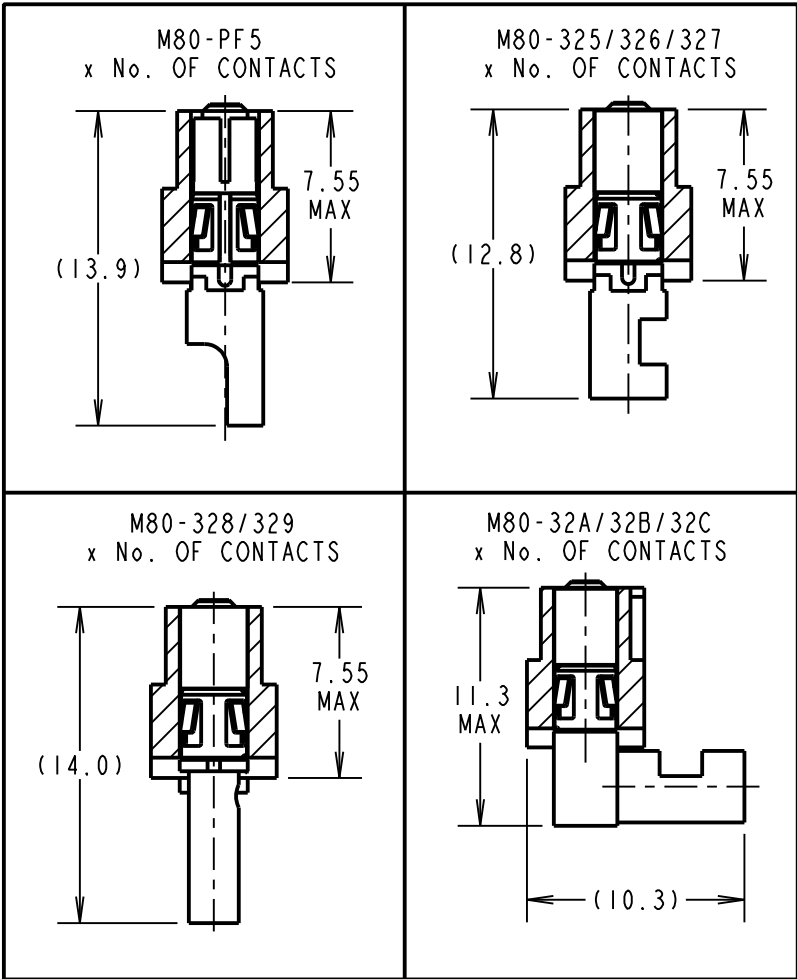
FOR COMPLETE SPECIFICATION SEE COMPONENT

SPECIFICATION C005XX (LATEST ISSUE)

POWER CRIMP AND SOLDER CONTACTS ONLY



2 x 3.0 A/F SLOTTED HEX HEAD



POWER CABLE
STRIPPING DIMENSIONS

ORDER CODE:(POWER CRIMP/SOLDER)

M80-4000000FI-XX-XXX-00-000

TOTAL No. OF CONTACTS _____
02 TO 12

SPECIAL CONTACTS

325 = POWER CONTACT SOLDER 12AWG M80-325
326 = POWER CONTACT SOLDER 14AWG M80-326
327 = POWER CONTACT SOLDER 16AWG M80-327
328 = POWER CONTACT SOLDER OR CRIMP 18AWG M80-328
329 = POWER CONTACT SOLDER OR CRIMP 20AWG M80-329
32A = 90° POWER CONTACT SOLDER 12AWG M80-32A
32B = 90° POWER CONTACT SOLDER 14AWG M80-32B
32C = 90° POWER CONTACT SOLDER 16AWG M80-32C
PF5 = POWER CONTACT SOLDER 10AWG M80-PF5

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, M80-4000000FI-10-325-00-000 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 NUMBER M80-325/326/327/328/329/32A/32B/32C/PF5.
- POWER AND CONTACT EXTRACTION TOOL = Z80-290.
- INSTRUCTION SHEETS ARE AVAILABLE.
- 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.

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 = ±0.20mm
X.XXX = ±0.01mm

ANGLES = ±5°

UNLESS STATED

MATERIAL:

SEE ABOVE

FINISH:

SEE ABOVE

S/AREA:

mm²

TITLE:

DATAMATE MIX-TEK
FEMALE ASSEMBLY
WITH JACKSCREW

DRAWING NUMBER:

M80-4000000FI-XX-XXX-00-000

SHT

6
OF
8

MGP 9 04.12.19 21540

NAME ISS. DATE C/NOTE

APPROVED: MGP

CHECKED: MR

DRAWN: R.ADDE

CUSTOMER REF.:

ASSEMBLY DRG:

Customer Information Sheet

DRAWING No.: M80-4000000F1-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
COAX CONTACT: BODY = COPPER ALLOY
INNER CONTACT = COPPER ALLOY
INSULATOR = PTFE
JACKSCREW, CIRCLIP = 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

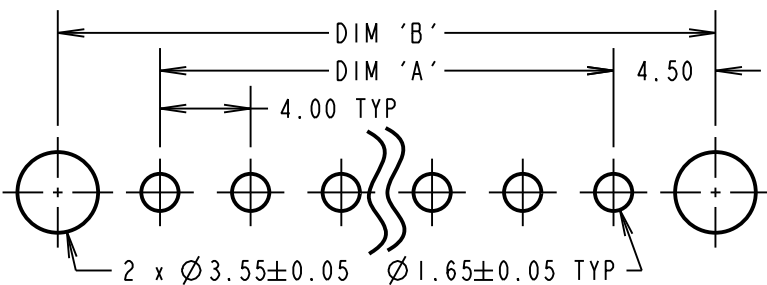
COAX CONTACT:
INSERTION FORCE = 8N MAX
WITHDRAWAL FORCE = 0.5N MIN

ENVIRONMENTAL:
TEMPERATURE RANGE:
M80-301/302/321/322 = -55°C TO +125°C
M80-PF1/PF2 = -55°C TO +150°C

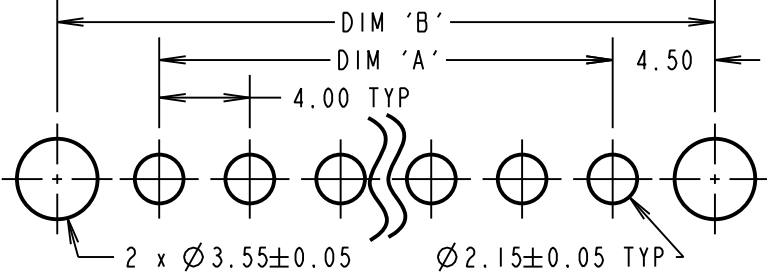
PACKING:
TUBE

FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)

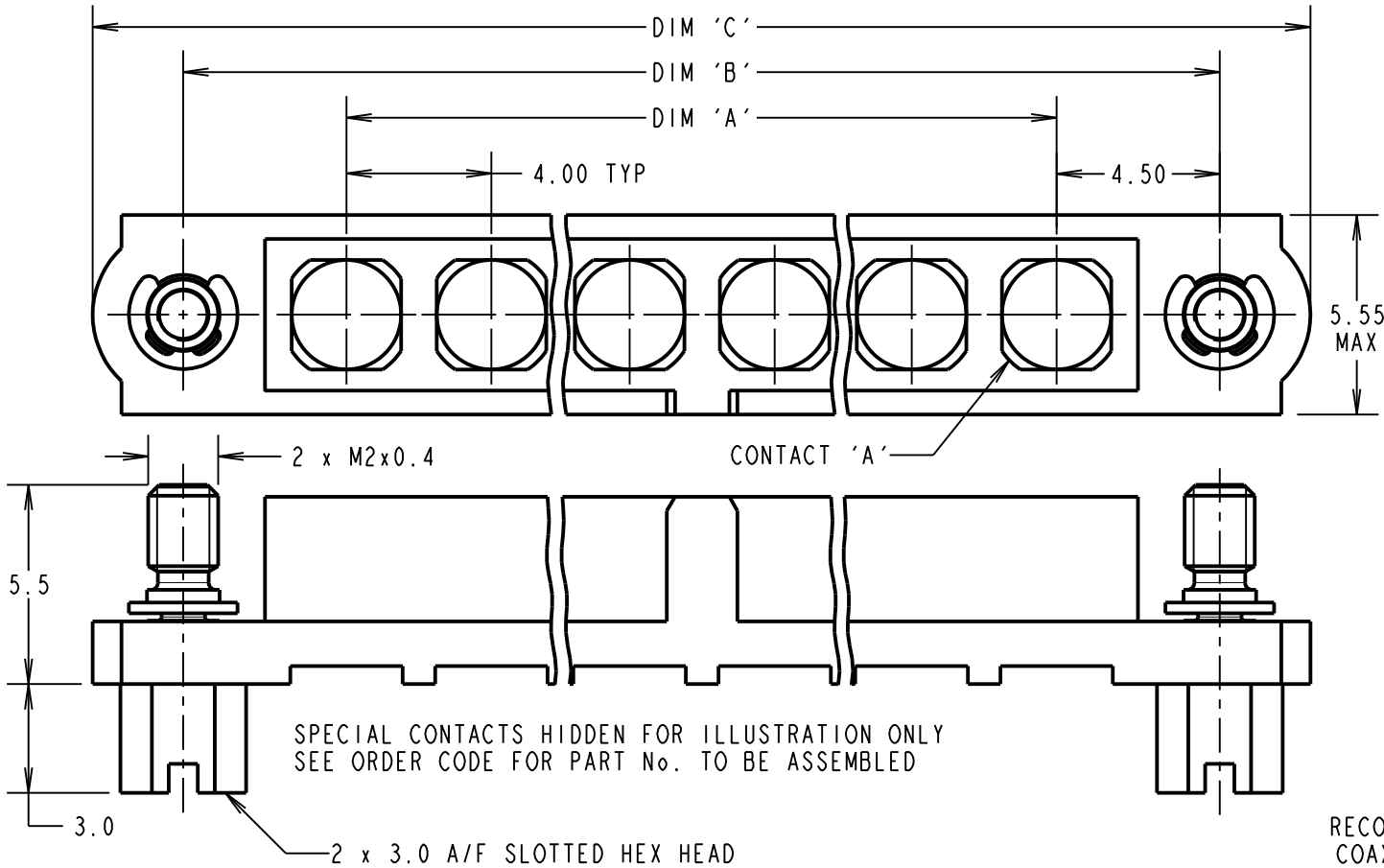
RECOMMENDED PCB LAYOUT FOR
POWER CONTACTS: M80-321/322



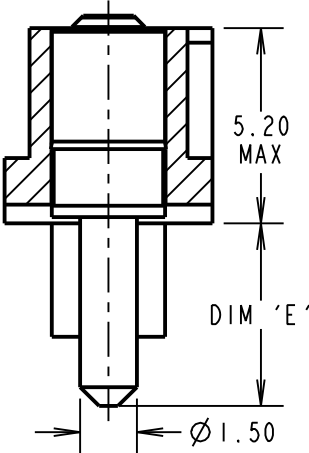
RECOMMENDED PCB LAYOUT FOR
POWER CONTACTS: M80-PF1/PF2



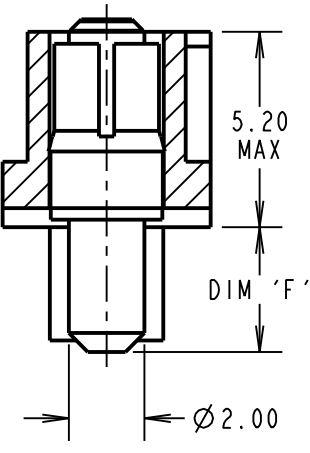
VERTICAL PC TAIL CONTACTS ONLY



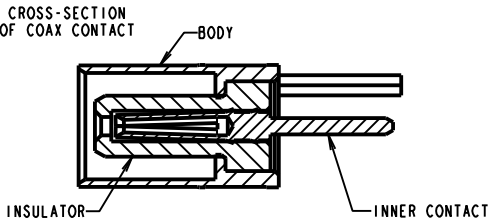
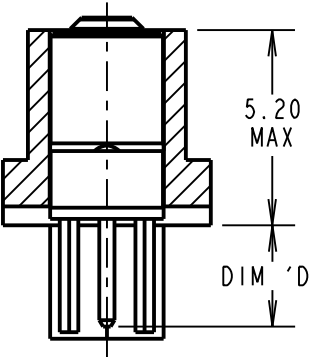
M80-321/322
x No. OF CONTACTS



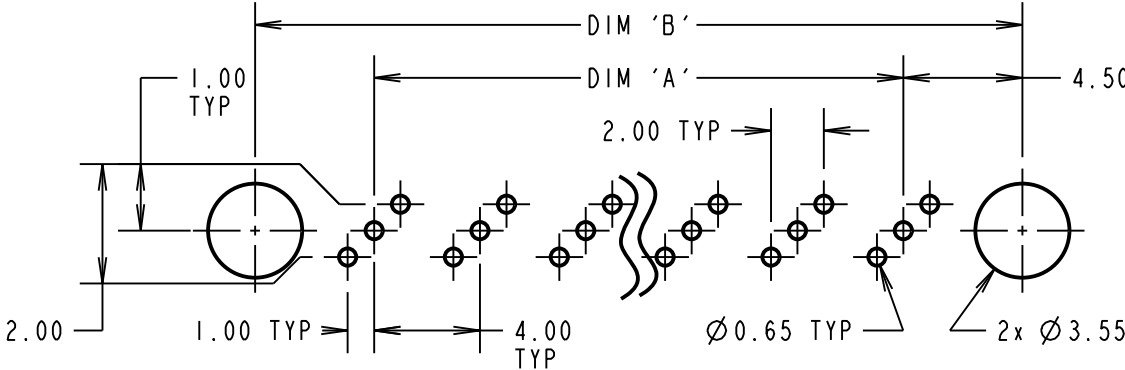
M80-PF1/PF2
x No. OF CONTACTS



M80-301/302
x No. OF CONTACTS



RECOMMENDED PCB LAYOUT FOR
COAX CONTACTS: M80-301/302
TOLERANCE = ±0.05



ORDER CODE:
(COAX PC TAIL VERTICAL CONTACTS ONLY)
M80-4000000F1-XX-XXX-00-000

TOTAL No. OF CONTACTS
02 TO 12

SPECIAL CONTACTS

301 = COAX CONTACT PC TAIL 3.0mm M80-301
302 = COAX CONTACT PC TAIL 4.5mm M80-302
321 = 20A POWER CONTACT PC TAIL 3.5mm M80-321
322 = 20A POWER CONTACT PC TAIL 5.0mm M80-322
PF1 = 40A POWER CONTACT PC TAIL 3.5mm M80-PF1
PF2 = 40A POWER CONTACT PC TAIL 5.0mm M80-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 = 3.00mm, M80-302 = 4.50mm
DIM 'E'	M80-321 = 3.50mm, M80-322 = 5.00mm
DIM 'F'	M80-PF1 = 3.50mm, M80-PF2 = 5.00mm

EXAMPLE 1: CONNECTOR WITH 08 COAX CONTACTS,
M80-4000000F1-08-301-00-000
DIM 'A' = 28.00mm, DIM 'B' = 37.00mm,
DIM 'C' = 42.0mm, DIM 'D' = 3.00mm

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 = ±0.20mm
X.XXX = ±0.01mm
ANGLES = ±5°
UNLESS STATED

MATERIAL:

SEE ABOVE

FINISH:

SEE ABOVE

S/AREA:

mm²

TITLE:

DATAMATE MIX-TEK
FEMALE ASSEMBLY
WITH JACKSCREW

DRAWING NUMBER:

M80-4000000F1-XX-XXX-00-000

SHT

7

OF

8

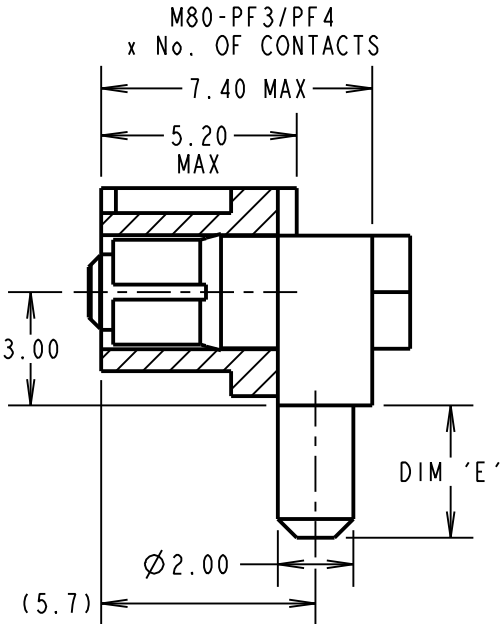
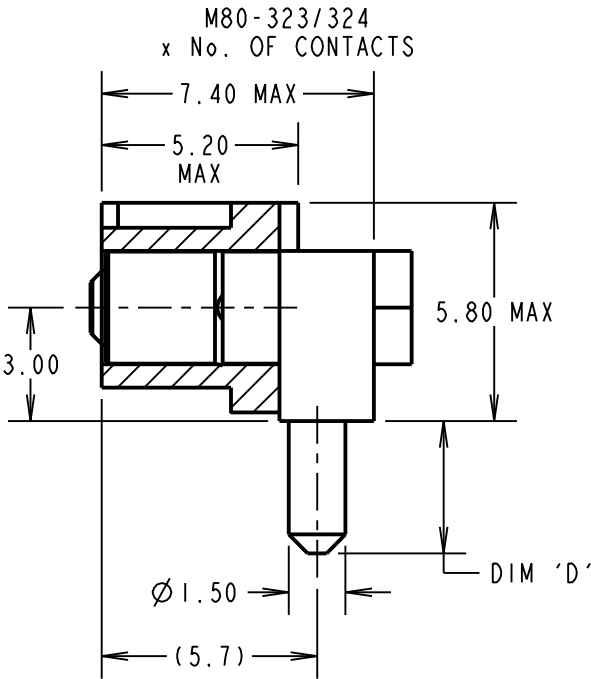
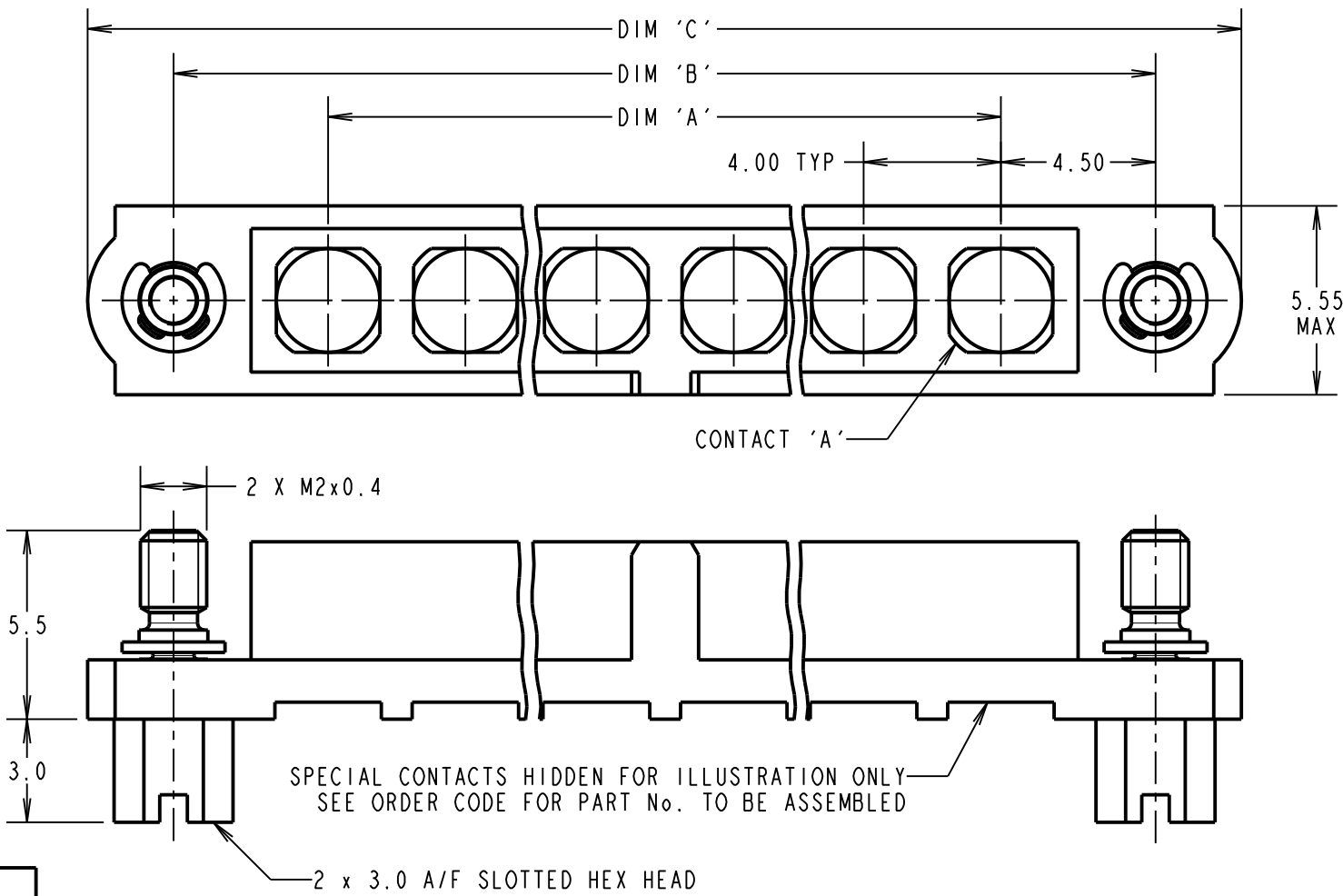
MGP	9	04.12.19	21540
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: MR			
DRAWN: R. ADDE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

Customer Information Sheet

DRAWING No.: M80-4000000FI-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, CIRCLIP: 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:
 M80-323/324 = 20A MAX
 M80-PF4/PF4 = 40A MAX
MECHANICAL:
 DURABILITY = 500 OPERATIONS
POWER CONTACT:
 INSERTION FORCE:
 M80-323/324 = 8N MAX
 M80-PF3/PF4 = 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)

HORIZONTAL POWER PC TAIL CONTACTS ONLY



ORDER CODE:
(POWER PC TAIL HORIZONTAL CONTACTS ONLY)

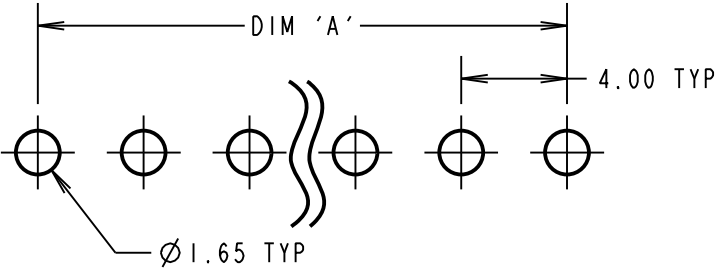
M80-4000000FI-XX-XXX-00-000

TOTAL No. OF CONTACTS
02 TO 12

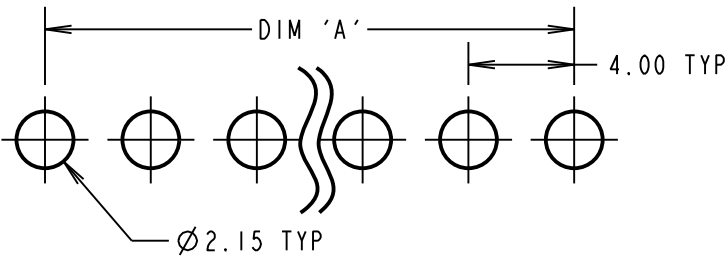
SPECIAL CONTACTS
323 = 20A POWER CONTACT PC TAIL 3.5mm M80-323
324 = 20A POWER CONTACT PC TAIL 5.0mm M80-324
PF3 = 40A POWER CONTACT PC TAIL 3.5mm M80-PF3
PF4 = 40A POWER CONTACT PC TAIL 5.0mm M80-PF4

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'	M80-323 = 3.50mm, M80-324 = 5.00mm
DIM 'E'	M80-PF3 = 3.50mm, M80-PF4 = 5.00mm
EXAMPLE: CONNECTOR WITH 10 POWER CONTACTS, M80-4000000FI-10-323-00-000 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.0mm, DIM 'D' = 3.50mm	

RECOMMENDED PCB LAYOUT FOR
POWER CONTACTS: M80-323/324
TOLERANCE = ±0.05



RECOMMENDED PCB LAYOUT FOR
POWER CONTACTS: M80-PF3/PF4
TOLERANCE = ±0.05



MGP	9	04.12.19	21540
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: MR			
DRAWN: R.ADDE			
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 = ±0.20mm
X.XXX = ±0.01mm
ANGLES = ±5°
UNLESS STATED

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

TITLE: DATAMATE MIX-TEK FEMALE ASSEMBLY WITH JACKSCREW
DRAWING NUMBER: **M80-4000000FI-XX-XXX-00-000** SHT 8 OF 8

Mouser Electronics

Authorized Distributor

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

[Harwin:](#)

[M80-4000000F1-06-325-00-000](#) [M80-4000000F1-08-325-00-000](#) [M80-4000000F1-10-325-00-000](#) [M80-4000000F1-04-325-00-000](#) [M80-4000000F1-02-325-00-000](#) [M80-4000000F1-08-305-00-000](#) [M80-4000000F1-04-326-00-000](#) [M80-4000000F1-04-305-00-000](#) [M80-4000000F1-06-PF5-00-000](#) [M80-4000000F1-04-PF5-00-000](#) [M80-4000000F1-06-327-00-000](#) [M80-4000000F1-02-PF5-00-000](#) [M80-4000000F1-04-328-00-000](#) [M80-4000000F1-10-PF5-00-000](#) [M80-4000000F1-08-PF5-00-000](#) [M80-4000000F1-02-329-00-000](#) [M80-4000000F1-08-322-00-000](#) [M80-4000000F1-08-321-00-000](#) [M80-4000000F1-08-307-00-000](#) [M80-4000000F1-02-327-00-000](#) [M80-4000000F1-02-32C-00-000](#) [M80-4000000F1-10-329-00-000](#) [M80-4000000F1-04-329-00-000](#) [M80-4000000F1-08-329-00-000](#) [M80-4000000F1-06-307-00-000](#) [M80-4000000F1-02-328-00-000](#) [M80-4000000F1-04-301-00-000](#) [M80-4000000F1-04-327-00-000](#) [M80-4000000F1-04-321-00-000](#) [M80-4000000F1-04-307-00-000](#) [M80-4000000F1-03-325-00-000](#) [M80-4000000F1-05-325-00-000](#) [M80-4000000F1-02-326-00-000](#) [M80-4000000F1-06-329-00-000](#) [M80-4000000F1-08-328-00-000](#) [M80-4000000F1-03-328-00-000](#) [M80-4000000F1-03-329-00-000](#) [M80-4000000F1-02-305-00-000](#) [M80-4000000F1-02-PF1-00-000](#) [M80-4000000F1-05-PF5-00-000](#) [M80-4000000F1-09-307-00-000](#) [M80-4000000F1-08-327-00-000](#) [M80-4000000F1-10-327-00-000](#) [M80-4000000F1-05-327-00-000](#) [M80-4000000F1-02-32C-00-000](#) [M80-4000000F1-12-PF5-00-000](#) [M80-4000000F1-12-329-00-000](#) [M80-4000000F1-03-327-00-000](#) [M80-4000000F1-03-326-00-000](#) [M80-4000000F1-06-326-00-000](#) [M80-4000000F1-04-PF1-00-000](#) [M80-4000000F1-02-323-00-000](#) [M80-4000000F1-05-328-00-000](#) [M80-4000000F1-03-307-00-000](#) [M80-4000000F1-04-32A-00-000](#) [M80-4000000F1-06-321-00-000](#) [M80-4000000F1-02-32A-00-000](#)