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 = 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 = 10^6MΩ @250V AC
  - OPERATING VOLTAGE = 180V AC @ 500mA
  - MAXIMUM VOLTAGE = 1000V AC

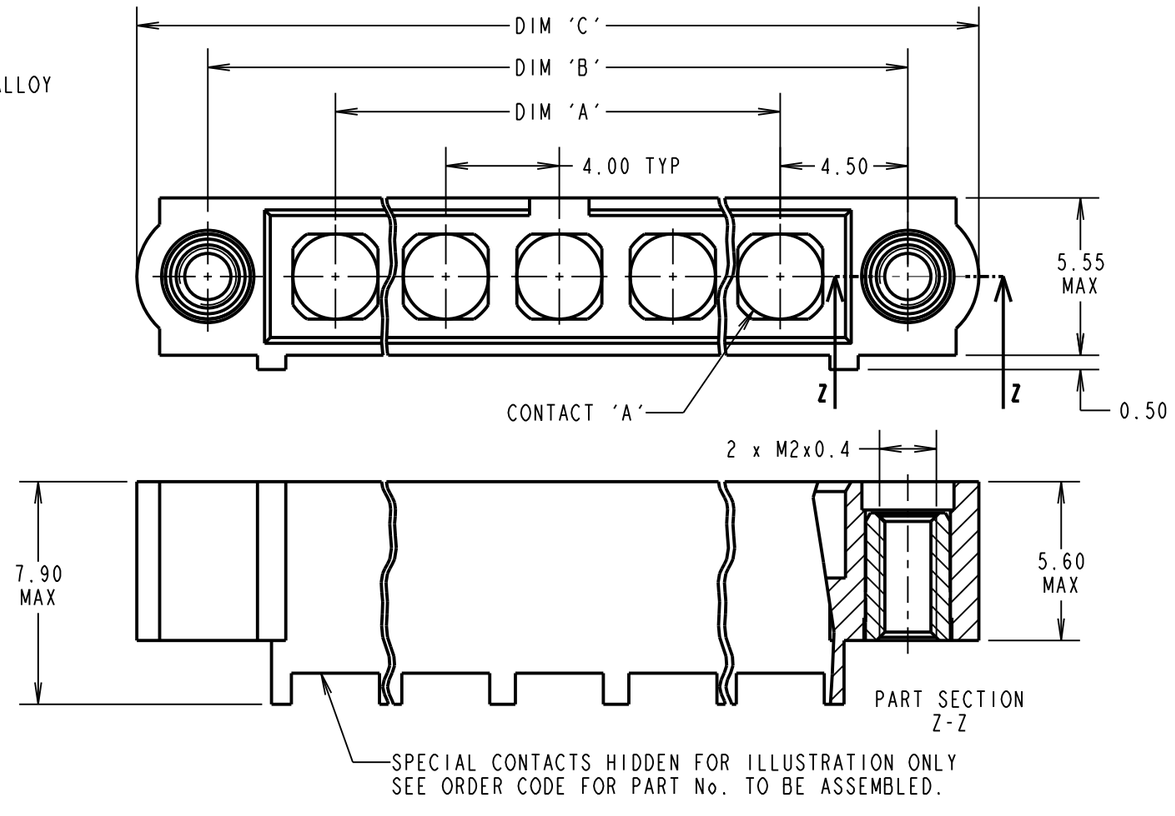
MECHANICAL:
- DURABILITY = 500 OPERATIONS
- COAX CONTACT:
  - INSERTION FORCE = 8N MAX
  - WITHDRAWAL FORCE = 0.5N MIN

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

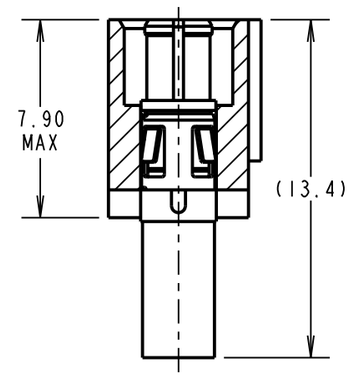
PACKING:
- BAG

FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)

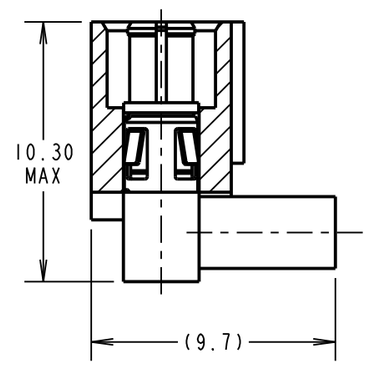
COAX CRIMP/SOLDER CONTACTS ONLY

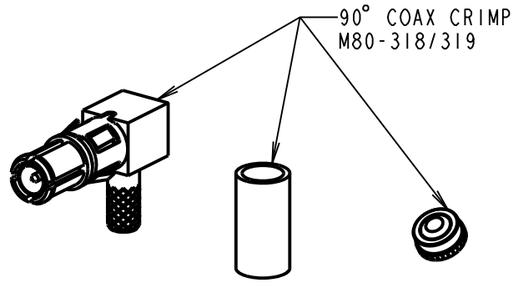


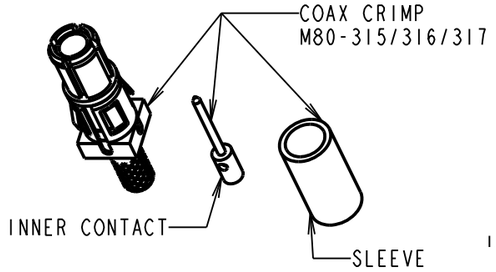
M80-315/317
x No. OF CONTACTS

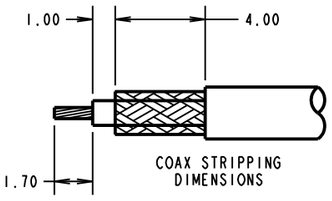


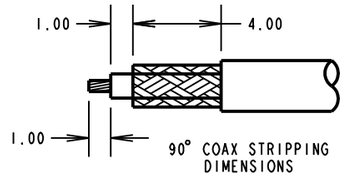
M80-318/319
x No. OF CONTACTS











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' = 42.0mm	

NOTES:
1. CONNECTORS ARE SUPPLIED WITH CONTACTS LOOSE.
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 M80-315/317/318/319.
4. 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.

MGP	7	22.11.18	21265
NAME	ISS.	DATE	C/NOTE

APPROVED: MGP
CHECKED: SB
DRAWN: R.ADDE
CUSTOMER REF.:
ASSEMBLY DRG:

HARWiN
www.harwin.com
technical@harwin.com

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

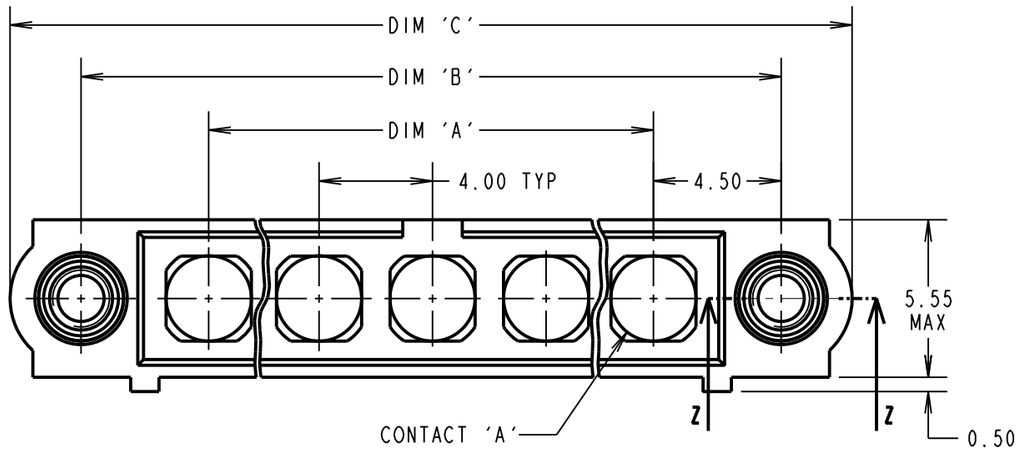
SHT 5 OF 8

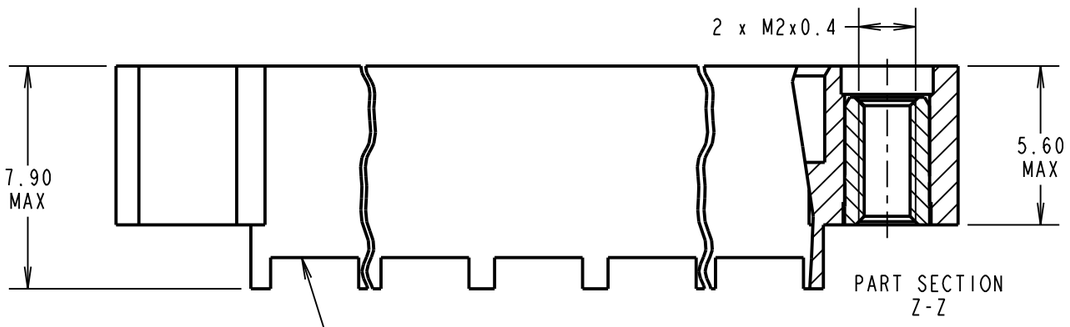
Customer Information Sheet

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:
  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)

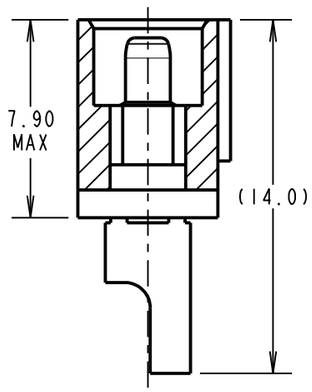
POWER CRIMP/SOLDER CONTACTS ONLY



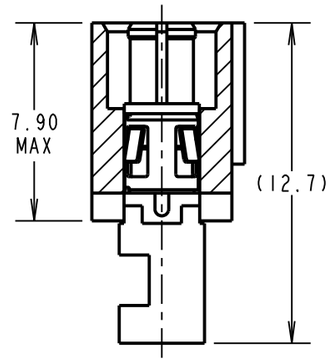


SPECIAL CONTACTS HIDDEN FOR ILLUSTRATION ONLY
SEE ORDER CODE FOR PART No. TO BE ASSEMBLED.

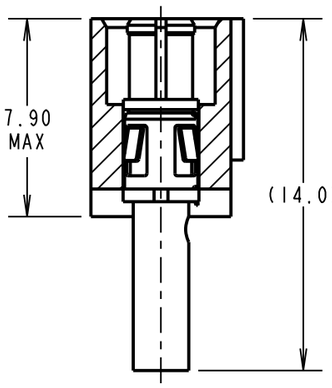
M80-PM5
x No. OF CONTACTS



M80-335/336/337
x No. OF CONTACTS



M80-338/339
x No. OF CONTACTS



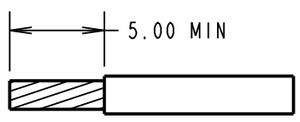
ORDER CODE:(POWER CRIMP/SOLDER CONTACTS)

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	



POWER CABLE
STRIPPING DIMENSIONS

NOTES:
1. CONNECTORS ARE SUPPLIED WITH CONTACTS LOOSE.
2. FOR EXTRA POWER CONTACTS USE PART NUMBERS: M80-PF5/335/336/337/338/339.
3. CONTACT EXTRACTION TOOL = Z80-290.
4. RECOMMENDED HAND CRIMP TOOL FOR CONTACTS 338/339 = Z80-294 AND POSITIONER Z80-295.
5. 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:			

HARWIN
www.harwin.com
technical@harwin.com

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

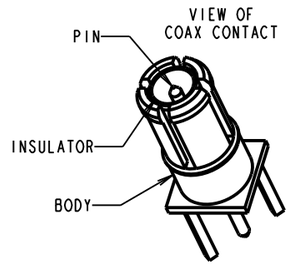
DRAWING NUMBER: M80-5000000MI-XX-XXX-00-000

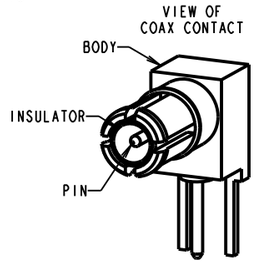
SHT 6 OF 8

Customer Information Sheet

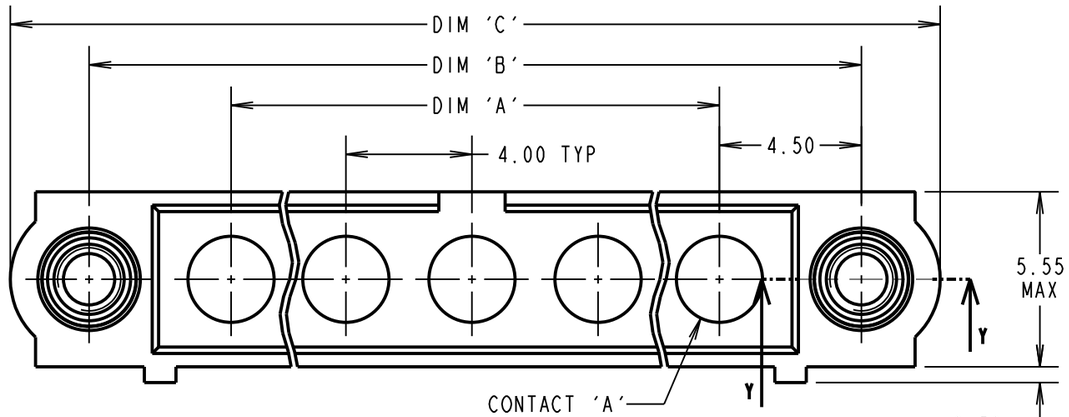
DRAWING No.: M80-5000000MI-XX-XXX-00-000	IF IN DOUBT - ASK	©	NOT TO SCALE	THIRD ANGLE PROJECTION	ALL DIMENSIONS IN mm

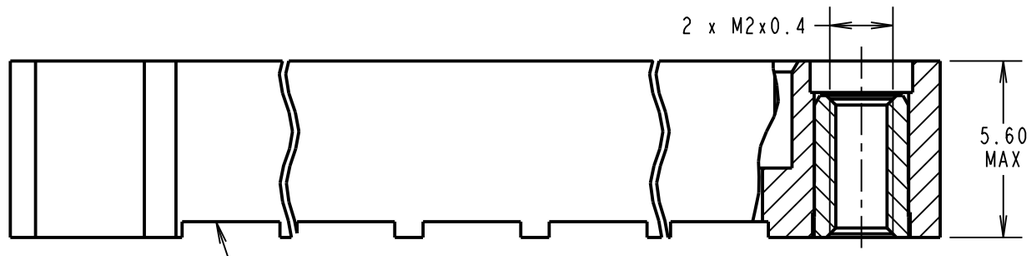
SPECIFICATIONS:
MATERIAL:
 MOULDING: GLASS FILLED PPS, UL94V-0, BLACK
 COAX CONTACT:
  BODY, INNER CONTACT, = COPPER ALLOY
  INSULATOR = PTFE
 JACKSCREW: STAINLESS STEEL
FINISH:
 COAX CONTACT:
  BODY, INNER CONTACT, = GOLD
ELECTRICAL:
 INSULATION RESISTANCE = 100MΩ MIN
 COAX CONTACT:
  FREQUENCY RANGE = 6GHz
  IMPEDANCE = 50Ω
  V.S.W.R = 1.05 + (0.04 x FREQUENCY) GHz MAX
  CONTACT RESISTANCE 6mΩ MAX
  INSULATION RESISTANCE = 10^6MΩ @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)



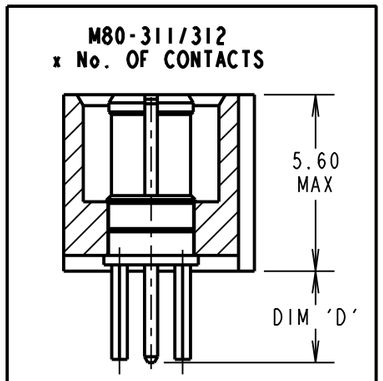


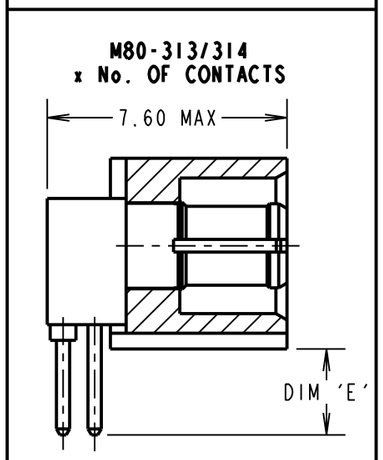
COAX PC TAIL CONTACTS ONLY





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





ORDER CODE:
(COAX PC TAIL CONTACTS ONLY)

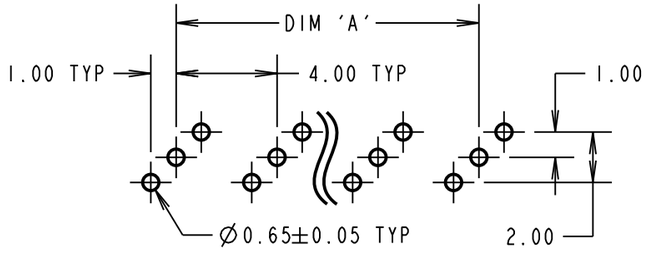
M80-5000000MI-XX-XXX-00-000

TOTAL No. OF CONTACTS
02 TO 12

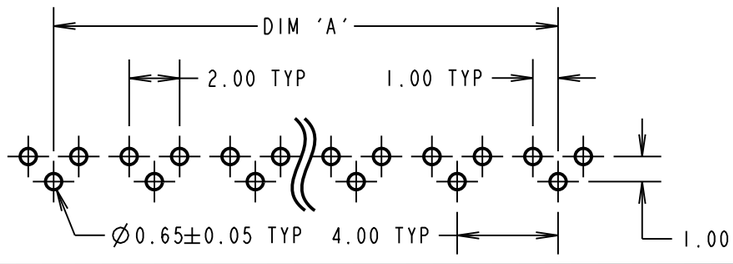
SPECIAL CONTACTS (PC TAIL)
311= COAX CONTACT 3.0mm PC TAIL M80-311
312 = COAX CONTACT 4.5mm PC TAIL M80-312
313 = COAX CONTACT 3.0mm HORZ' PC TAIL M80-313
314 = COAX CONTACT 4.5mm HORZ' PC TAIL M80-314

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	

RECOMMENDED PCB LAYOUTS FOR
COAX CONTACTS: M80-311/312



RECOMMENDED PCB LAYOUTS FOR
COAX CONTACTS: M80-313/314



MGP	7	22.11.18	21265
NAME	ISS.	DATE	C/NOTE

APPROVED: MGP
CHECKED: SB
DRAWN: R.ADDE
CUSTOMER REF.:
ASSEMBLY DRG:

HARWIN
www.harwin.com
technical@harwin.com

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

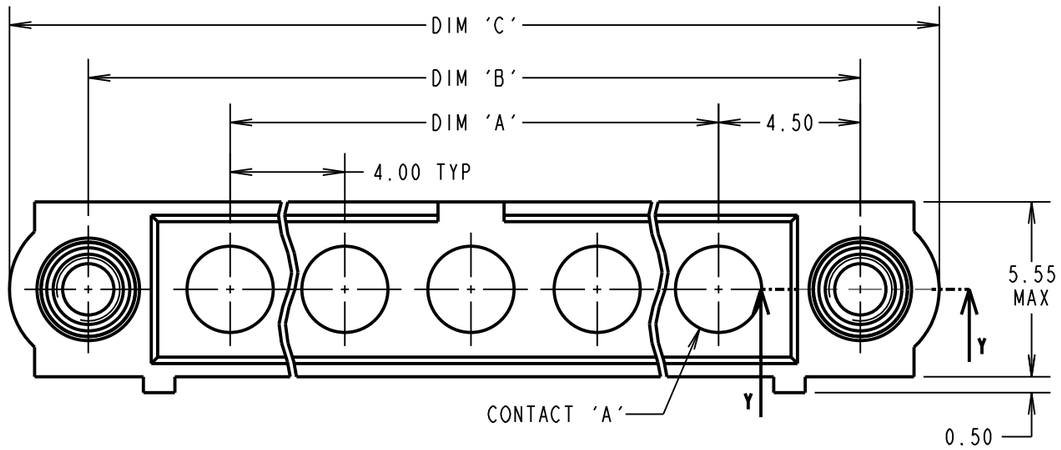
TITLE: DATAMATE MIX-TEK MALE ASSEMBLY WITH JACKSCREW
DRAWING NUMBER: M80-5000000MI-XX-XXX-00-000
SHT 7 OF 8

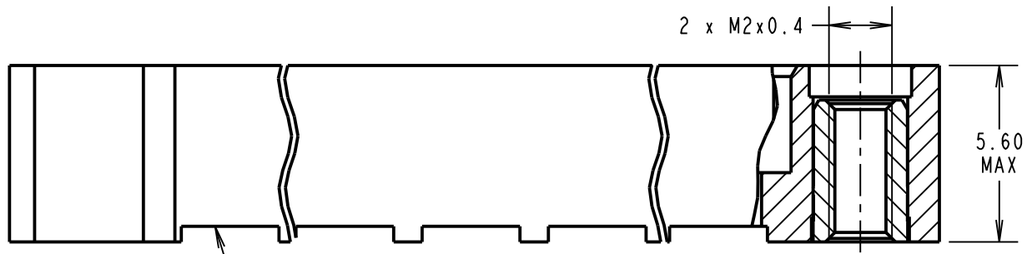
Customer Information Sheet

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-PMI/PM2/PM3/PM4 = 40A MAX
MECHANICAL:
 DURABILITY = 500 OPERATIONS
 POWER CONTACT:
  INSERTION FORCE:
   M80-331/332/323/324/33A = 8N MAX
   M80-PMI/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





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

ORDER CODE:
(POWER PC TAIL AND SMT CONTACTS ONLY)

M80-5000000MI-XX-XXX-00-000

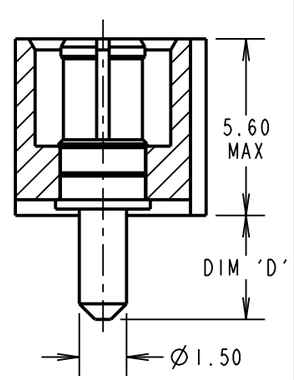
TOTAL No. OF CONTACTS
02 TO 12

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
PMI = 40A POWER CONTACT 3.0mm VERT' PC TAIL M80-PMI
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

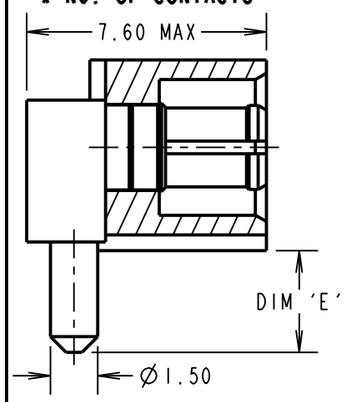
DIMENSION	CALCULATION
DIM 'A'	4 x No. OF CONTACTS - 4.00
DIM 'B'	4 x No. OF CONTACTS + 5.00
DIM 'C'	4 x No. OF CONTACTS + 10.0
DIM 'D'	M80-331 = 3.5mm, M80-332 = 5.0mm
DIM 'E'	M80-333 = 3.5mm, M80-334 = 5.0mm
DIM 'F'	M80-PMI = 3.5mm, M80-PM2 = 5.0mm
DIM 'G'	M80-PM3 = 3.5mm, M80-PM4 = 5.0mm

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

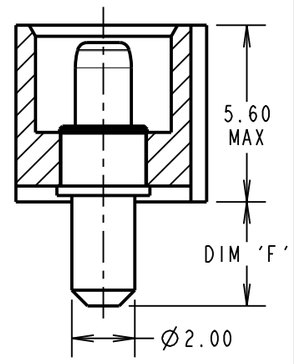
M80-331/332
x No. OF CONTACTS



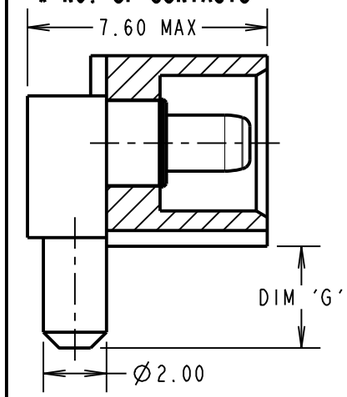
M80-333/334
x No. OF CONTACTS



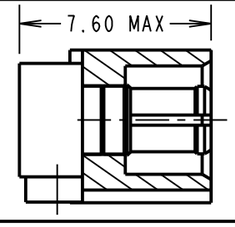
M80-PMI/PM2
x No. OF CONTACTS



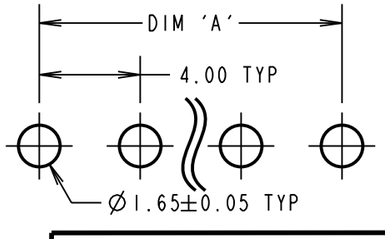
M80-PM3/PM4
x No. OF CONTACTS



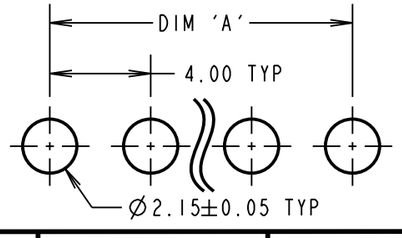
M80-33A
x No. OF CONTACTS



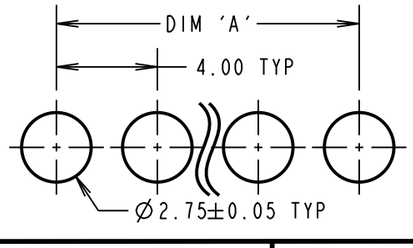
RECOMMENDED PCB LAYOUT FOR
M80-331/332/333/334
PC TAIL POWER CONTACTS



RECOMMENDED PCB LAYOUT FOR
M80-PMI/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
www.harwin.com
technical@harwin.com

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