

Customer Information Sheet

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

SHEET 3 OF 4

IF IN DOUBT - ASK

(C)

NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

SPECIFICATIONS:

MATERIAL:
MOULDING: GLASS FILLED PPS, UL94V-0, BLACK
COAX & POWER CONTACT:
BODY, SLEEVE, INNER CONTACT, END PLUG = COPPER ALLOY
LATCHING COLLAR = BERYLLIUM COPPER
INSULATOR = PTFE
JACKSCREW: STAINLESS STEEL

FINISH:
COAX & 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 = M80-335 = 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

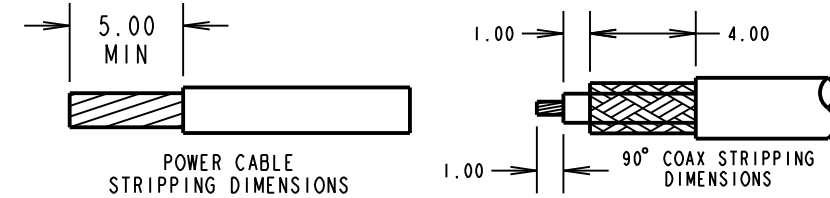
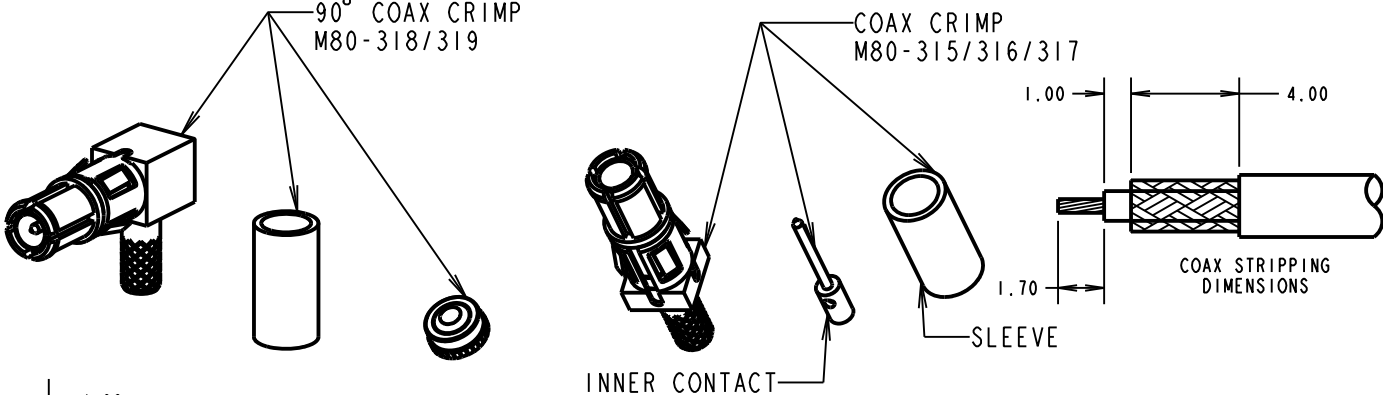
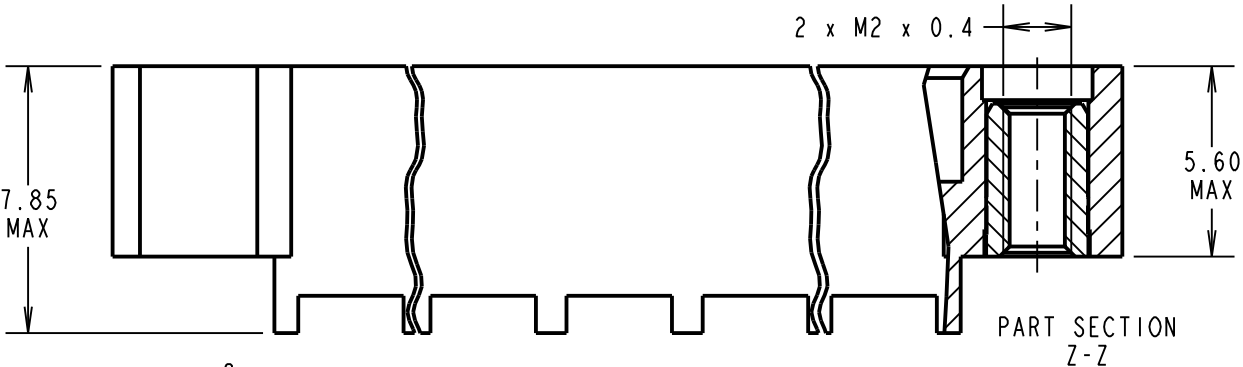
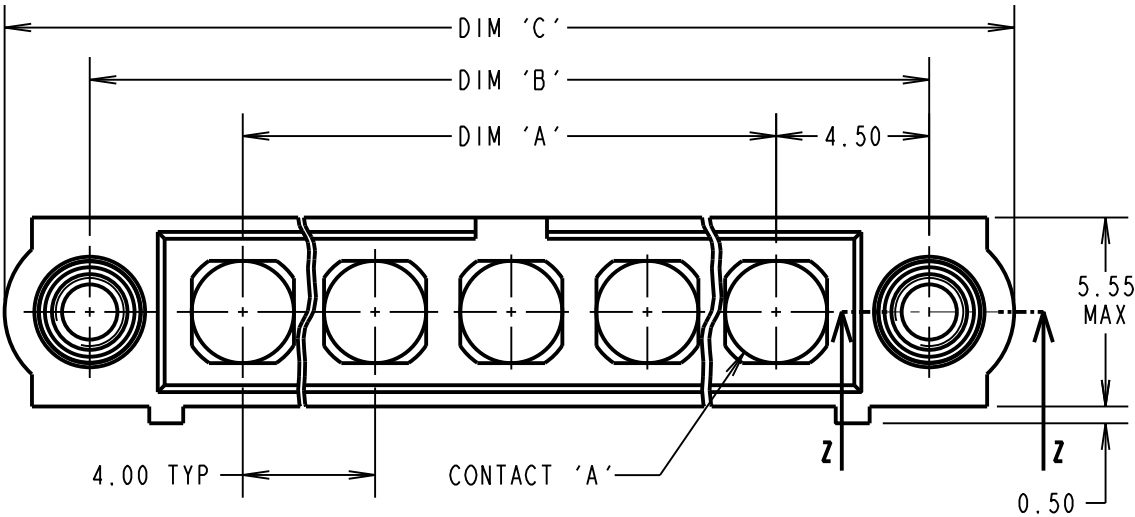
COAX CONTACT:
FREQUENCY RANGE = 6GHz
IMPEDANCE = 50 Ω
V.S.W.R = 1.05 + (0.04 x FREQUENCY) GHz MAX
CONTACT RESISTANCE 6 mΩ MAX

INSULATION RESISTANCE = 10⁶MΩ @250V AC
OPERATING VOLTAGE = 180V AC @ 500mA
MAXIMUM VOLTAGE = 1000V AC

MECHANICAL:
DURABILITY = 500 OPERATIONS
COAX & POWER 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)



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 + 10.00

EXAMPLE 1: CONNECTOR WITH 08 COAX CONTACTS,
M80-5000000MI-08-315-00-000
DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm

EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS,
M80-5000000MI-10-335-00-000
DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm

ORDER CODE:(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
316 = COAX CONTACT 2.4mm CRIMP M80-316
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
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

- 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 M80-315/316/317/318/319.
 - FOR EXTRA POWER CONTACTS USE PART NUMBERS M80-335/336/337/338/339
 - COAX & POWER CONTACT EXTRACTION TOOL = Z80-290
 - RECOMMENDED HAND CRIMP TOOL FOR CONTACTS 338/339 = Z80-294 AND POSITIONER Z80-295.
 - 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.

HARWIN
www.harwin.com
technical@harwin.com

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TOLERANCES
X. = ±1mm
X.X = ±0.25mm
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 3 OF 4

MGP	4	15.01.13	11898
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

SHEET 4 OF 4

IF IN DOUBT - ASK

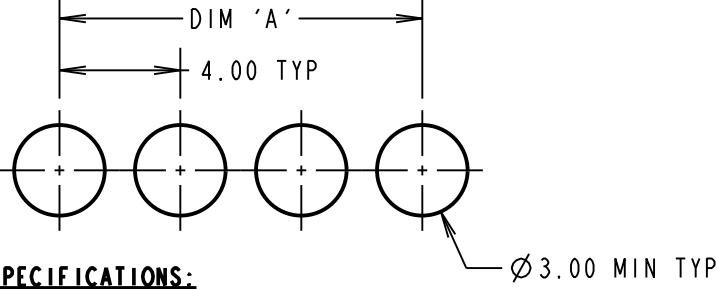
(C)

NOT TO SCALE

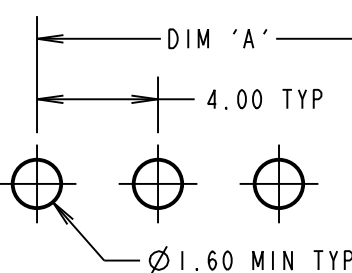
THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

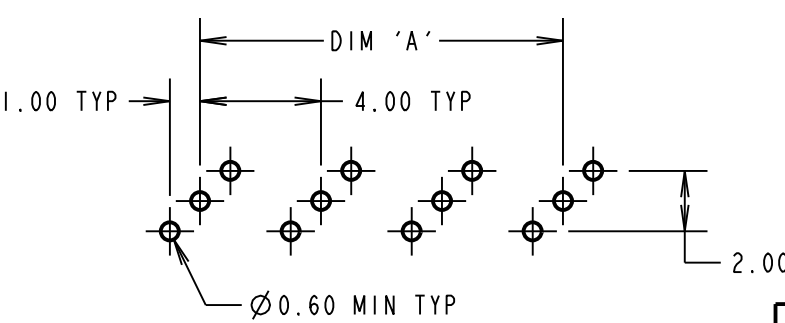
RECOMMENDED PCB LAYOUT FOR ALL
SMT POWER CONTACTS



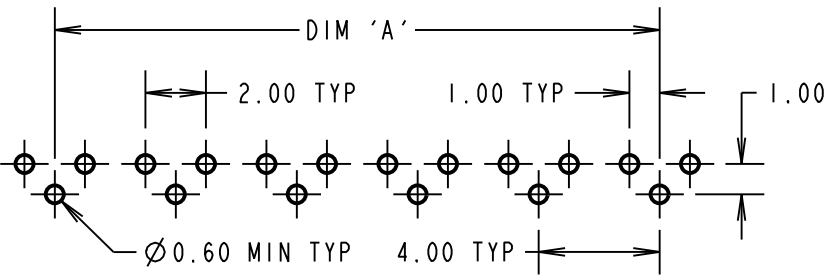
RECOMMENDED PCB LAYOUT FOR ALL
PC TAIL POWER CONTACTS



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



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



SPECIFICATIONS:

MATERIAL:
MOULDING: GLASS FILLED PPS, UL94V-0, BLACK
COAX & POWER CONTACT:
BODY, INNER CONTACT, = COPPER ALLOY
INSULATOR = PTFE
JACKSCREW: STAINLESS STEEL

FINISH:
COAX & POWER 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 = 20A MAX

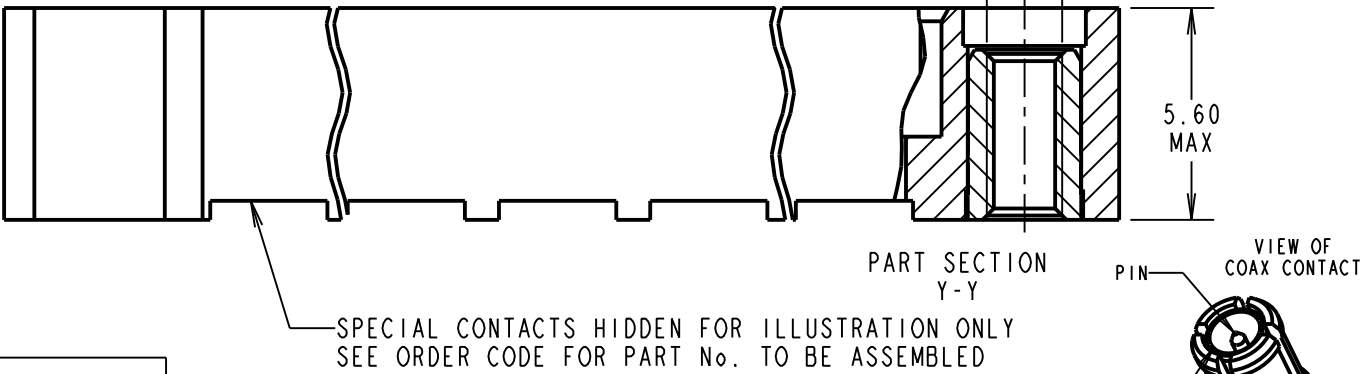
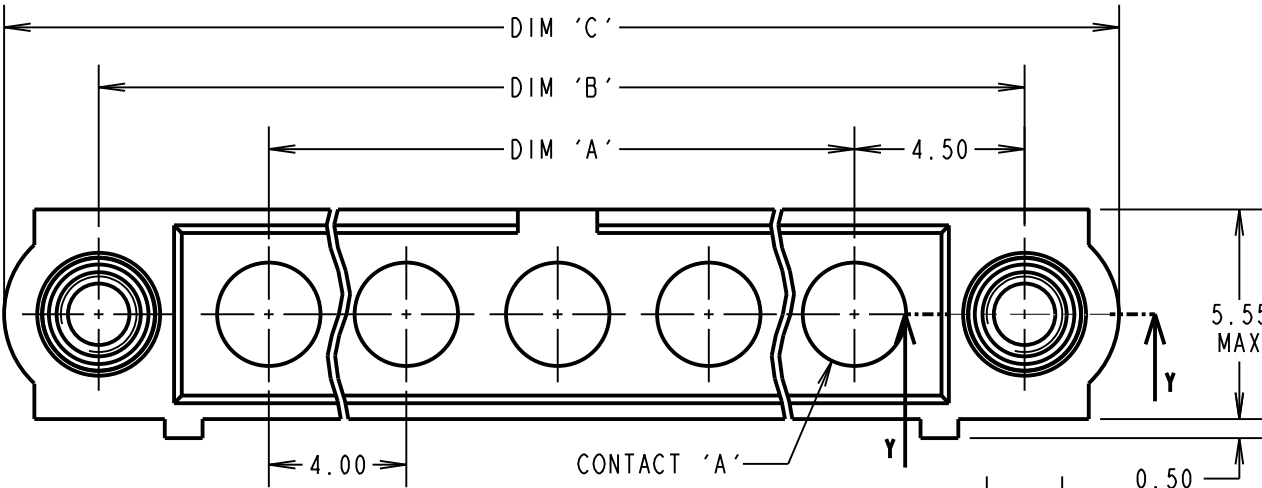
COAX CONTACT:
FREQUENCY RANGE = 6GHz
IMPEDANCE = 50 Ω
V.S.W.R = 1.05 + (0.04 x FREQUENCY) GHz MAX
CONTACT RESISTANCE 6 mΩ MAX

INSULATION RESISTANCE = 10⁶MΩ @250V AC
OPERATING VOLTAGE = 180V AC @ 500mA
MAXIMUM VOLTAGE = 1000V AC

MECHANICAL:
DURABILITY = 500 OPERATIONS
COAX & POWER 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)



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

ORDER CODE:(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
331 = POWER CONTACT 3.5mm VERT' PC TAIL M80-331
332 = POWER CONTACT 5.0mm VERT' PC TAIL M80-332
333 = POWER CONTACT 3.0mm HORZ' PC TAIL M80-333
33A = POWER CONTACT HORZ' SMT M80-33A
334 = POWER CONTACT 4.5mm HORZ' PC TAIL M80-334

VIEW OF
COAX CONTACT

PIN

INSULATOR

BODY

VIEW OF
COAX CONTACT

PIN

INSULATOR

BODY

HARWIN

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TOLERANCES

X. = ±1mm
X.X = ±0.25mm
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

4 OF 4

MGP 4 15.01.13 11898

NAME ISS. DATE C/NOTE

APPROVED: MGP

CHECKED: SB

DRAWN: R.ADDE

CUSTOMER REF.:

ASSEMBLY DRG: