

Customer Information Sheet

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

SHEET 3 OF 4

IF IN DOUBT - ASK

©

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 = 120V AC/DC

VOLTAGE PROOF = 360V AC/DC

INSULATION RESISTANCE = 100M Ω MIN

POWER CONTACT:

CONTACT RESISTANCE 6m Ω 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 m Ω MAXINSULATION RESISTANCE = 10⁶M Ω @250V AC

OPERATING VOLTAGE = 180V AC @ 500mA

MAXIMUM VOLTAGE = 1000V AC

MECHANICAL:

DURABILITY = 500 OPERATIONS

COAX & POWER CONTACT:

INSERTION FORCE = 5N MAX

WITHDRAWAL FORCE = 0.5N MIN

ENVIRONMENTAL:

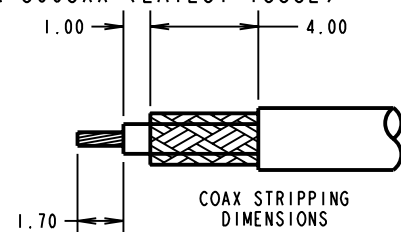
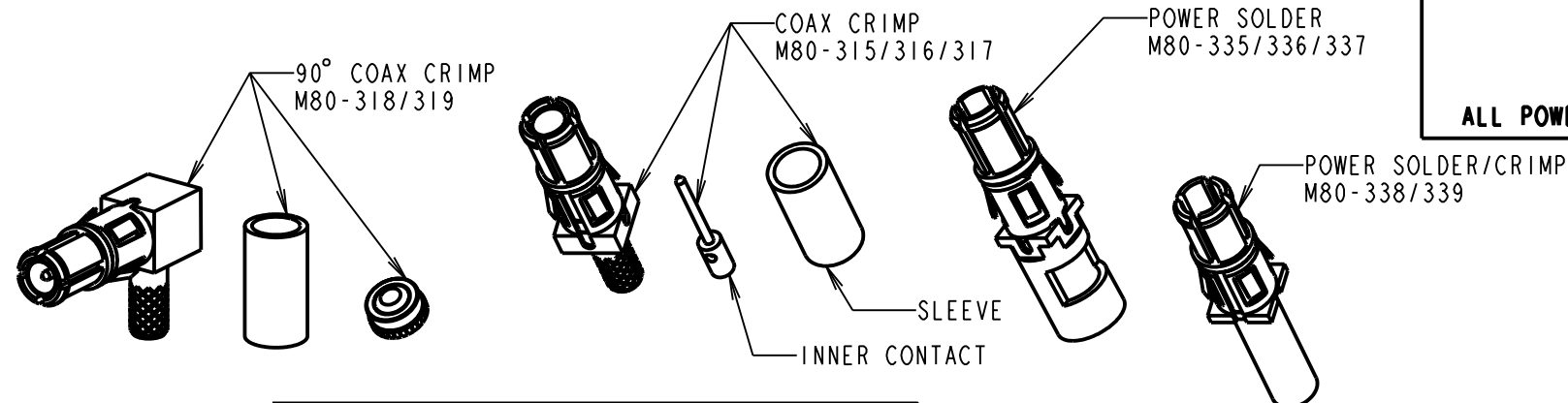
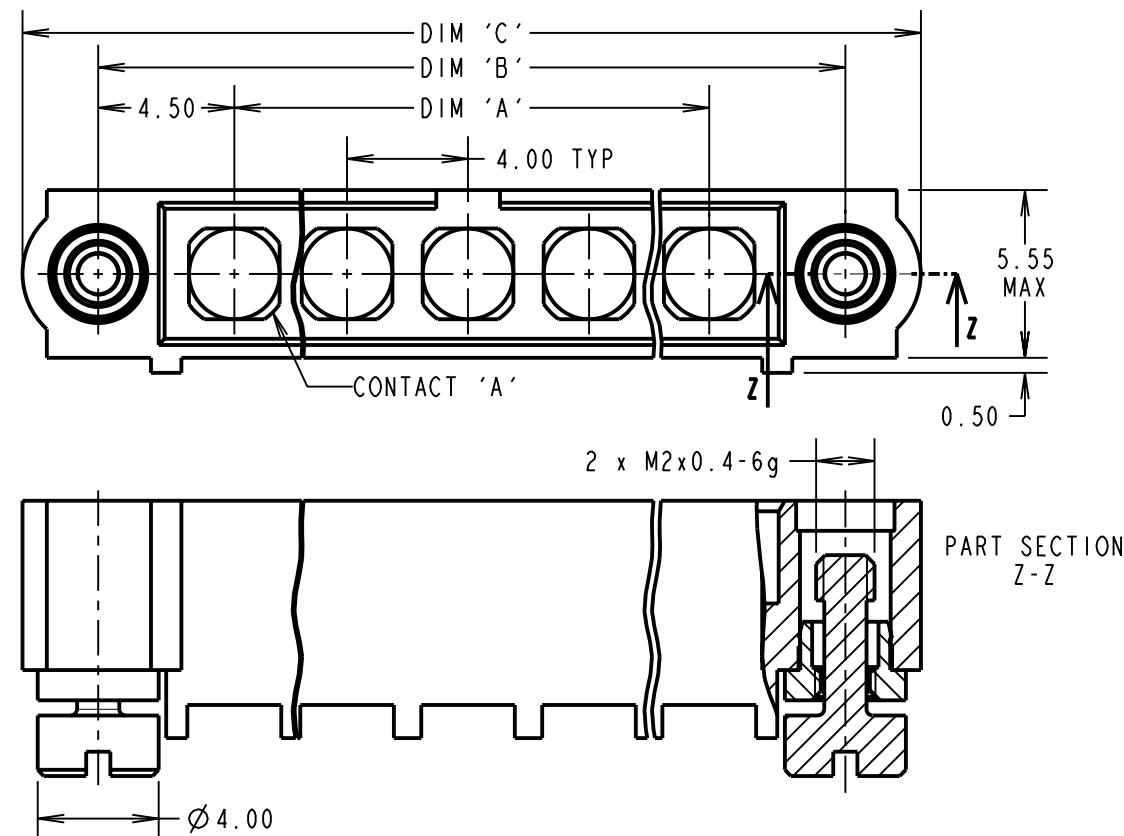
TEMPERATURE RANGE = -55°C TO +125°C

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, M80-5000000MA-08-315-00-000 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm DIM 'D' = 3.0mm	
EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS, M80-5000000MA-10-335-00-000 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm DIM 'E' = 3.5mm	

ORDER CODE: (CRIMP/SOLDER CONTACTS)

M80-5000000MA-XX-XXX-00-000TOTAL 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
336 = POWER CONTACT 14AWG SOLDER
337 = POWER CONTACT 16AWG SOLDER
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
- POWER CONTACT WIRE, STRIP BY 5.00mm MINIMUM.
- RECOMMENDED HAND CRIMP TOOL FOR CONTACTS M80-338/339 = Z80-294 AND POSITIONER Z80-295.
- RECOMMENDED HAND CRIMP TOOL FOR INNER CONTACT = Z80-292 WITH POSITIONER Z80-291. RECOMMENDED HAND CRIMP TOOL AND DIE SET FOR SLEEVE = Z80-293.
- INSTRUCTION SHEETS ARE AVAILABLE.

HARWIN

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HARWIN Asia
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TOLERANCES
X. = ± 1 mm
X.X = ± 0.25 mm
X.XX = ± 0.10 mm
X.XXX = ± 0.01 mm
ANGLES = $\pm 5^\circ$
UNLESS STATED

MATERIAL:

SEE ABOVE

FINISH: SEE ABOVE

S/AREA:

mm²

TITLE: JACKSCREW DATAMATE
MIXED TECHNOLOGY
MALE ASSEMBLY

DRAWING NUMBER:

M80-5000000MA-XX-XXX-00-000SHT
3 OF 4

RA	A	07.12.09	----
NAME	ISS.	DATE	C/NOTE
APPROVED:		R. ADDE	
CHECKED:		M.G. PLESTED	
DRAWN:		R. ADDE	
CUSTOMER REF.:			
ASSEMBLY DRG:			

Customer Information Sheet

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

SHEET 4 OF 4

IF IN DOUBT - ASK

©

NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

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 = 120V AC/DC

VOLTAGE PROOF = 360V AC/DC

INSULATION RESISTANCE = 100M Ω MIN

POWER CONTACT:

CONTACT RESISTANCE 6m Ω 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 m Ω MAXINSULATION RESISTANCE = 10⁶M Ω @250V AC

OPERATING VOLTAGE = 180V AC @ 500mA

MAXIMUM VOLTAGE = 1000V AC

MECHANICAL:

DURABILITY = 500 OPERATIONS

COAX & POWER CONTACT:

INSERTION FORCE = 5N 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)

NOTES:

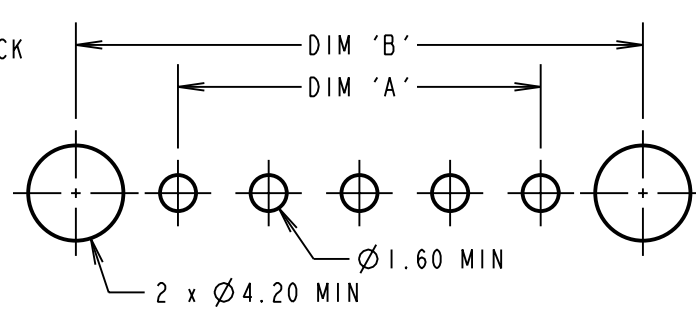
1. FOR EXAMPLE OF ALL COAX SPECIAL CONTACTS

ORDER CODE SEE EXAMPLE 1 IN TABLE.

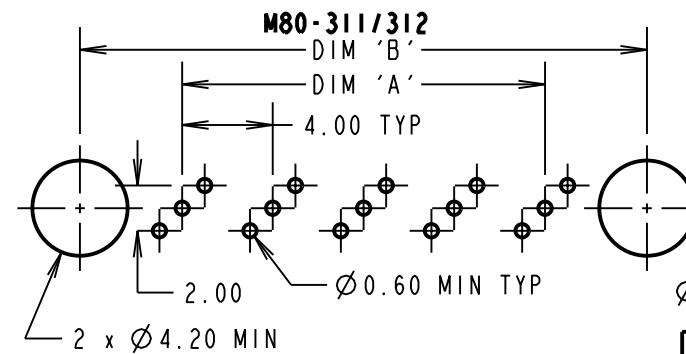
2. FOR EXAMPLE OF ALL POWER SPECIAL CONTACTS

ORDER CODE SEE EXAMPLE 2 IN TABLE.

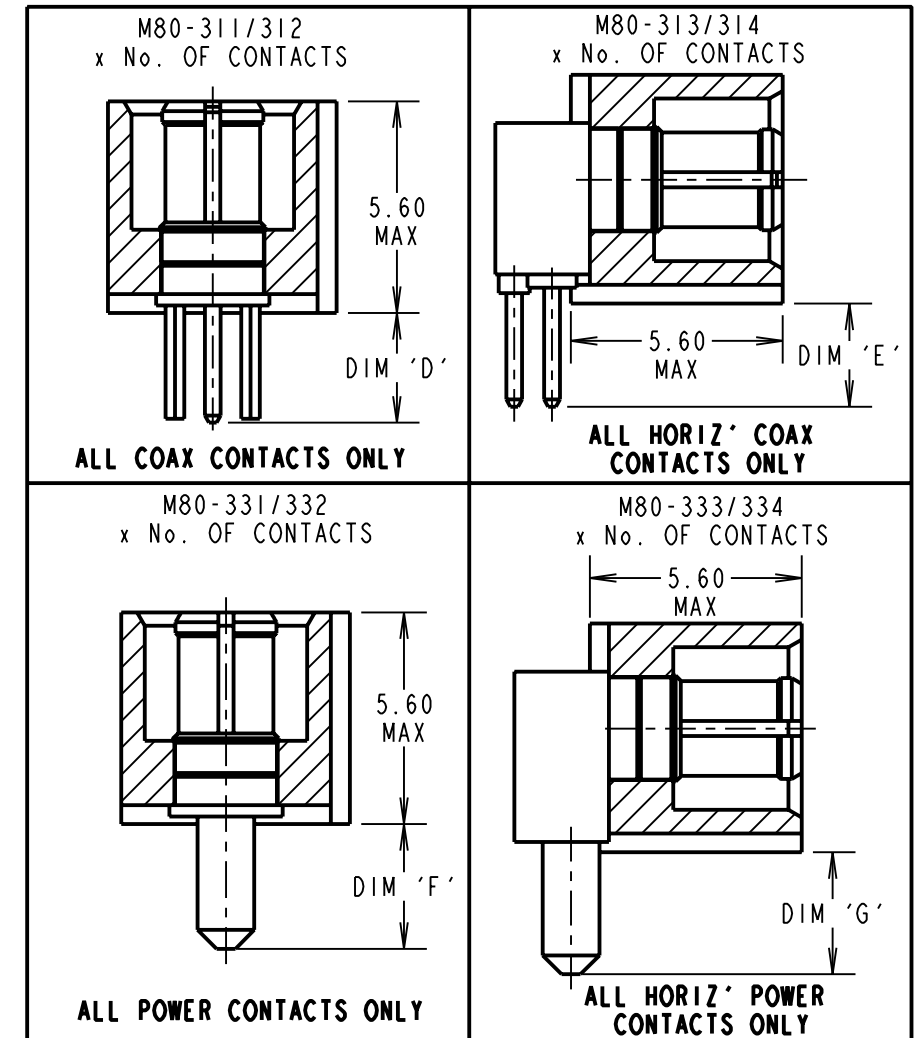
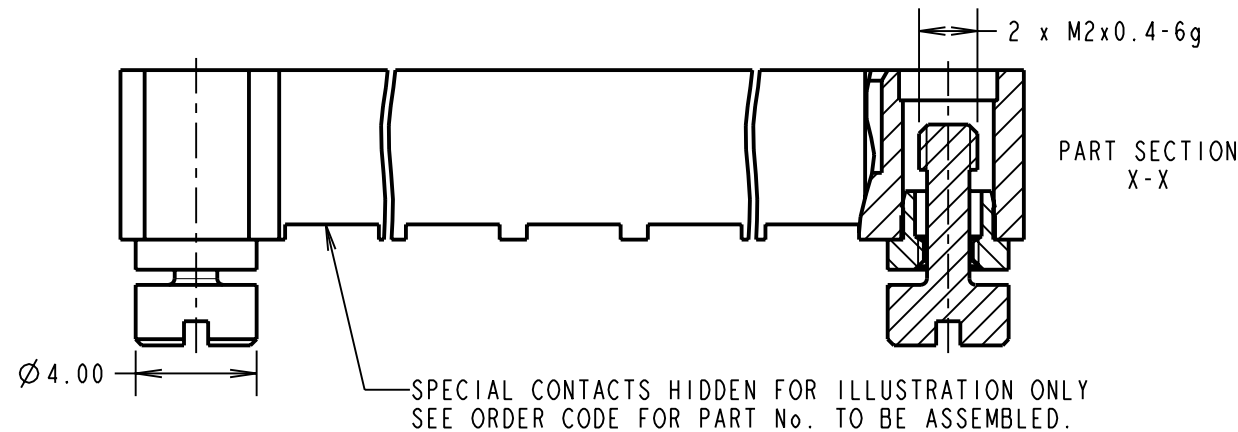
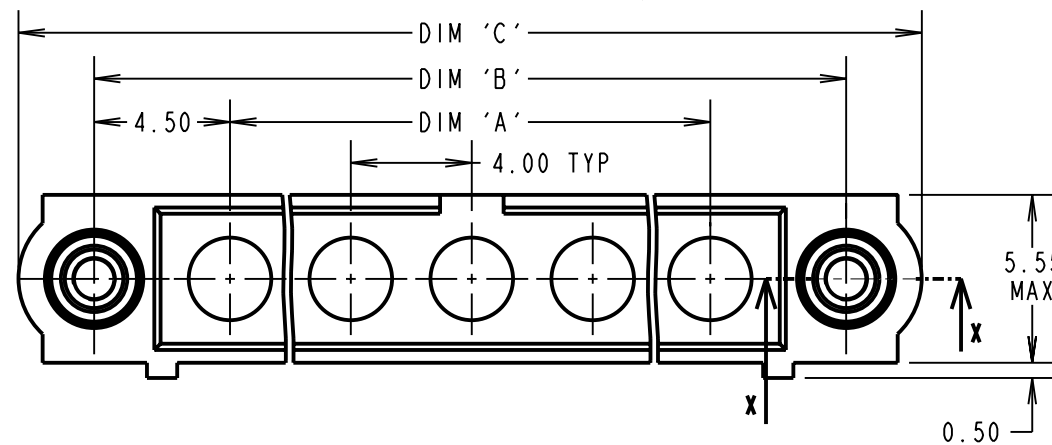
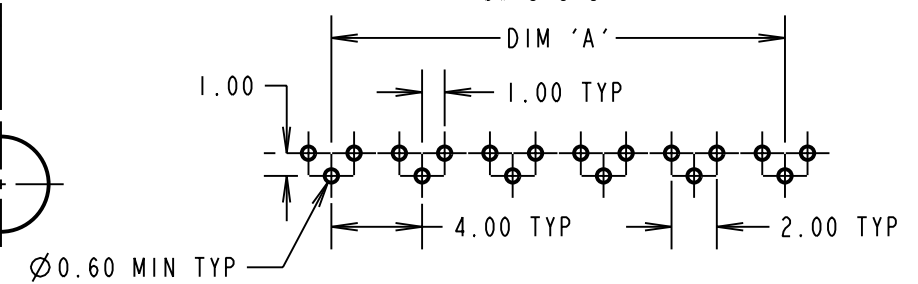
RECOMMENDED PCB LAYOUT FOR ALL POWER ONLY



RECOMMENDED PCB LAYOUTS FOR ALL COAX CONTACTS ONLY



M80-313/314



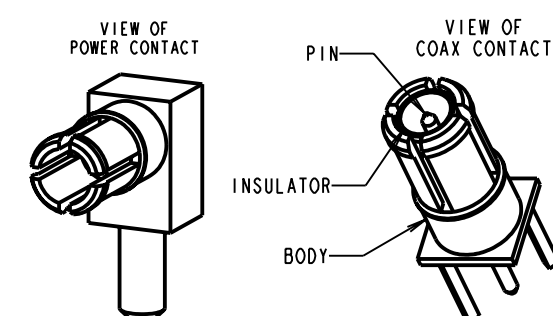
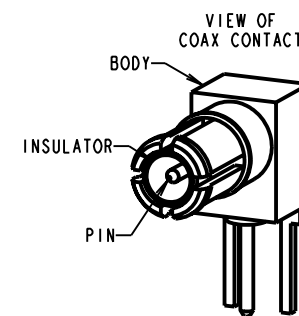
DIMENSION	CALCULATION
DIM 'A'	4 x No. OF CONTACTS - 4.00
DIM 'B'	4 x No. OF CONTACTS + 5.00
DIM 'C'	4 x No. OF CONTACTS + 10.00
DIM 'D'	M80-311 = 3.0mm, M80-312 = 4.5mm
DIM 'E'	M80-313 = 3.0mm, M80-314 = 4.5mm
DIM 'F'	M80-331 = 3.5mm, M80-332 = 5.0mm
DIM 'G'	M80-333 = 3.0mm, M80-334 = 4.5mm
EXAMPLE 1: CONNECTOR WITH 08 COAX CONTACTS, M80-5000000MA-08-313-00-000 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm DIM 'D' = 3.0mm	
EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS, M80-5000000MA-10-334-00-000 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm DIM 'E' = 3.5mm	

ORDER CODE:(PC TAIL CONTACTS ONLY)

M80-5000000MA-XX-XXX-00-000TOTAL 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 HORIZ' PC TAIL M80-313
314 = COAX CONTACT 4.5mm HORIZ' 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 HORIZ' PC TAIL M80-333
334 = POWER CONTACT 4.5mm HORIZ' PC TAIL M80-334

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X.X = ± 0.25 mm
X.XX = ± 0.10 mm
X.XXX = ± 0.01 mm
ANGLES = $\pm 5^\circ$
UNLESS STATED

MATERIAL:

SEE ABOVE

FINISH:

SEE ABOVE

S/AREA:

mm²

TITLE: JACKSCREW DATAMATE
MIXED TECHNOLOGY
MALE ASSEMBLY

DRAWING NUMBER:

M80-5000000MA-XX-XXX-00-000SHT
4 OF 4

RA	A	07.12.09	----
NAME	ISS.	DATE	C/NOTE
APPROVED:		R.ADE	
CHECKED:		M.G.PLESTED	
DRAWN:		R.ADE	
CUSTOMER REF.:			
ASSEMBLY DRG:			