

# Customer Information Sheet

DRAWING No.: M80-400000F1-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  
 POWER & COAX CONTACT:  
 BODY = COPPER ALLOY  
 INNER CONTACT, LATCHING COLLAR = BERYLLIUM COPPER  
 INSULATOR = PTFE  
 JACKSCREW, CIRCLIP: STAINLESS STEEL  
**FINISH:**  
 POWER & COAX CONTACT  
 BODY, SLEEVE, INNER CONTACT = GOLD  
 LATCHING COLLAR: = NICKEL  
**ELECTRICAL:**  
 WORKING VOLTAGE = 120V AC/DC  
 VOLTAGE PROOF = 360V AC/DC  
 INSULATION RESISTANCE = 100MΩ MIN  
**POWER CONTACT:**  
 CONTACT RESISTANCE = 6mΩ MAX  
 CURRENT RATING = M80-325 20A MAX 12AWG  
 M80-326 15A MAX 14AWG  
 M80-327 10A MAX 16AWG  
 M80-328 8A MAX 18AWG  
 M80-329 5A MAX 20AWG  
 M80-32A 20A MAX 12AWG  
 M80-32B 15A MAX 14AWG  
 M80-32C 10A MAX 16AWG  
 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 = 10<sup>6</sup> MΩ @ 250V AC  
 OPERATING VOLTAGE = 180V AC @ 500mA  
 MAXIMUM VOLTAGE = 1000V AC

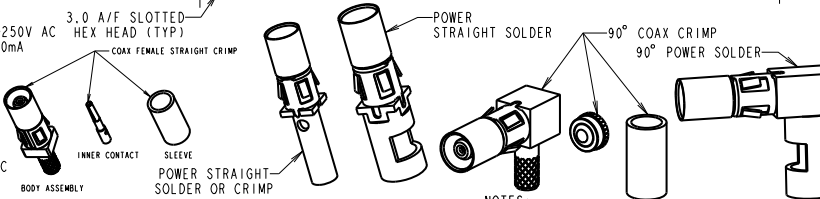
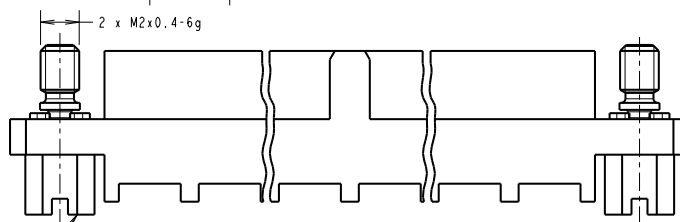
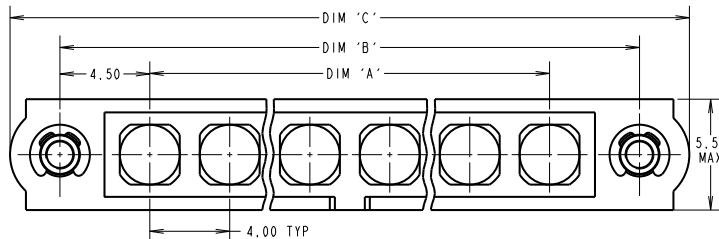
**MECHANICAL:**  
 DURABILITY = 500 OPERATIONS  
 POWER & COAX CONTACT:  
 INSERTION FORCE = 5N MAX  
 WITHDRAWAL FORCE = 0.5N MIN  
**ENVIRONMENTAL:**  
 TEMPERATURE RANGE = -55°C TO +125°C  
**PACKING:**  
 BAG

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
DIM 'D'	M80-305/306/307 = 13.4mm
DIM 'E'	M80-325/326/327 = 12.7mm
DIM 'F'	M80-308/309 = 9.7mm
DIM 'G'	M80-32A/32B/32C = 10.3mm
DIM 'H'	M80-328/329 = 13.95mm

EXAMPLE 1: CONNECTOR WITH 08 COAX CONTACTS.  
 M80-400000F1-08-305-00-000  
 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm,  
 DIM 'C' = 42.00mm, DIM 'D' = 13.4mm

EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS.  
 M80-400000F1-10-325-00-000  
 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm,  
 DIM 'C' = 50.00mm, DIM 'E' = 12.7mm



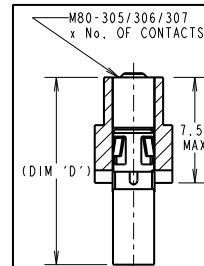
ORDER CODE: (CRIMP/SOLDER)  
**M80-400000F1-XX-XXX-00-000**

TOTAL No. OF CONTACTS  
 02 TO 12

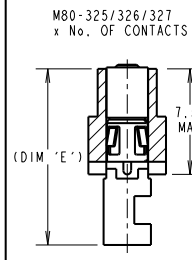
**SPECIAL CONTACTS**  
 305 = COAX CONTACT CRIMP 2.0mm M80-305  
 306 = COAX CONTACT CRIMP 2.4mm M80-306  
 307 = COAX CONTACT CRIMP 2.7mm M80-307  
 308 = 90° COAX CONTACT CRIMP 2.0mm M80-308  
 309 = 90° COAX CONTACT CRIMP 2.7mm M80-309  
 325 = POWER CONTACT SOLDER 12AWG M80-325  
 326 = POWER CONTACT 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

## NOTES:

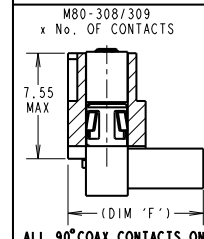
- CONNECTORS ARE SUPPLIED WITH CONTACTS LOOSE.
- COAX CONTACT IS SUPPLIED AS A KIT OF PARTS: BODY, INSULATOR AND LATCHING COLLAR ARE PRE-ASSEMBLED AND SLEEVE AND INNER CONTACT ARE SEPARATE.
- FOR EXTRA COAX CONTACTS, USE PART NUMBER M80-305/306/307/308/309 FOR EXTRA POWER CONTACTS, USE PART NUMBER M80-325/326/327/328/329/32A/32B/32C.
- 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.
- POWER AND COAX CONTACT EXTRACTION TOOL = Z80-290
- POWER CONTACT WIRE, STRIP BY 5.00mm MINIMUM
- INSTRUCTION SHEETS ARE AVAILABLE
- FOR EXAMPLE OF ALL COAX SPECIAL CONTACTS ORDER CODE SEE EXAMPLE 1 IN TABLE
- FOR EXAMPLE OF ALL POWER SPECIAL CONTACTS ORDER CODE SEE EXAMPLE 2 IN TABLE.



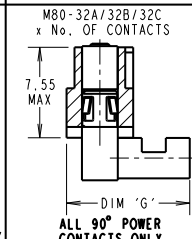
ALL COAX CONTACTS ONLY



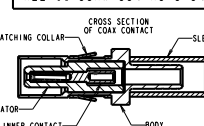
ALL POWER CONTACTS ONLY



ALL 90° COAX CONTACTS ONLY



ALL 90° POWER CONTACTS ONLY



ALL POWER CONTACTS ONLY



SM	I	23.08.10	10806
NAME	ISS:	DATE	C/NOTE
APPROVED:	S. MCCULLAGH		
CHECKED:	R. ADDE		
DRAWN:	R. ADDE		
CUSTOMER REF.:			
ASSEMBLY DRG:			

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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:**  
 mm<sup>2</sup>

**TITLE:** JACKSCREW DATAMATE MIXED TECHNOLOGY FEMALE ASSEMBLY

**DRAWING NUMBER:**  
**M80-400000F1-XX-XXX-00-000**

SHT  
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 OF 4

# Customer Information Sheet

DRAWING No.: M80-400000F1-XX-XXX-00-000

SHEET 4 OF 4

IF IN DOUBT - ASK (C)

NOT TO SCALE

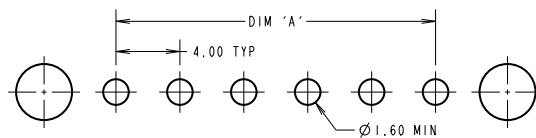
THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

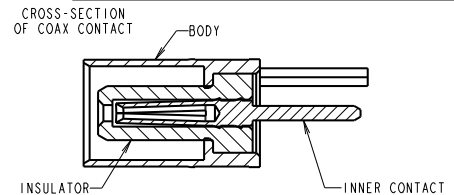
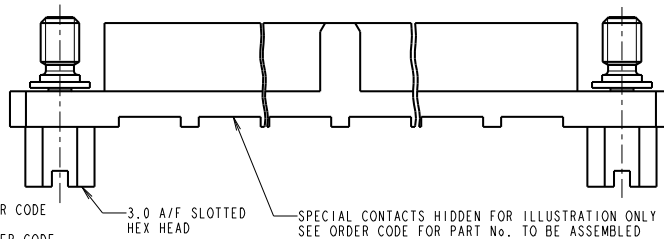
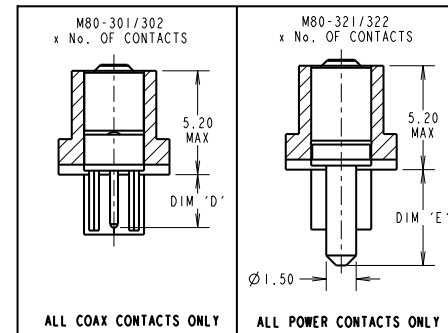
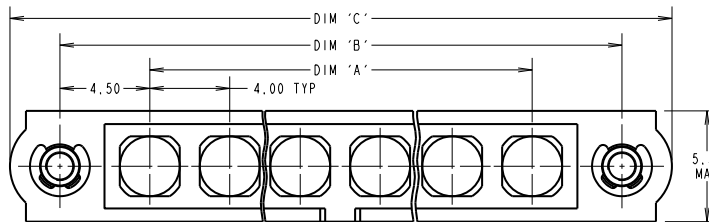
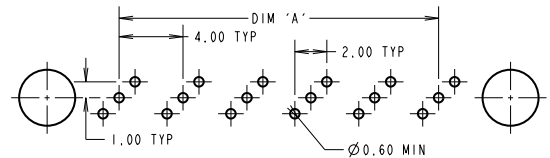
## SPECIFICATIONS:

**MATERIAL:**  
 Moulding: GLASS FILLED PPS, UL94V-0, BLACK  
**POWER & COAX CONTACT:**  
 BODY = COPPER ALLOY  
 INNER CONTACT = BERYLLIUM COPPER  
 INSULATOR = PTFE  
 JACKSCREW, CIRCLIP: STAINLESS STEEL  
**FINISH:**  
 POWER & COAX CONTACT  
 BODY, SLEEVE, INNER CONTACT = GOLD  
**ELECTRICAL:**  
 WORKING VOLTAGE = 120V AC/DC  
 VOLTAGE PROOF = 360V 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 = 10<sup>6</sup>MΩ @250V AC  
 OPERATING VOLTAGE = 180V AC @ 500mA  
 MAXIMUM VOLTAGE = 1000V AC  
**MECHANICAL:**  
 DURABILITY = 500 OPERATIONS  
 POWER & COAX 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)

RECOMMENDED PCB LAYOUT FOR ALL POWER CONTACTS ONLY



RECOMMENDED PCB LAYOUT FOR ALL COAX CONTACTS ONLY

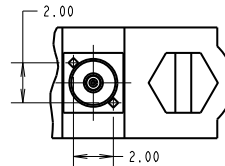


- NOTES:**  
 1. FOR EXAMPLE OF ALL COAX SPECIAL CONTACTS ORDER CODE SEE EXAMPLE 1 IN TABLE  
 2. FOR EXAMPLE OF ALL POWER SPECIAL CONTACTS ORDER CODE SEE EXAMPLE 2 IN TABLE.

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'	M80-301 = 3.00mm, M80-302 = 4.50mm
DIM 'E'	M80-321 = 3.50mm, M80-322 = 5.00mm
EXAMPLE 1: CONNECTOR WITH 08 COAX CONTACTS, M80-400000F1-08-301-00-000	
DIM 'A'	= 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm DIM 'D' = 3.00mm
EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS, M80-400000F1-10-321-00-000	
DIM 'A'	= 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm DIM 'E' = 3.50mm

ORDER CODE: (PC TAIL CONTACTS ONLY)  
**M80-400000F1-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 = POWER CONTACT PC TAIL 3.5mm M80-321  
 322 = POWER CONTACT PC TAIL 5.0mm M80-322



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**MATERIAL:**  
 SEE ABOVE  
**FINISH:**  
 SEE ABOVE  
**S/AREA:**  
 mm<sup>2</sup>

**TITLE:** JACKSCREW DATAMATE MIXED TECHNOLOGY FEMALE ASSEMBLY  
**DRAWING NUMBER:**  
**M80-400000F1-XX-XXX-00-000**  
 SHT 4 of 4

SM	1	23.08.10	10806
NAME	ISS.	DATE	C/NOTE
APPROVED: S. MCCULLAGH			
CHECKED: R. ADDE			
DRAWN: R. ADDE			
CUSTOMER REF.:			
ASSEMBLY DRG:			