

# Customer Information Sheet

DRAWING No.: M80-400000F1-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  
 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

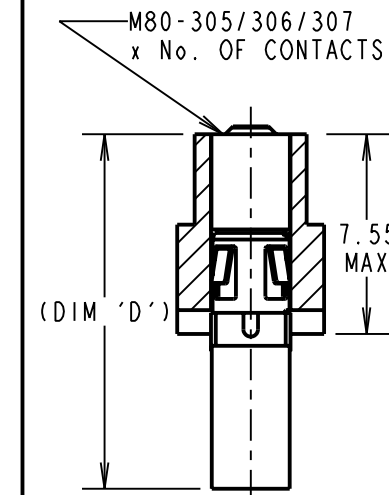
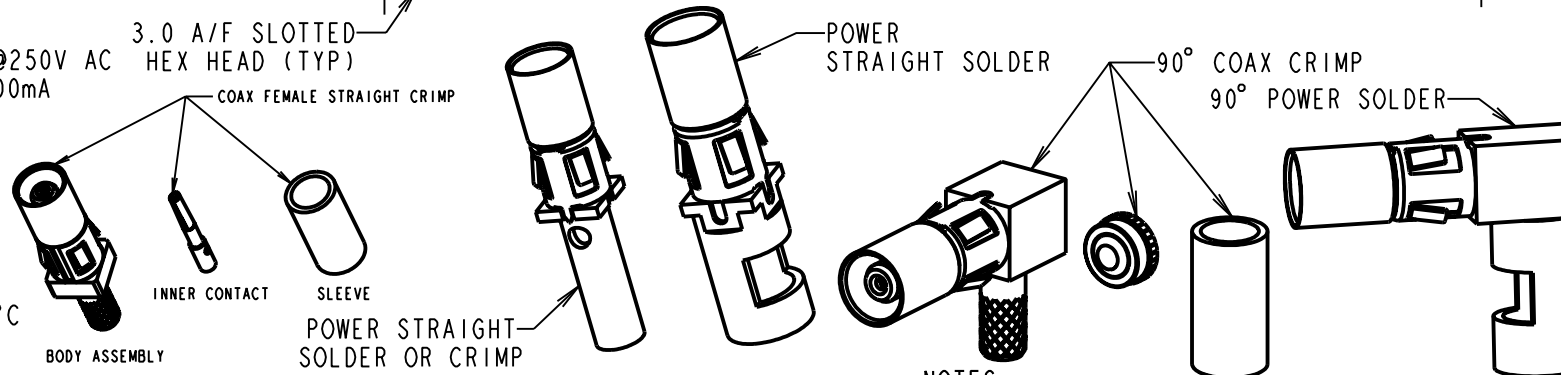
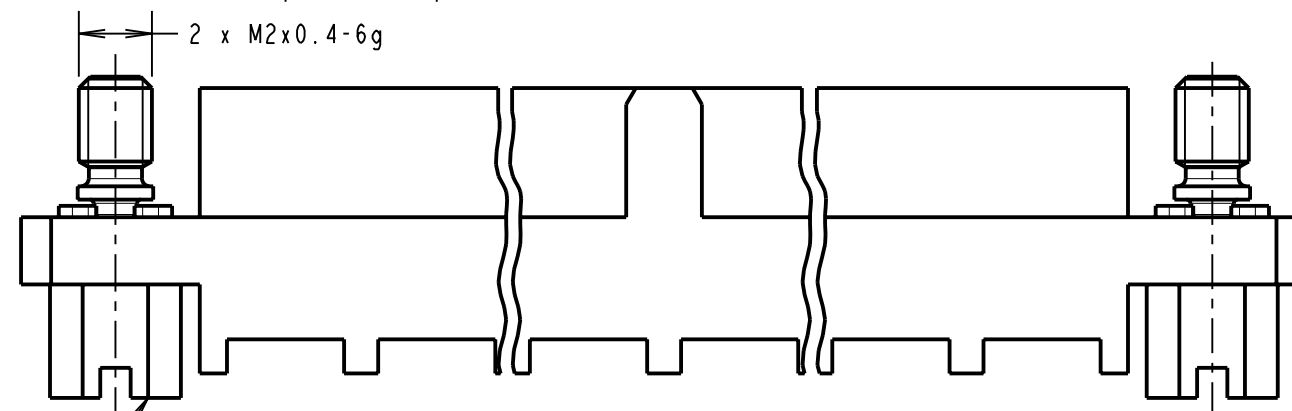
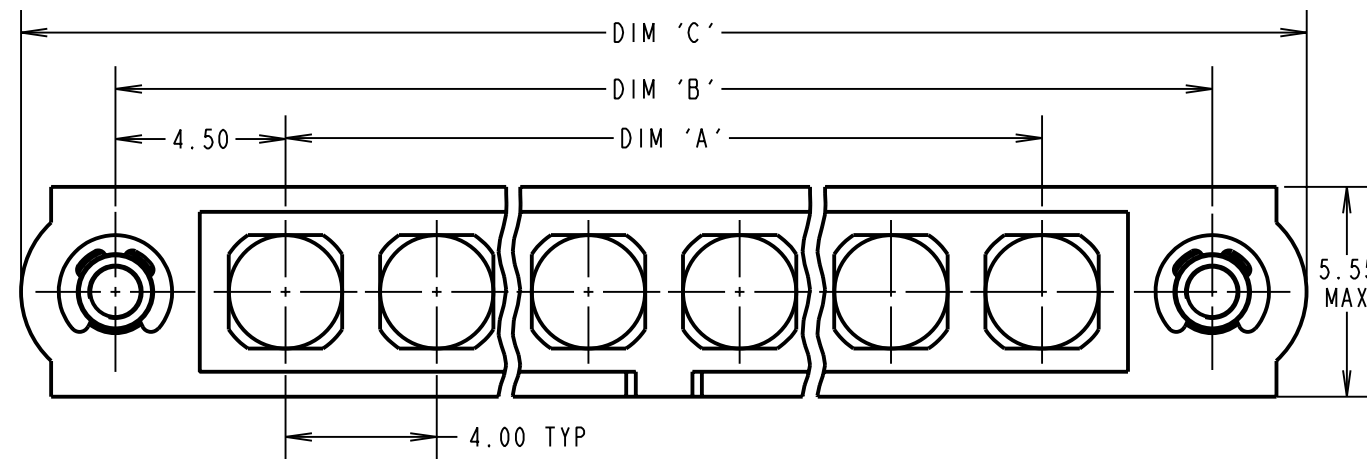
**ELECTRICAL:**  
 WORKING VOLTAGE = 120V AC/DC  
 VOLTAGE PROOF = 360V AC/DC  
 INSULATION RESISTANCE = 100MΩ MIN  
**POWER CONTACT:**  
 CONTACT RESISTANCE = 6mΩ MAX  
 CURRENT RATING = M80-325 20A MAX 12AWG  
 M80-326 15A MAX 14AWG  
 M80-327 10A MAX 16AWG  
 M80-328 8A MAX 18AWG  
 M80-329 5A MAX 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

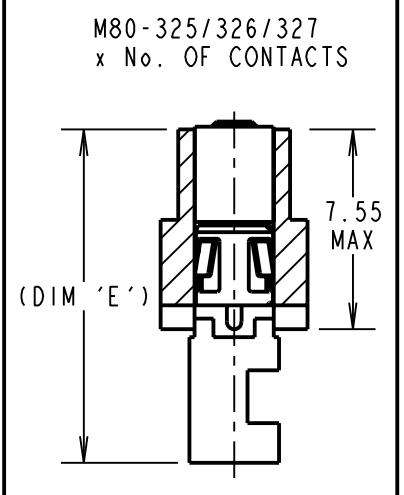
**MECHANICAL:**  
 DURABILITY = 500 OPERATIONS  
 POWER & COAX CONTACT:  
 INSERTION FORCE = 5N MAX  
 WITHDRAWAL FORCE = 0.5N MIN

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

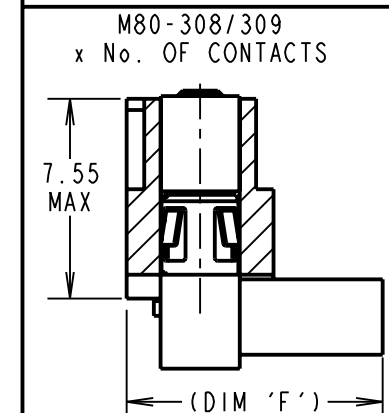
**PACKING:**  
 BAG  
 FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)



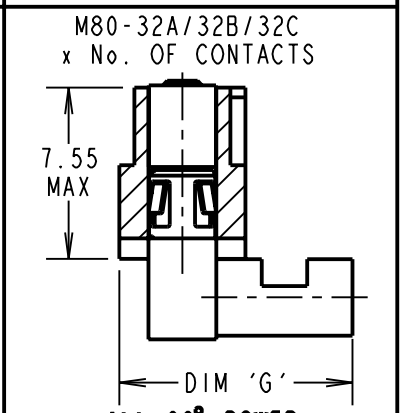
ALL COAX CONTACTS ONLY



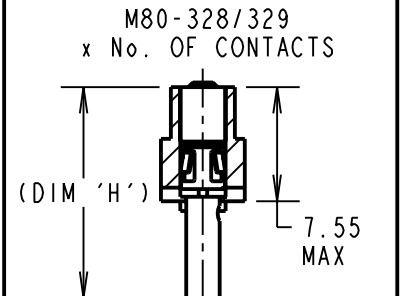
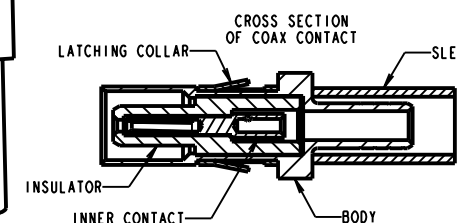
ALL POWER CONTACTS ONLY



ALL 90° COAX CONTACTS ONLY



ALL 90° POWER CONTACTS ONLY



ALL POWER CONTACTS ONLY

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

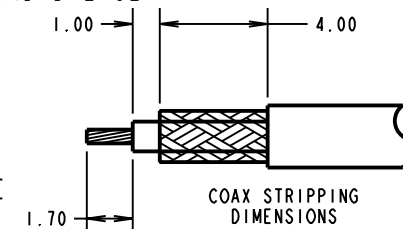
TOTAL No. OF CONTACTS \_\_\_\_\_  
 02 TO 12

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 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.



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

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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**

CP	D	21.05.10	10812
NAME	ISS.	DATE	C/NOTE
APPROVED:		C.PENROSE	
CHECKED:		R.ADE	
DRAWN:		R.ADE	
CUSTOMER REF.:			
ASSEMBLY DRG:			

SHT 3 OF 4

# Customer Information Sheet

DRAWING No.: M80-400000F1-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

### 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

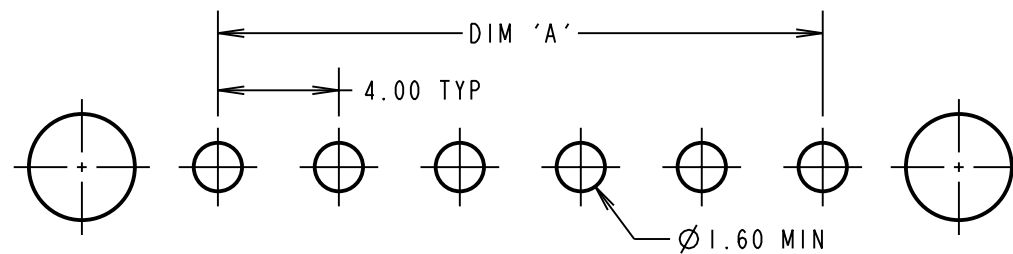
### PACKING:

TUBE

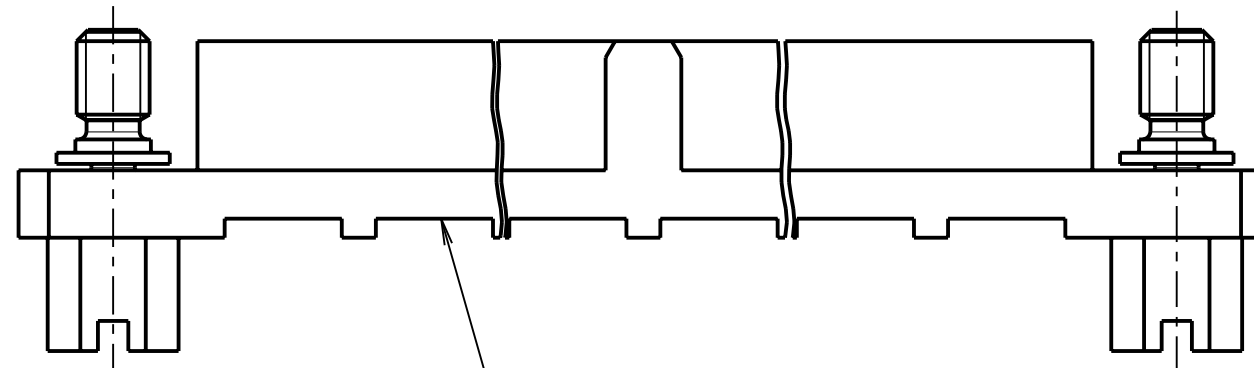
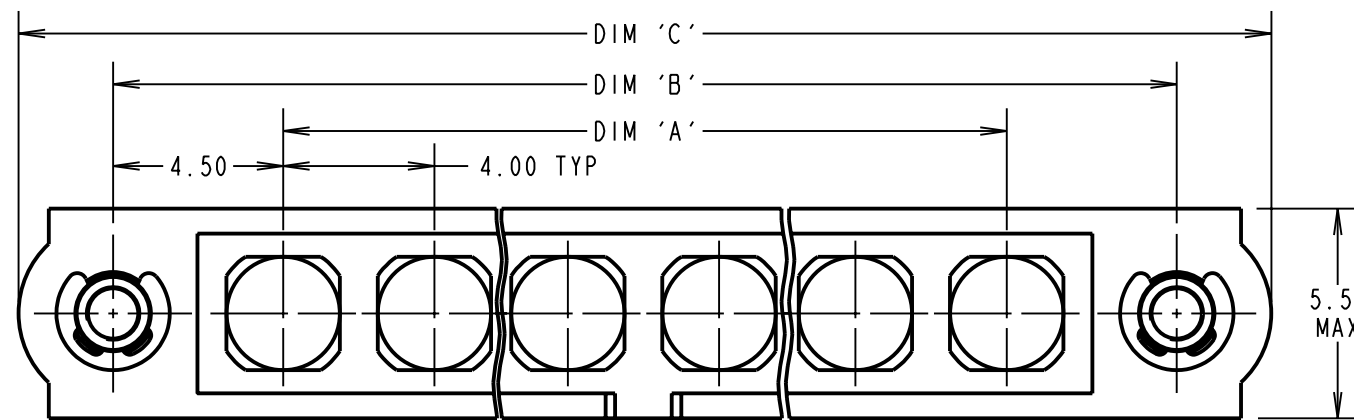
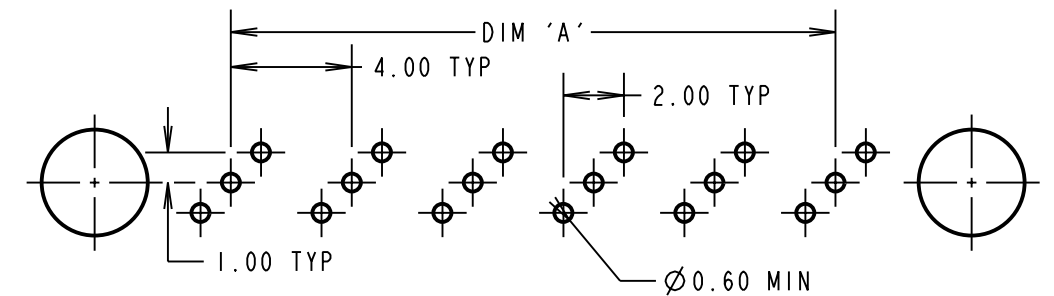
FOR COMPLETE SPECIFICATION SEE COMPONENT

SPECIFICATION C005XX (LATEST ISSUE)

RECOMMENDED PCB LAYOUT FOR ALL POWER CONTACTS ONLY

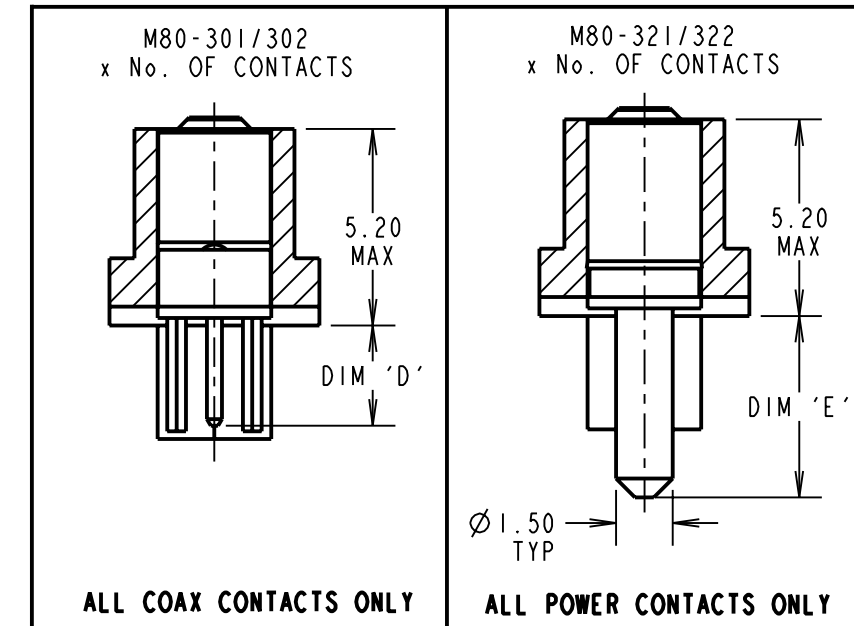


RECOMMENDED PCB LAYOUT FOR ALL COAX CONTACTS ONLY

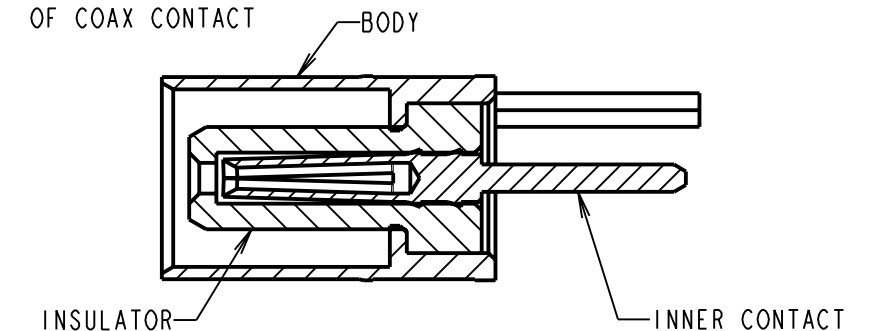


3.0 A/F SLOTTED  
HEX HEAD (TYP)

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



CROSS-SECTION  
OF COAX CONTACT



### NOTES:

- 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.

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

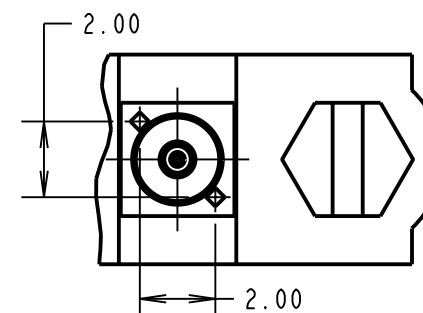
ORDER CODE: (PC TAIL CONTACTS ONLY)

**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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### 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**

CP	D	21.05.10	10812
NAME	ISS.	DATE	C/NOTE
APPROVED:		C.PENROSE	
CHECKED:		R.ADDE	
DRAWN:		R.ADDE	
CUSTOMER REF.:			
ASSEMBLY DRG:			

SHT  
4 OF 4