

# Customer Information Sheet

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

SHEET 4 OF 6

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 CONTACT:

BODY, SLEEVE, INNER CONTACT, END PLUG = COPPER ALLOY

LATCHING COLLAR = BERYLLIUM COPPER

INSULATOR = PTFE

BOARD MOUNT JACKSCREW, SCREW = STAINLESS STEEL

### FINISH:

### COAX CONTACT:

BODY, SLEEVE, INNER CONTACT, END PLUG = GOLD

LATCHING COLLAR = NICKEL

### ELECTRICAL:

WORKING VOLTAGE = 800V AC/DC

VOLTAGE PROOF = 1200V AC/DC

INSULATION RESISTANCE = 100M $\Omega$  MIN

### COAX CONTACT:

FREQUENCY RANGE = 6GHz

IMPEDANCE = 50 $\Omega$

V.S.W.R = 1.05 + (0.04 x FREQUENCY) GHz MAX

CONTACT RESISTANCE = 6m $\Omega$  MAX

INSULATION RESISTANCE = 10<sup>6</sup>M $\Omega$  @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

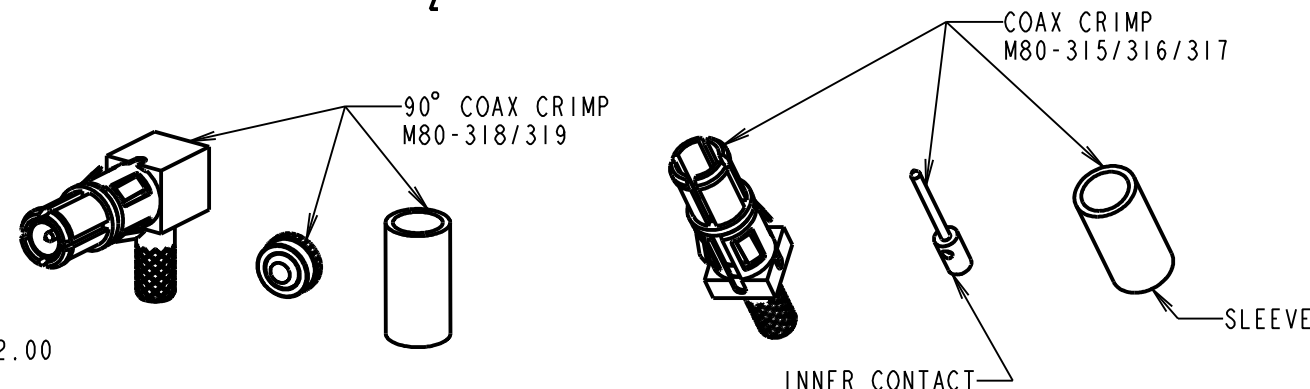
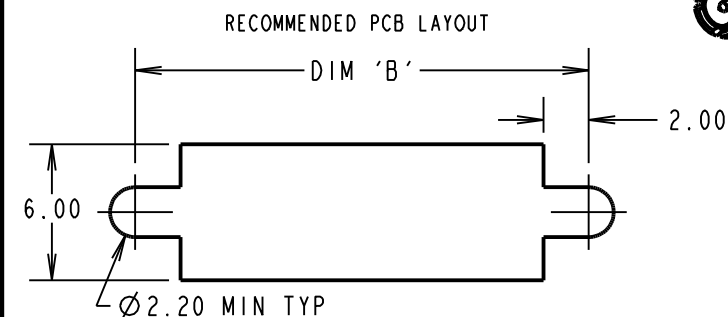
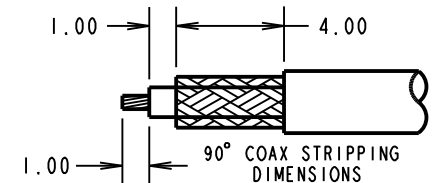
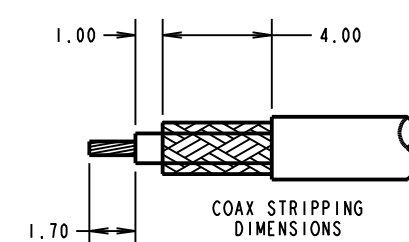
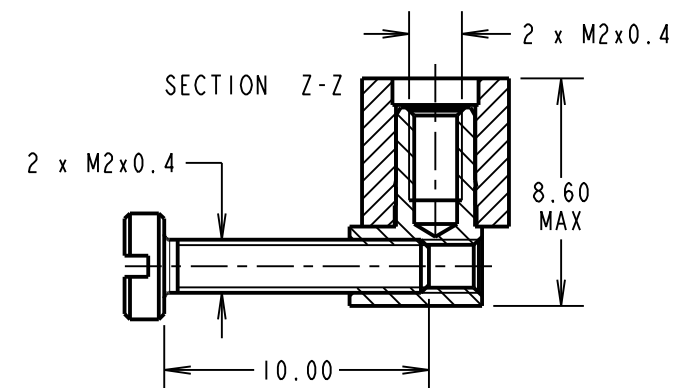
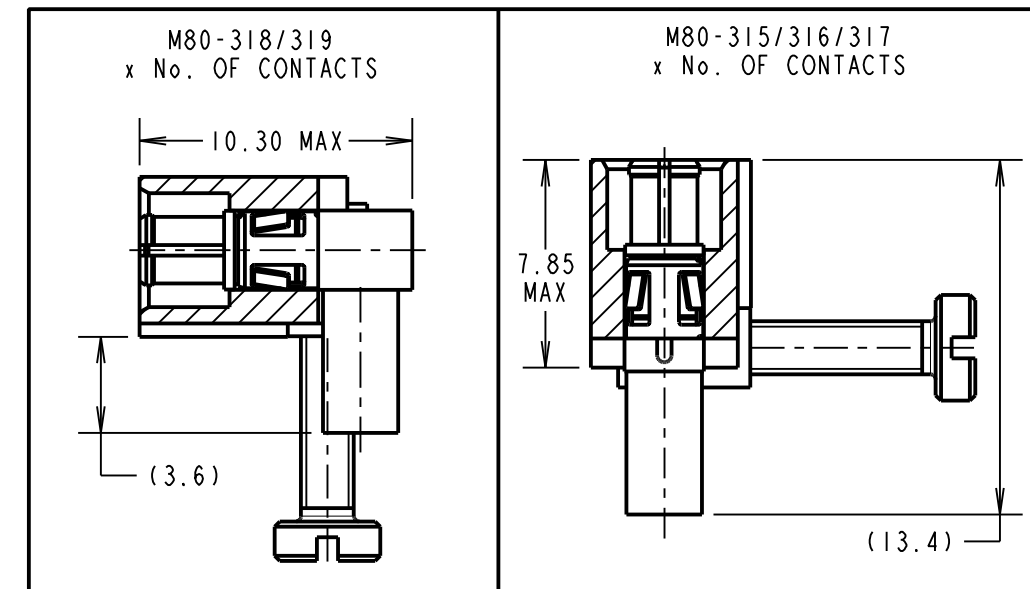
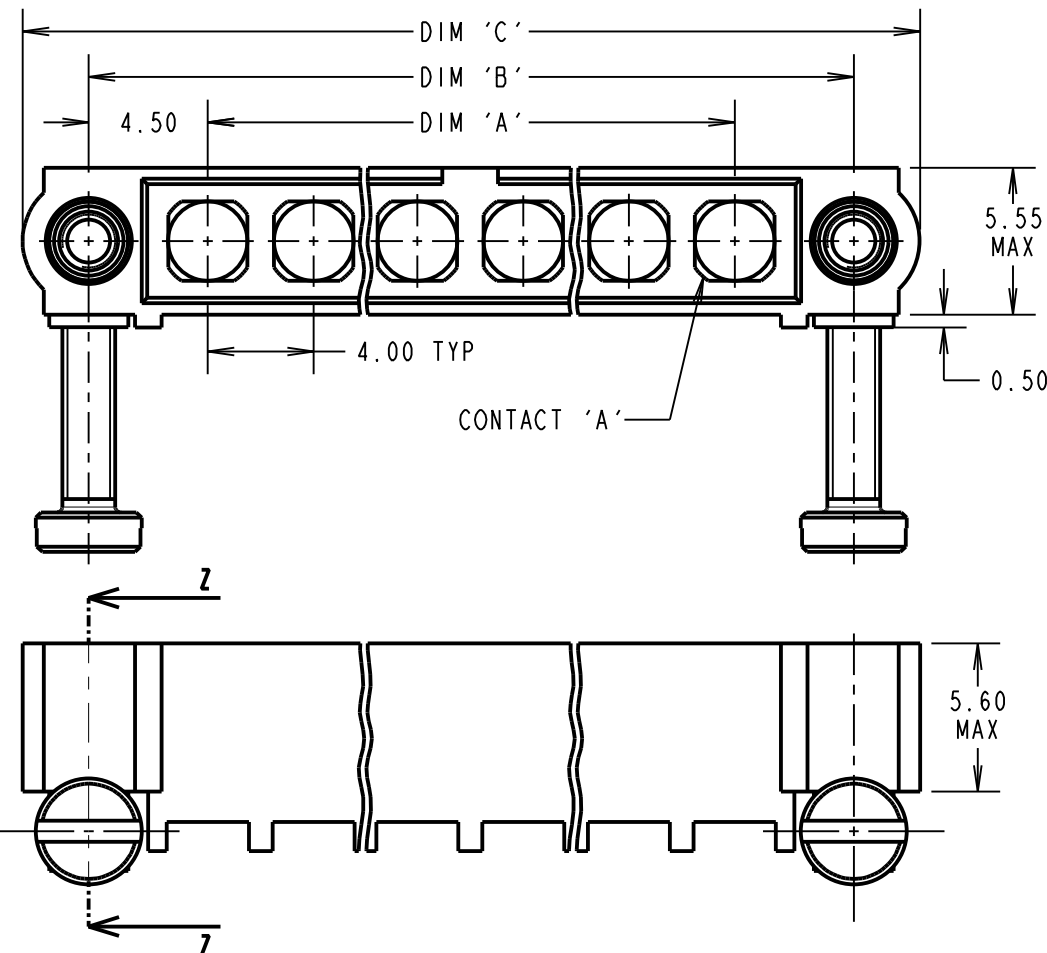
### PACKING:

BAG

FOR COMPLETE SPECIFICATION SEE COMPONENT

SPECIFICATION C005XX (LATEST ISSUE)

## COAX CRIMP CONTACTS ONLY



### CRIMP/SOLDER 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.
- COAX CONTACT EXTRACTION TOOL = Z80-290.
- 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.

ORDER CODE:(COAX CRIMP CONTACTS)

**M80-5000000MN-XX-XXX-00-000**

TOTAL No. OF CONTACTS  
02 TO 12

### SPECIAL CONTACTS

315 = COAX CONTACT 2.00mm CRIMP M80-315  
316 = COAX CONTACT 2.40mm CRIMP M80-316  
317 = COAX CONTACT 2.70mm CRIMP M80-317  
318 = COAX CONTACT 2.00mm HORIZ' CRIMP M80-318  
319 = COAX CONTACT 2.70mm HORIZ' 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 + 10.00
EXAMPLE 1: CONNECTOR WITH 08 COAX CONTACTS, M80-5000000MN-08-315-00-000 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm	

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technical@harwin.com

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TOLERANCES  
X. =  $\pm 1$ mm  
X.X =  $\pm 0.50$ mm  
X.XX =  $\pm 0.10$ mm  
X.XXX =  $\pm 0.01$ mm  
ANGLES =  $\pm 5^\circ$   
UNLESS STATED

MATERIAL:

SEE ABOVE

FINISH:

SEE ABOVE

S/AREA:

mm<sup>2</sup>

TITLE:

DATAMATE MIX-TEK  
PC TAIL MALE ASSY WITH  
BOARD MOUNT J/SCREWS

DRAWING NUMBER:

**M80-5000000MN-XX-XXX-00-000**

SHT

4 OF 6

MSP	2	25.03.15	12566
NAME	ISS.	DATE	C/NOTE
APPROVED:		M.PERREN	
CHECKED:		S.BENNETT	
DRAWN:		R.ADDE	
CUSTOMER REF.:			
ASSEMBLY DRG:			

# Customer Information Sheet

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

SHEET 5 OF 6

IF IN DOUBT - ASK

(C)

NOT TO SCALE

THIRD ANGLE PROJECTION

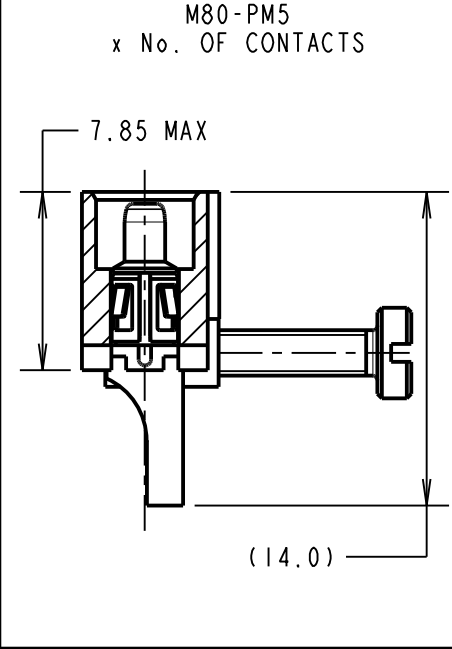
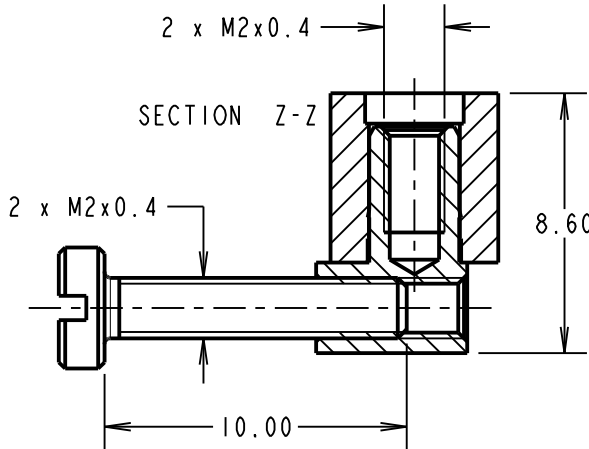
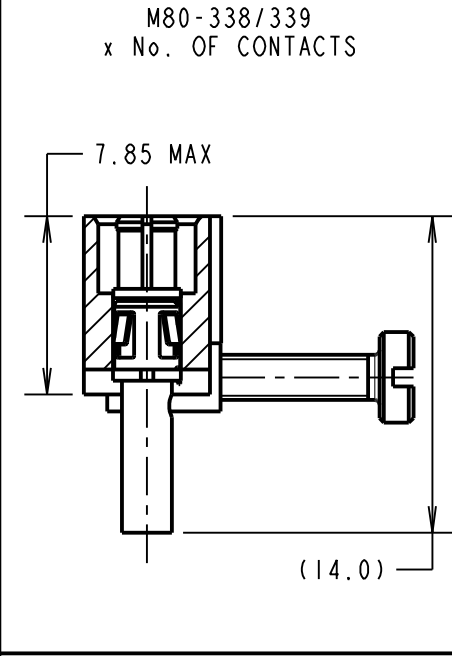
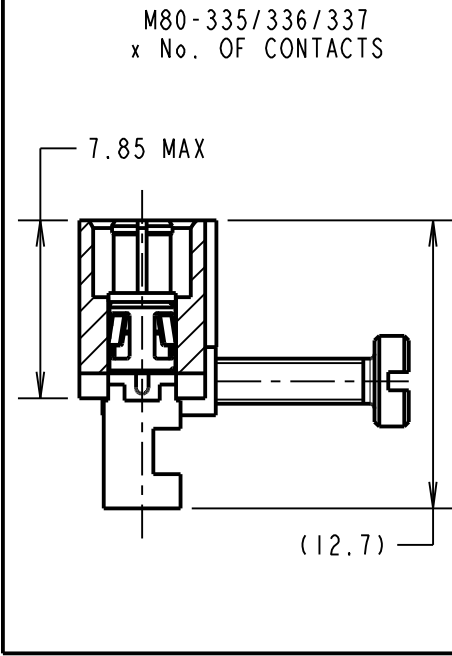
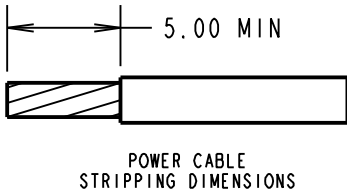
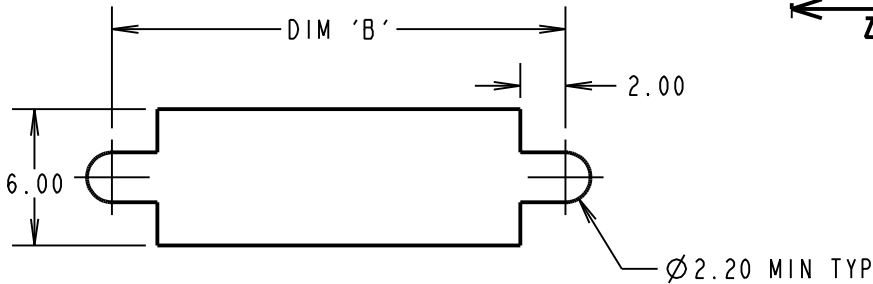
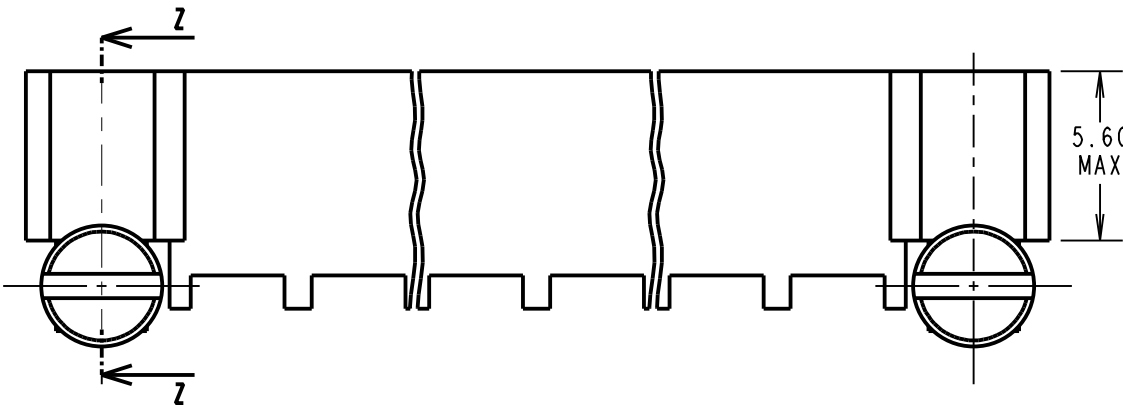
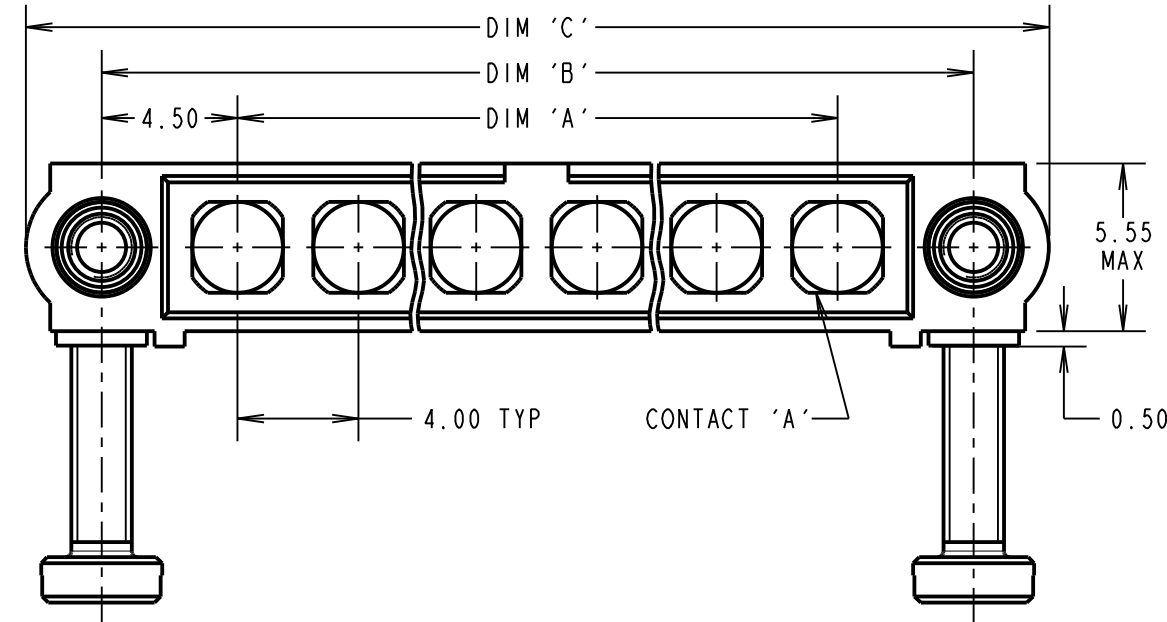
ALL DIMENSIONS IN mm

## SPECIFICATIONS:

**MATERIAL:**  
MOULDING: GLASS FILLED PPS, UL94V-0, BLACK  
**POWER CONTACT:**  
BODY, SLEEVE, INNER CONTACT, END PLUG = COPPER ALLOY  
LATCHING COLLAR = BERYLLIUM COPPER  
INSULATOR = PTFE  
BOARD MOUNT JACKSCREW, SCREW: STAINLESS STEEL  
**FINISH:**  
**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  
M80-PM5 = 40A MAX WITH 10AWG  
CONTACT AS SPECIFIED

**MECHANICAL:**  
DURABILITY = 500 OPERATIONS  
**POWER CONTACT:**  
INSERTION FORCE:  
M80-335/336/337/338/339 = 8N MAX  
M80-PM5 = 15N MAX  
WITHDRAWAL FORCE = 0.5N MIN  
**ENVIRONMENTAL:**  
TEMPERATURE RANGE:  
M80-335/336/337/338/339 = -55°C TO +125°C  
M80-PM5 = -55°C TO +150°C  
**PACKING:**  
BAG  
FOR COMPLETE SPECIFICATION SEE COMPONENT  
SPECIFICATION C005XX (LATEST ISSUE)

## POWER CRIMP & SOLDER CONTACTS ONLY



## CRIMP/SOLDER NOTES:

- CONNECTORS ARE SUPPLIED WITH CONTACTS LOOSE.
- FOR EXTRA POWER CONTACTS USE PART NUMBERS M80-335/336/337/338/339/PM5.
- POWER CONTACT EXTRACTION TOOL = Z80-290.
- RECOMMENDED HAND CRIMP TOOL FOR CONTACTS 338/339 = Z80-294 AND POSITIONER Z80-295.
- INSTRUCTION SHEETS ARE AVAILABLE.

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

ORDER CODE: (POWER CRIMP/SOLDER CONTACTS)

**M80-5000000MN-XX-XXX-00-000**

TOTAL No. OF CONTACTS  
02 TO 12

### SPECIAL CONTACTS

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  
PM5 = POWER CONTACT 10AWG SOLDER M80-PM5

MSP	2	25.03.15	12566
NAME	ISS.	DATE	C/NOTE
APPROVED: M.PERREN			
CHECKED: S.BENNETT			
DRAWN: R.ADDE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

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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:

mm<sup>2</sup>

TITLE:

DATAMATE MIX-TEK  
PC TAIL MALE ASSY WITH  
BOARD MOUNT J/SCREWS

DRAWING NUMBER:

**M80-5000000MN-XX-XXX-00-000**

SHT  
5  
OF  
6

# Customer Information Sheet

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

SHEET 6 OF 6

IF IN DOUBT - ASK

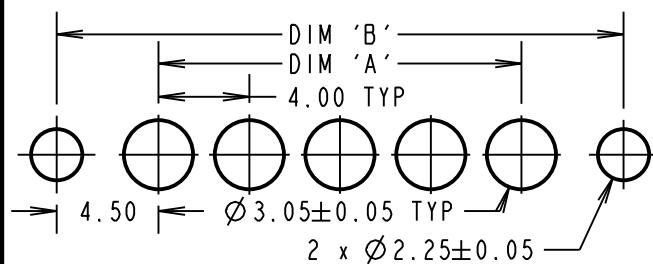
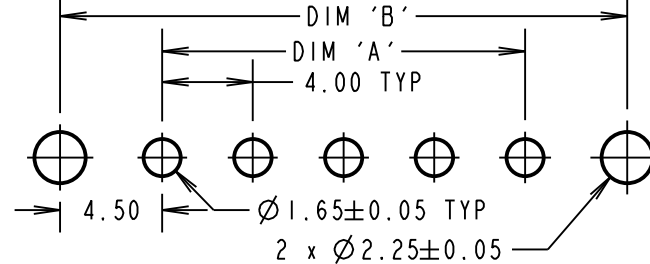
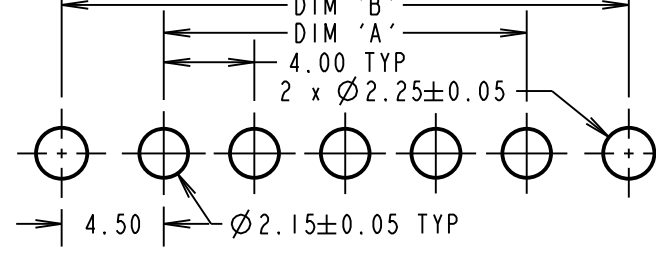
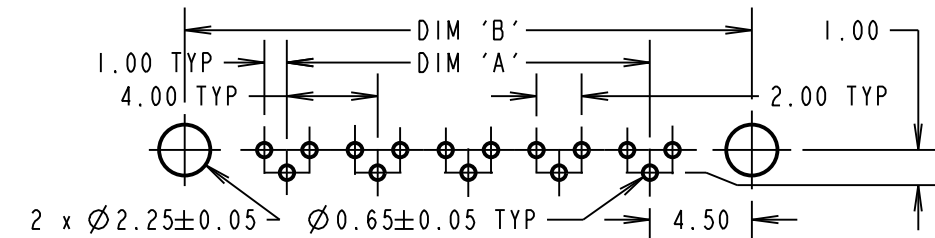
(C)

NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

RECOMMENDED PCB LAYOUT FOR POWER SMT

RECOMMENDED PCB LAYOUT FOR  
POWER CONTACTS: M80-333/334RECOMMENDED PCB LAYOUT FOR  
POWER CONTACTS: M80-PM3/PM4RECOMMENDED PCB LAYOUT FOR  
COAX CONTACTS: M80-313/314

## SPECIFICATIONS:

### MATERIAL:

MOULDING: GLASS FILLED PPS, UL94V-0, BLACK

POWER CONTACT: COPPER ALLOY

### COAX CONTACT:

BODY = COPPER ALLOY

INNER CONTACT = COPPER ALLOY

INSULATOR = PTFE

BOARDMOUNT JACKSCREWS = STAINLESS STEEL

### FINISH:

POWER CONTACT: GOLD

COAX 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:

M80-333/334/33A = 20A MAX

M80-PM3/PM4 = 40A MAX

### 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<sup>6</sup>MΩ @250V AC

OPERATING VOLTAGE = 180V AC @ 500mA

MAXIMUM VOLTAGE = 1000V AC

### MECHANICAL:

DURABILITY = 500 OPERATIONS

### POWER CONTACT:

INSERTION FORCE:

M80-333/334/33A = 8N MAX

M80-PM3/PM4 = 15N MAX

WITHDRAWAL FORCE = 0.5N MIN

### COAX CONTACT:

INSERTION FORCE = 8N MAX

WITHDRAWAL FORCE = 0.5N MIN

### ENVIRONMENTAL:

TEMPERATURE RANGE:

M80-313/314/333/334/33A = -55°C TO +125°C

M80-PM3/PM4 = -55°C TO +125°C

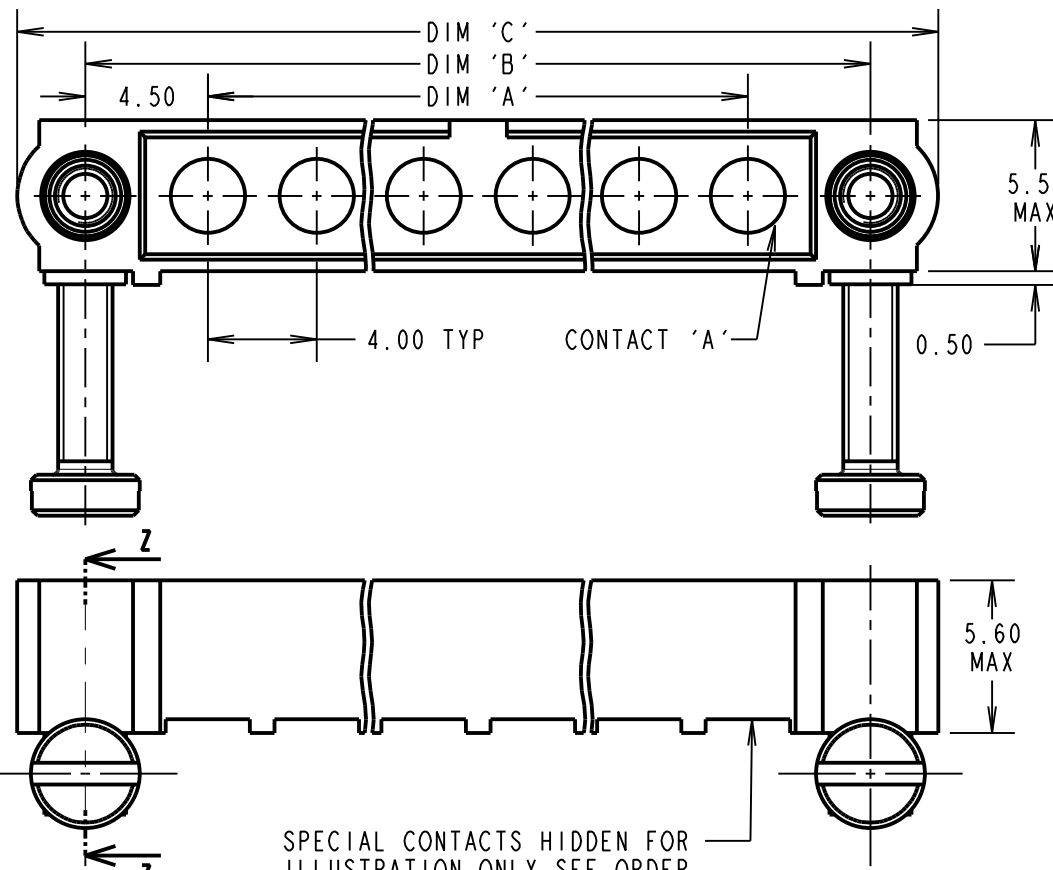
### PACKING:

TUBE

FOR COMPLETE SPECIFICATION SEE COMPONENT

SPECIFICATION C005XX (LATEST ISSUE)

## HORIZONTAL PC TAIL & SMT CONTACTS ONLY

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

ORDER CODE:(PC TAIL CONTACTS ONLY)

**M80-5000000MN-XX-XXX-00-000**TOTAL No. OF CONTACTS  
02 TO 12

### SPECIAL CONTACTS

313 = COAX CONTACT 3.0mm PC TAIL M80-313

314 = COAX CONTACT 4.5mm PC TAIL M80-314

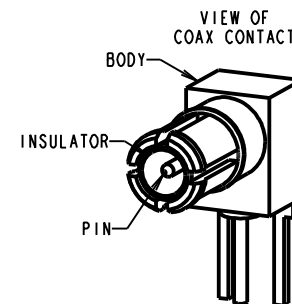
333 = 20A POWER CONTACT 3.5mm HORZ' PC TAIL M80-333

334 = 20A POWER CONTACT 5.0mm HORZ' PC TAIL M80-334

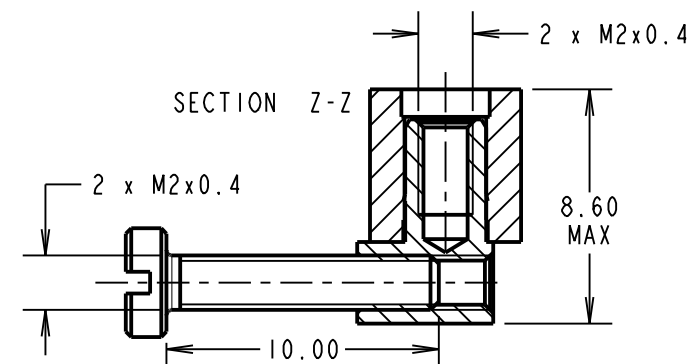
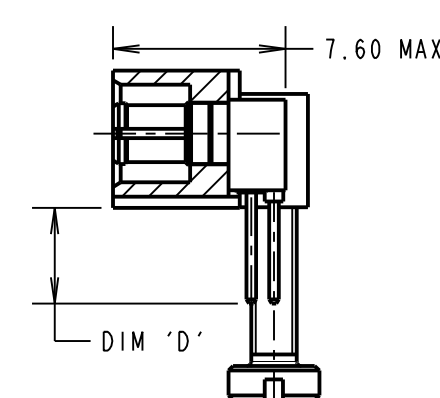
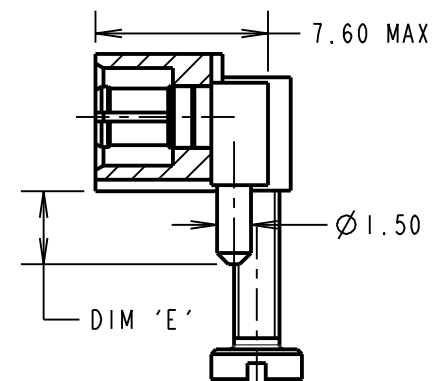
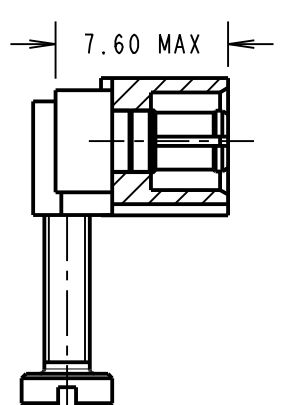
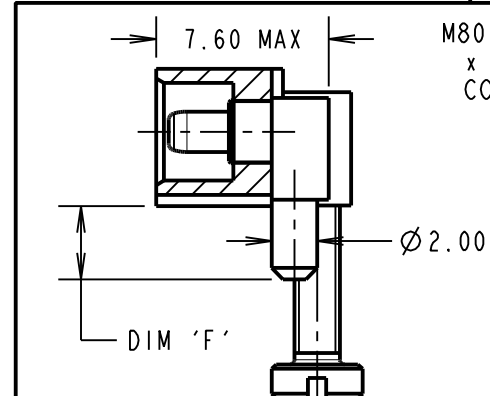
PM3 = 40A POWER CONTACT 3.5mm HORZ' PC TAIL M80-PF3

PM4 = 40A POWER CONTACT 5.0mm HORZ' PC TAIL M80-PF4

33A = POWER CONTACT HORZ' SMT M80-33A



SECTION Z-Z

M80-313/M80-314  
x No. OF CONTACTSM80-333/M80-334  
x No. OF CONTACTSM80-33A  
x No. OF CONTACTSM80-PM3/PM4  
x No. OF  
CONTACTS

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'	M80-313 = 3.0mm, M80-314 = 4.5mm
DIM 'E'	M80-333 = 3.5mm, M80-334 = 5.0mm
DIM 'F'	M80-PM3 = 3.5mm, M80-PM4 = 5.0mm

EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS,  
M80-5000000MN-10-333-00-000  
DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm  
DIM 'E' = 3.5mm

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### 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:

mm<sup>2</sup>

### TITLE:

DATAMATE MIX-TEK  
PC TAIL MALE ASSY WITH  
BOARD MOUNT J/SCREWS

### DRAWING NUMBER:

**M80-5000000MN-XX-XXX-00-000**

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APPROVED:		M. PERREN	
CHECKED:		S. BENNETT	
DRAWN:		R. ADDE	
CUSTOMER REF.:			
ASSEMBLY DRG:			

SHT  
6 OF 6