

# Customer Information Sheet

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

SHEET 3 OF 4

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NOT TO SCALE

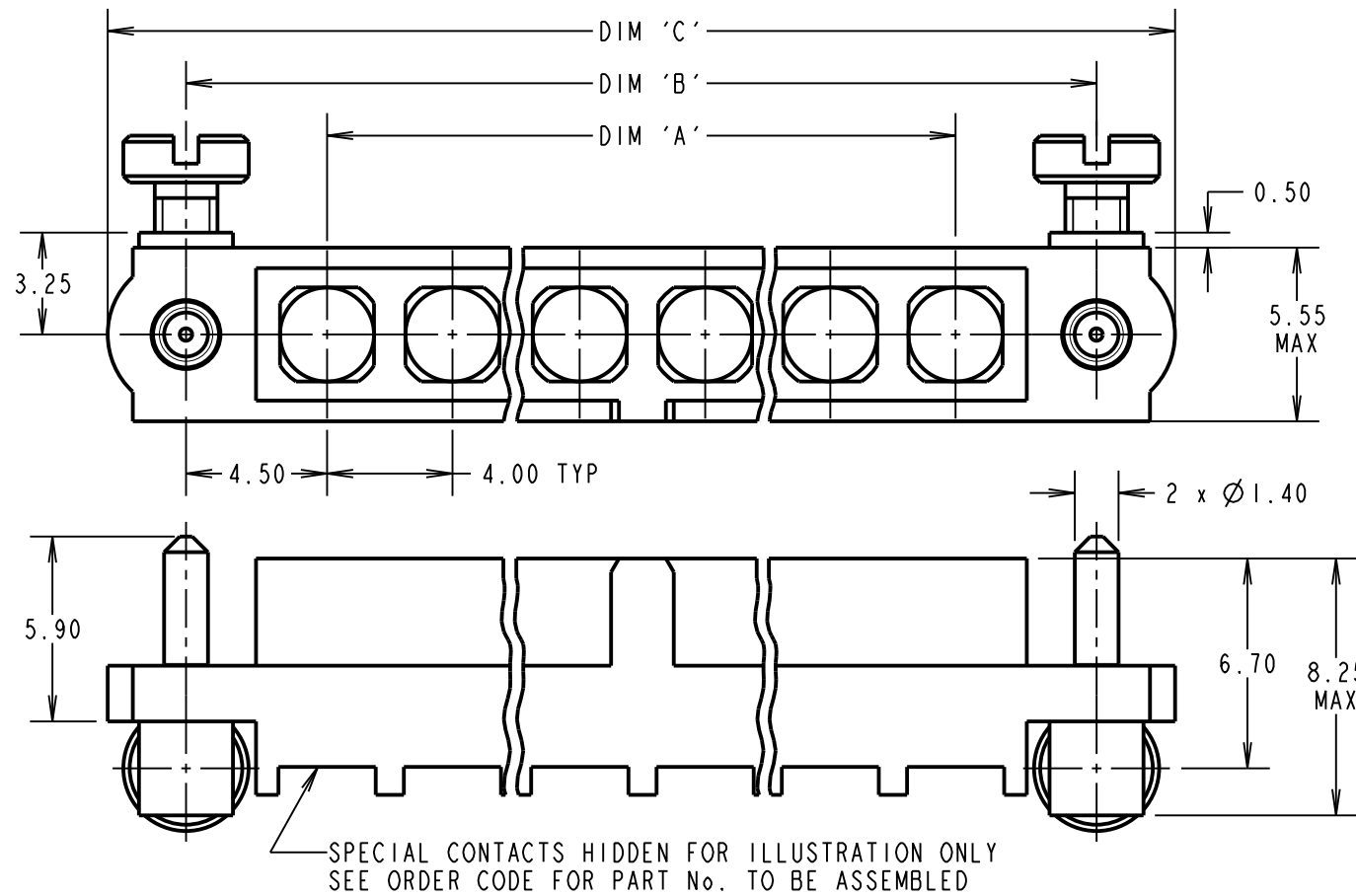
THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

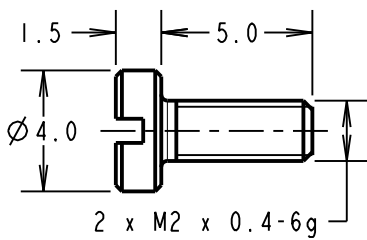
**SPECIFICATIONS:**

**MATERIAL:**  
 MOULDING: GLASS FILLED PPS, UL94V-0, BLACK  
 POWER & COAX CONTACT:  
 BODY = COPPER ALLOY  
 INNER CONTACT, LATCHING COLLAR = BERYLLIUM COPPER  
 INSULATOR = PTFE  
 GUIDE PIN, SCREW: 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)

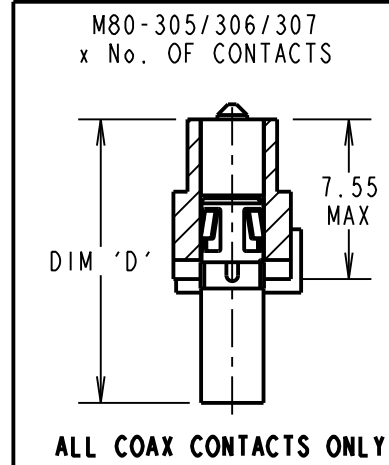
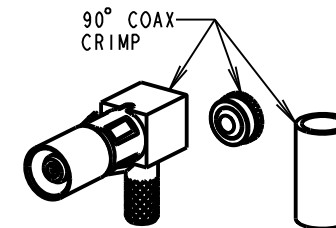
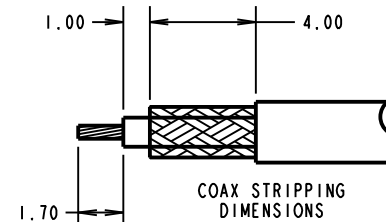
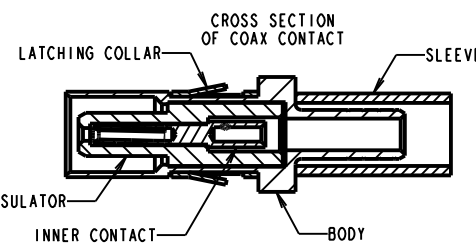
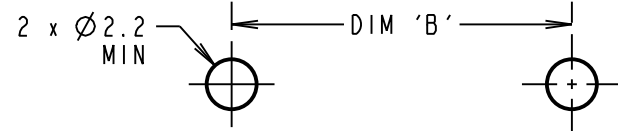
## CRIMP/SOLDER CONTACTS ONLY



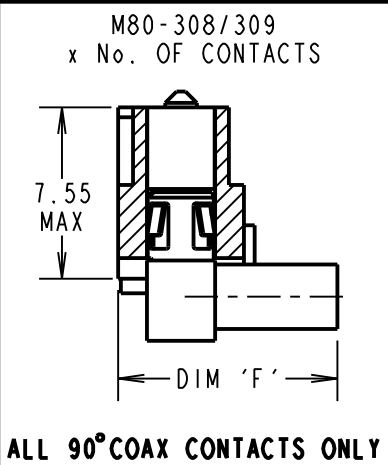
SPECIAL CONTACTS HIDDEN FOR ILLUSTRATION ONLY  
 SEE ORDER CODE FOR PART No. TO BE ASSEMBLED



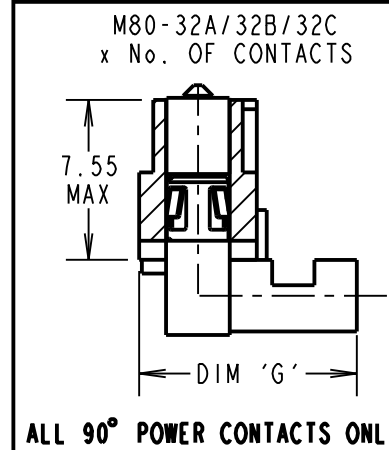
**RECOMMENDED PCB LAYOUT**



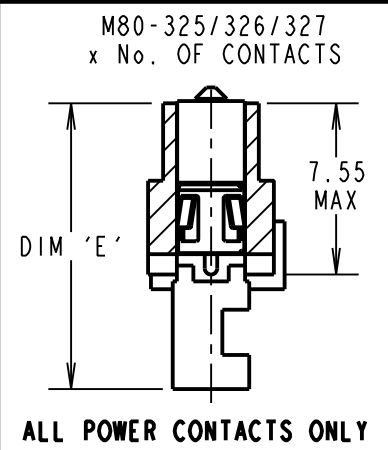
ALL COAX CONTACTS ONLY



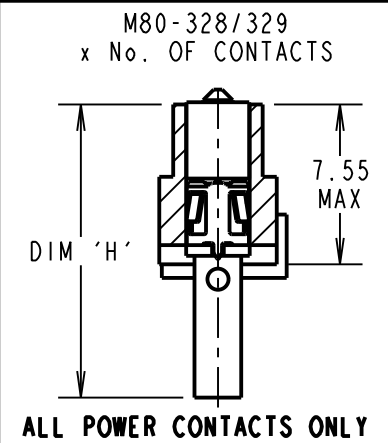
ALL 90° COAX CONTACTS ONLY



ALL 90° POWER CONTACTS ONLY



ALL POWER CONTACTS ONLY



ALL POWER CONTACTS ONLY

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 = 13.9mm

EXAMPLE 1: CONNECTOR WITH 08 COAX CONTACTS,  
 M80-400000FE-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,  
 M80-400000FE-10-325-00-000  
 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm,  
 DIM 'C' = 50.00mm, DIM 'E' = 12.7mm

**NOTES:**

- CONNECTORS ARE SUPPLIED WITH CONTACTS AND SCREWS LOOSE, GUIDE PINS ARE ASSEMBLED.
- 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.
- RECOMMENDED HAND CRIMP TOOL FOR M80-328/329 = Z80-294 WITH POSITIONER Z80-295.
- 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.

ORDER CODE: (CRIMP/SOLDER)  
**M80-400000FE-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/CRIMP 18AWG M80-328
- 329 = POWER CONTACT SOLDER/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

SM	I	07.04.11	11222
NAME	ISS.	DATE	C/NOTE
APPROVED: S. MCCULLAGH			
CHECKED: M. G. PLESTED			
DRAWN: S. FLOWER			
CUSTOMER REF.:			
ASSEMBLY DRG:			

## HARWIN

HARWIN USA  
 TEL: 603 893 5376  
 FAX: 603 893 5396  
 mis@harwin.com

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 mis@harwin.co.uk

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 mis@harwin.com.sg

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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:** DATAMATE MIX-TEK FEMALE HORIZONTAL POWER ASSEMBLY WITH GUIDE PINS AND BOARD MOUNT  
**DRAWING NUMBER:** M80-400000FE-XX-XXX-00-000  
 SHT 3 OF 4

# Customer Information Sheet

DRAWING No.: M80-400000FE-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 CONTACT: COPPER ALLOY  
 GUIDE PIN, SCREW: STAINLESS STEEL

**FINISH:**  
 POWER CONTACT: GOLD

**ELECTRICAL:**  
 WORKING VOLTAGE = 120V AC/DC  
 VOLTAGE PROOF = 360V AC/DC  
 INSULATION RESISTANCE = 100MΩ MIN

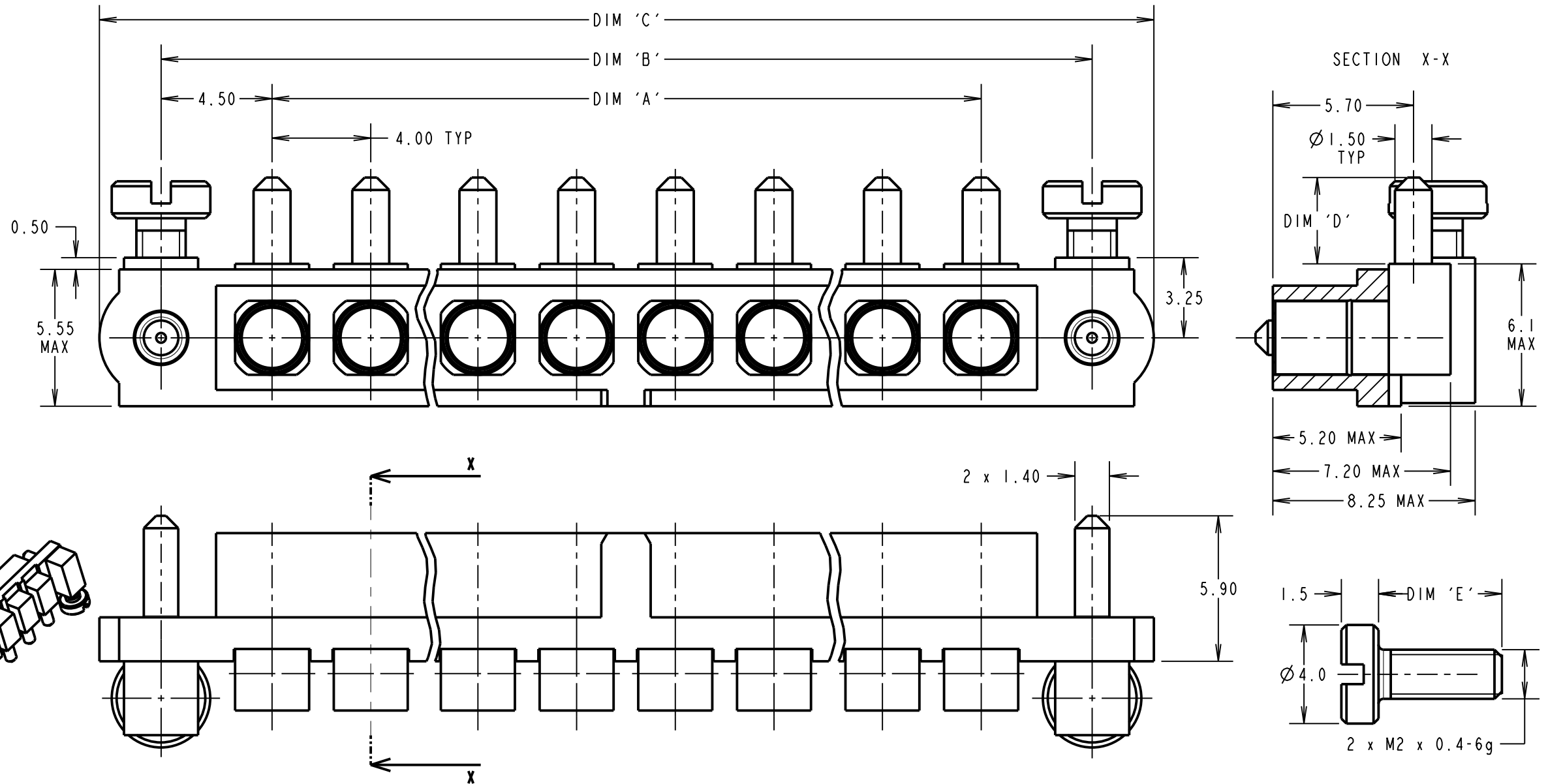
**POWER CONTACT:**  
 CONTACT RESISTANCE = 6 mΩ MAX  
 CURRENT RATING = 20A MAX

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

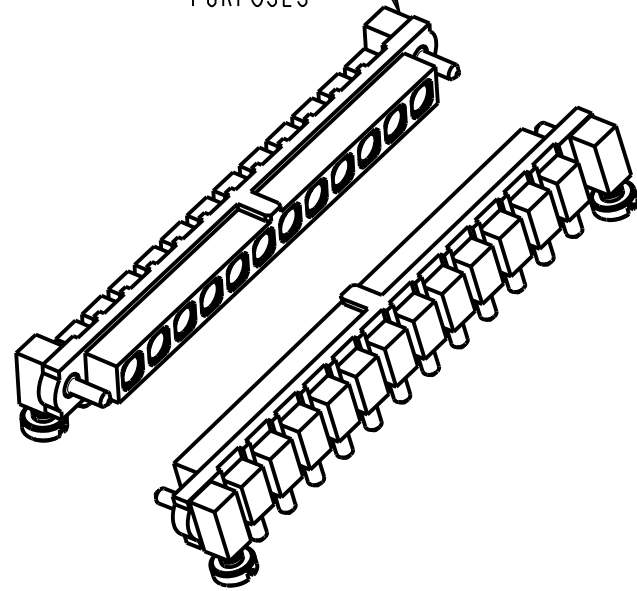
**ENVIRONMENTAL:**  
 TEMPERATURE RANGE = -55°C TO +125°C

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

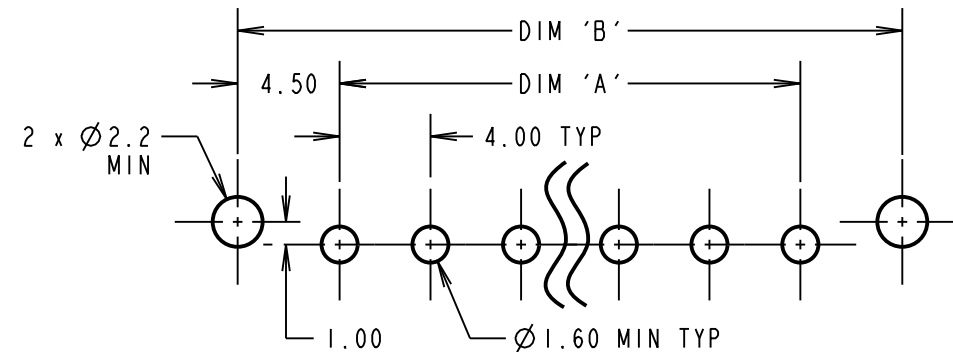
## PC TAIL HORIZONTAL CONTACTS ONLY



M80-400000FE-12-323-00-00  
 SHOWN FOR ILLUSTRATION PURPOSES



### RECOMMENDED PCB LAYOUT



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'	M80-323 = 3.50mm, M80-324 = 5.00mm
DIM 'E'	M80-323 = 3.50mm, M80-324 = 5.00mm

ORDER CODE:  
 (PC TAIL HORIZONTAL CONTACTS ONLY)  
**M80-400000FE-XX-XXX-00-000**

TOTAL No. OF CONTACTS  
 02 TO 12

FEMALE HORIZONTAL POWER CONTACTS  
 323 = POWER CONTACT PC TAIL 3.5mm M80-323  
 324 = POWER CONTACT PC TAIL 5.0mm M80-324

EXAMPLE 1: CONNECTOR WITH 10 POWER CONTACTS 3.5mm,  
 M80-400000FE-10-323-00-000  
 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm  
 DIM 'D' = 3.50mm

EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS 5.0mm,  
 M80-400000FE-10-324-00-000  
 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm  
 DIM 'D' = 5.00mm

SM	1	07.04.11	11222
NAME	ISS.	DATE	C/NOTE
APPROVED: S. MCCULLAGH			
CHECKED: M. G. PLESTED			
DRAWN: S.FLOWER			
CUSTOMER REF.:			
ASSEMBLY DRG:			

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HARWIN USA TEL: 603 893 5376 FAX: 603 893 5396 mis@harwin.com	HARWIN Europe (UK) TEL: 023 9231 4545 FAX: 023 9231 4590 mis@harwin.co.uk	HARWIN Asia TEL: +65 6 779 4909 FAX: +65 6 779 3868 mis@harwin.com.sg					