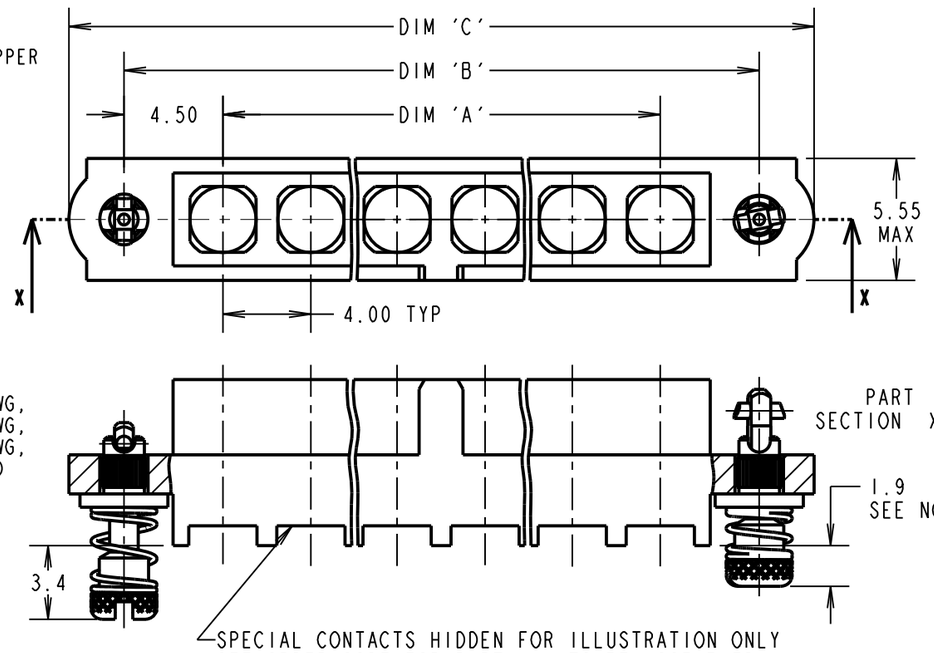
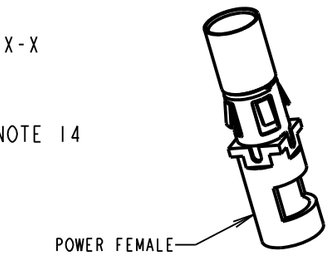
Customer Information Sheet

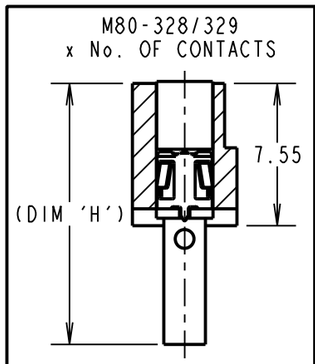
DRAWING No.: M80-4000000FC-XX-XXX -00-000	SHEET 4 OF 6	IF IN DOUBT - ASK	©	NOT TO SCALE	THIRD ANGLE PROJECTION	ALL DIMENSIONS IN mm

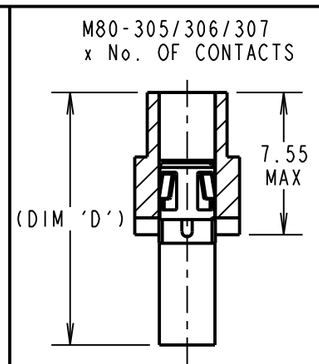
SPECIFICATIONS:
MATERIAL:
MOULDING: GLASS FILLED PPS, UL94V-0, BLACK
POWER & COAX CONTACT:
BODY = COPPER ALLOY
INNER CONTACT,LATCHING COLLAR = BERYLLIUM COPPER
INSULATOR = PTFE
101 SCREW, COLLAR = STAINLESS STEEL
SPRING = MUSIC WIRE
FINISH:
POWER & COAX CONTACT
BODY,SLEEVE, INNER CONTACT = GOLD
LATCHING COLLAR = NICKEL
SPRING = 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 = 10^6MΩ @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)

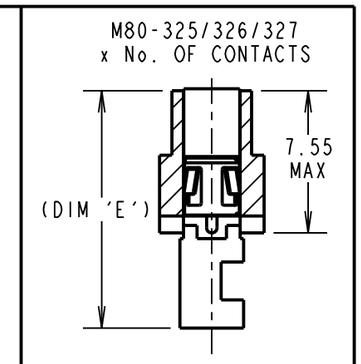
CRIMP AND SOLDER CONTACTS ONLY

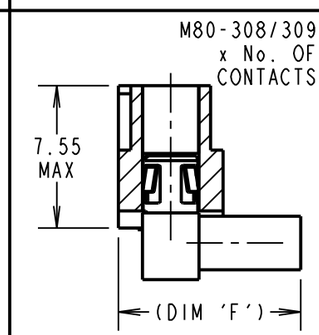


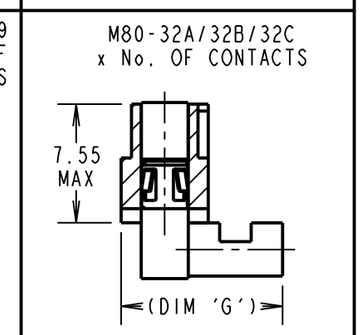


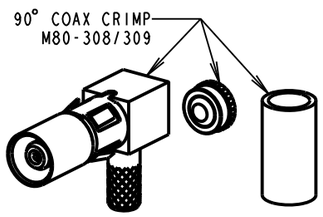


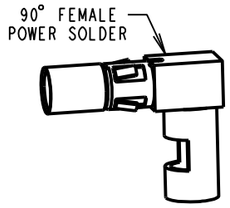


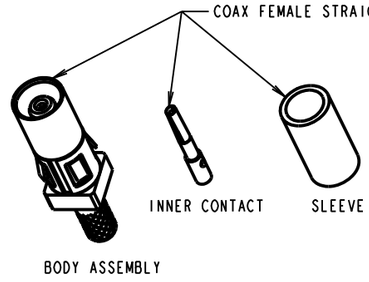


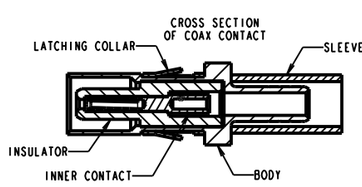


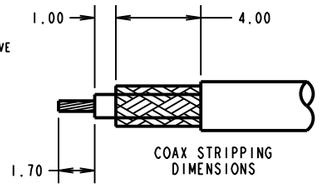












DIMENSION	CALCULATION
DIM 'A'	4 x No. OF CONTACTS -4.00
DIM 'B'	4 x No. OF CONTACTS + 5.00
DIM 'C'	4 x No. OF CONTACTS + 10.00
DIM 'D'	M80-305/306/307=13.4mm
DIM 'E'	M80-325/326/327=12.7mm
DIM 'F'	M80-308/309 = 9.7mm
DIM 'G'	M80-32A/32B/32C = 10.3mm
DIM 'H'	M80-328/329 = 13.9mm

EXAMPLE 1: CONNNECTOR WITH 08 COAX CONTACTS,
M80-4000000FC-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,
M80-4000000FC-10-325-00-000
DIM 'A' = 36.00mm, DIM 'B' = 45.00mm,
DIM 'C' = 50.00mm, DIM 'E' = 12.7mm

ORDER CODE:(CRIMP/SOLDER)

M80-4000000FC-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 CRIMP/SOLDER 18AWG M80-328
329 = POWER CONTACT CRIMP/SOLDER 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:
1. CONNECTORS ARE SUPPLIED WITH CONTACTS LOOSE.
2. COAX CONTACT IS SUPPLIED AS A KIT OF PARTS: BODY, INSULATOR AND LATCHING COLLAR ARE PRE-ASSEMBLED AND SLEEVE AND INNER CONTACT ARE SEPARATE.
3. FOR EXTRA POWER CONTACTS, USE PART NUMBER M80-325/326/327/328/329/32A/32B/32C. FOR EXTRA COAX CONTACTS, USE PART NUMBER M80-305/306/307/308/309
4. 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.
5. RECOMMENDED HAND CRIMP TOOL FOR CONTACTS M80-328/329 = Z80-294 AND POSITIONER Z80-295.
6. POWER AND COAX CONTACT EXTRACTION TOOL = Z80-290
7. POWER CONTACT WIRE, STRIP BY 5.00mm MINIMUM
8. INSTRUCTION SHEETS ARE AVAILABLE.
9. FOR EXAMPLE OF ALL COAX SPECIAL CONTACTS ORDER CODE SEE EXAMPLE 1 IN TABLE.
10. FOR EXAMPLE OF ALL POWER SPECIAL CONTACTS ORDER CODE SEE EXAMPLE 2 IN TABLE.
11. RECOMMENDED PANEL/PCB THICKNESS = 1.3 - 1.6mm.
12. RECOMMENDED WIRE TYPE = BS 3G 210 TYPE A, PTFE INSULATED 24-28 AWG. MAX INSULATION DIAMETER = Ø1.10mm, STRIP WIRE BY 2.00mm.
13. SPRING LOAD WHEN SOLID = 2.642N,SPRING RATE = 1.32N/mm.
14. LENGTH WILL BE 1.9mm WHEN 101LOK SCREWS ARE ENGAGED WITH RETAINERS IN MATING CONNECTOR.

SM	4	07.04.11	11222
NAME	ISS.	DATE	C/NOTE

APPROVED: S. MCCULLAGH
CHECKED: M. G. PLESTED
DRAWN: C.PENROSE
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: mm²

TITLE: JACKSCREW DATAMATE
MIXED TECHNOLOGY
FEMALE ASSY WITH 101LOK J/S

DRAWING NUMBER: M80-4000000FC-XX-XXX-00-000

SHT 4 OF 6

Customer Information Sheet

DRAWING No.: M80-4000000FC-XX-XXX -00-000	SHEET 5 OF 6	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
- 101 SCREW, COLLAR = STAINLESS STEEL
- SPRING = MUSIC WIRE

FINISH:
- POWER & COAX CONTACT
  - BODY,SLEEVE,INNER CONTACT = GOLD
- SPRING = NICKEL

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 = 10^6MΩ @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

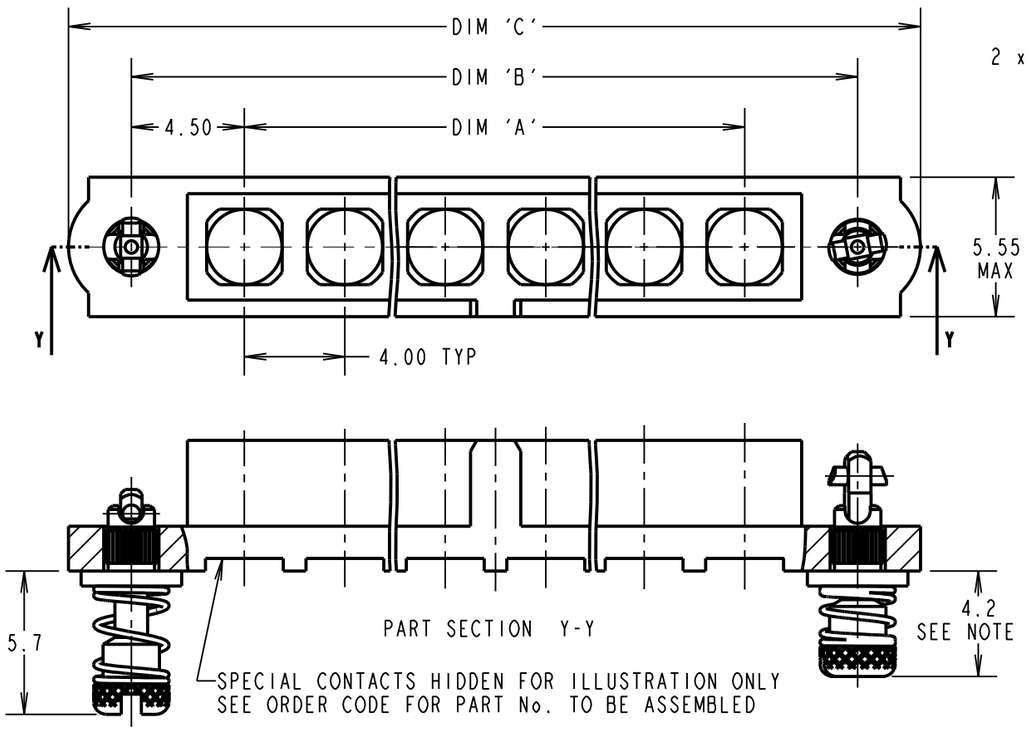
ENVIRONMENTAL:
- TEMPERATURE RANGE = -55°C TO +125°C

PACKING:
- TUBE

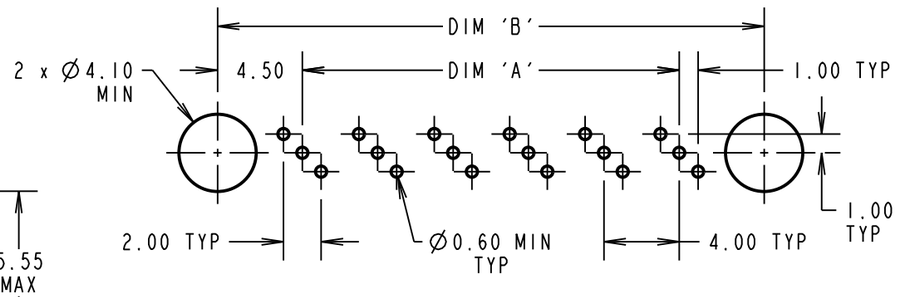
FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)

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.
3. SPRING LOAD WHEN SOLID = 2.642N.SPRING RATE = 1.32N/mm.
4. LENGTH WILL BE 4.2mm WHEN 101LOK SCREWS ARE ENGAGED WITH RETAINERS IN MATING CONNECTOR.

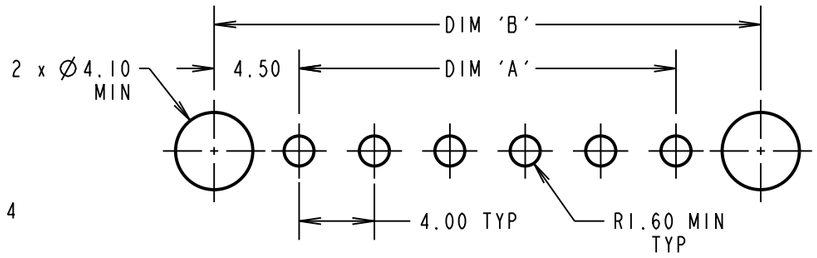
PC TAIL VERTICAL CONTACTS ONLY



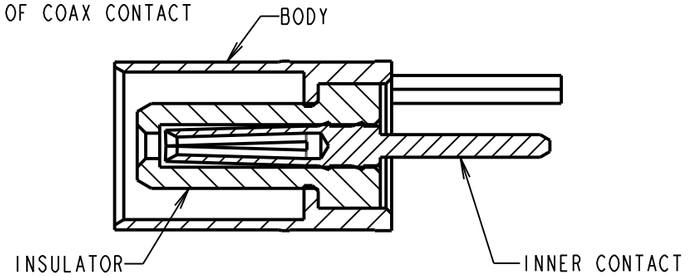
RECOMMENDED PCB LAYOUT FOR ALL COAX CONTACTS ONLY



RECOMMENDED PCB LAYOUT FOR ALL POWER CONTACTS ONLY



CROSS-SECTION OF COAX CONTACT



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: CONNNECTOR WITH 08 COAX CONTACTS,
M80-4000000FC-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,
M80-4000000FC-10-321-00-000
DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm
DIM 'E' = 3.50mm

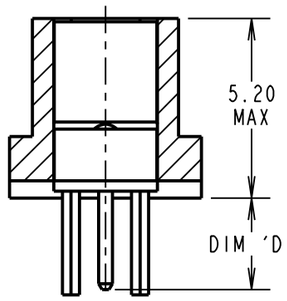
ORDER CODE:(PC TAIL VERTICAL CONTACTS ONLY)

M80-4000000FC-XX-XXX-00-000

TOTAL No. OF CONTACTS
02 TO 12

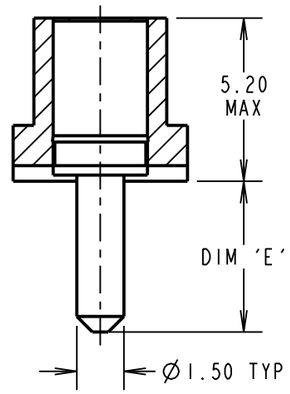
SPECIAL CONTACTS
- 301 = COAX CONTACT PC TAIL 3.0mm M80-301
- 302 = COAX CONTACT PC TAIL 4.5mm M80-302
- 321 = POWER CONTACT PC TAIL 3.5mm M80-321
- 322 = POWER CONTACT PC TAIL 5.0mm M80-322

M80-301/302
x No. OF CONTACTS



ALL COAX CONTACTS ONLY

M80-321/322
x No. OF CONTACTS



ALL POWER CONTACTS ONLY

SM	4	07.04.11	11222
NAME	ISS.	DATE	C/NOTE

APPROVED: S. MCCULLAGH
CHECKED: M. G. PLESTED
DRAWN: C.PENROSE
CUSTOMER REF.:
ASSEMBLY DRG:

HARWIN

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mis@harwin.com	mis@harwin.co.uk	mis@harwin.com.sg

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: mm²

TITLE: JACKSCREW DATAMATE
MIXED TECHNOLOGY
FEMALE ASSY WITH 101LOK J/S

DRAWING NUMBER: M80-4000000FC-XX-XXX-00-000
SHT 5 OF 6

Customer Information Sheet

DRAWING No.: M80-4000000FC-XX-XXX -00-000	SHEET 6 OF 6	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
- 101 SCREW, COLLAR = STAINLESS STEEL
- SPRING = MUSIC WIRE

FINISH:
- POWER CONTACT = GOLD
- SPRING = NICKEL

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

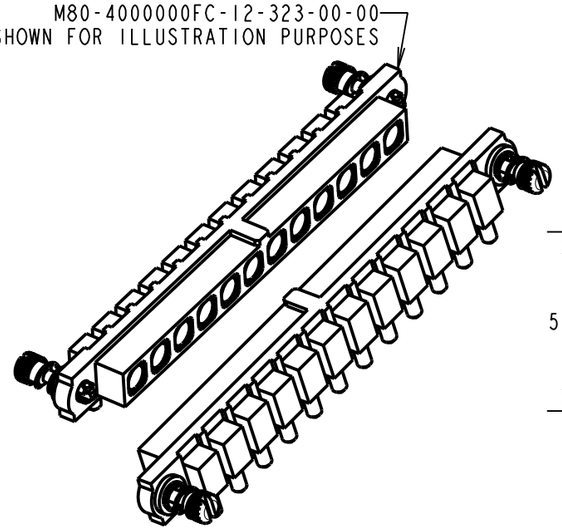
MECHANICAL:
- DURABILITY = 500 OPERATIONS
- POWER CONTACT:
  - INSERTION FORCE = 5N MAX
  - WITHDRAWAL FORCE = 0.5N MIN

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

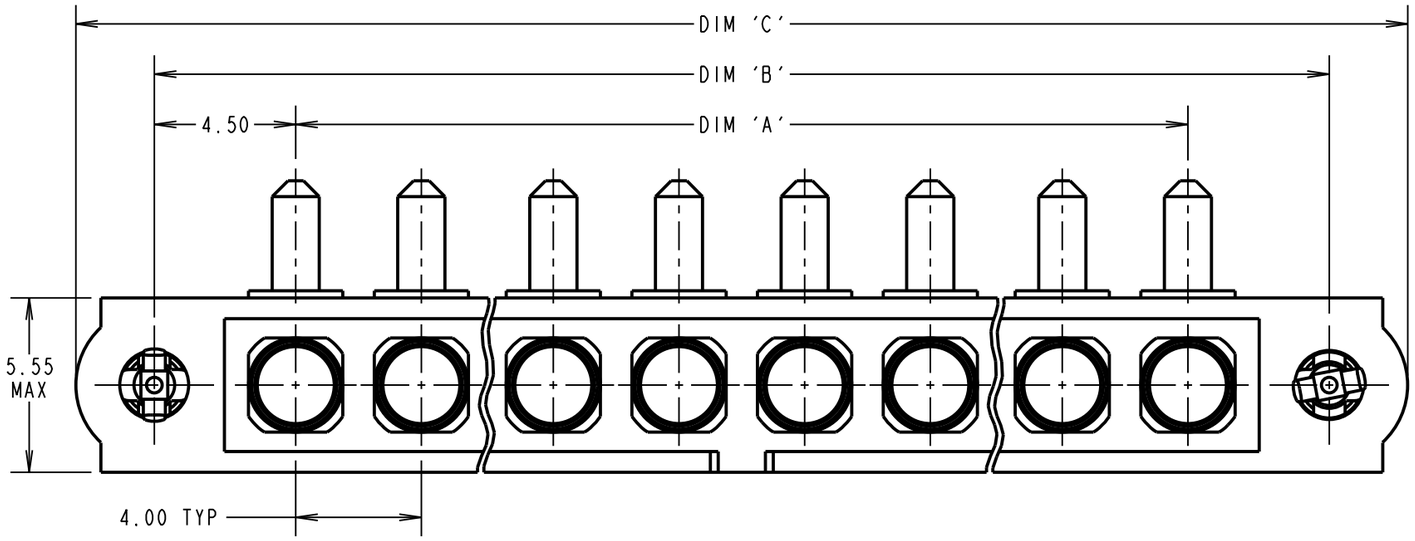
PACKING:
- TUBE

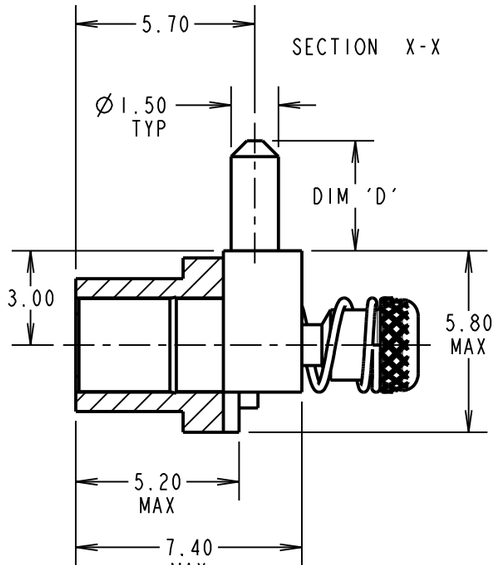
FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)

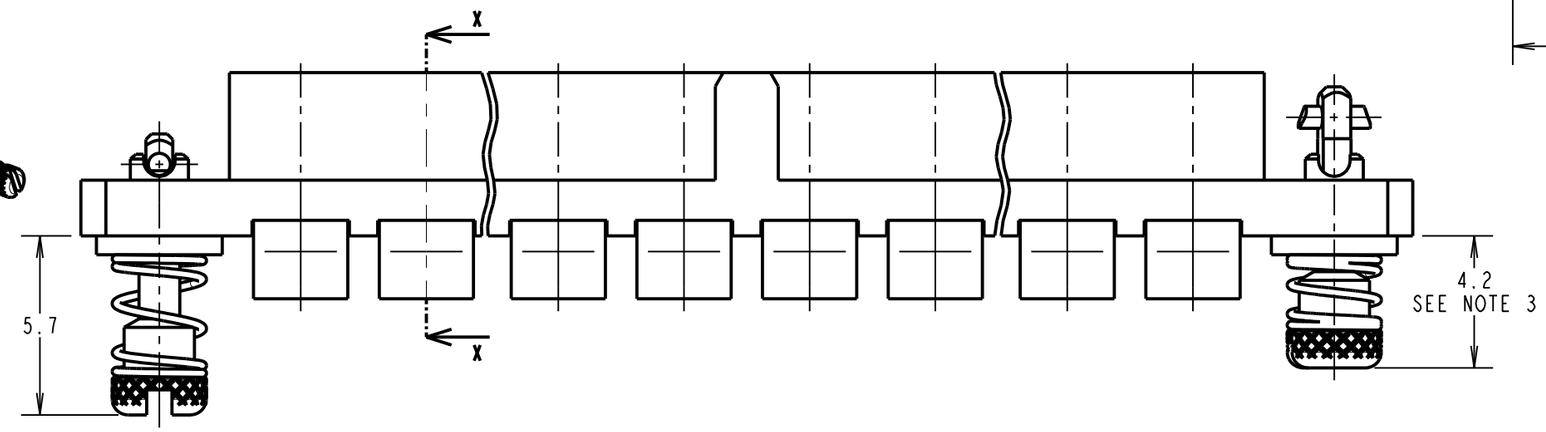
M80-4000000FC-12-323-00-00
SHOWN FOR ILLUSTRATION PURPOSES



PC TAIL HORIZONTAL CONTACTS ONLY







NOTES:
1. FOR EXAMPLE OF ALL POWER SPECIAL CONTACTS ORDER CODE SEE EXAMPLES IN TABLE.
2. SPRING LOAD WHEN SOLID = 2.642N.SPRING RATE = 1.32N/mm.
3. LENGTH WILL BE 4.2mm WHEN 101LOK SCREWS ARE ENGAGED WITH RETAINERS IN MATING CONNECTOR.

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
EXAMPLE 1: CONNECTOR WITH 10 POWER CONTACTS 3.5mm, M80-4000000FC-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, M80-4000000FC-10-324-00-000 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm, DIM 'D' = 5.00mm	

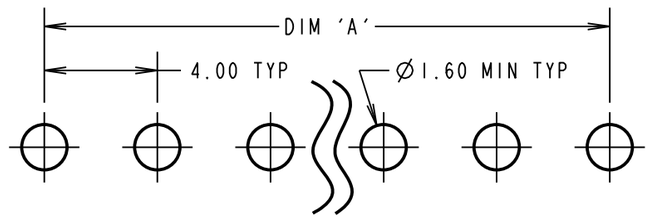
ORDER CODE:
(FEMALE HORIZONTAL POWER CONTACTS ONLY)

M80-4000000FC-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

RECOMMENDED PCB LAYOUT



SM	4	07.04.11	11222
NAME	ISS.	DATE	C/NOTE

APPROVED: S. MCCULLAGH
CHECKED: M. G. PLESTED
DRAWN: C.PENROSE
CUSTOMER REF.:
ASSEMBLY DRG:

HARWIN

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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: mm²

TITLE: JACKSCREW DATAMATE MIXED TECHNOLOGY FEMALE ASSY WITH 101LOK J/S

DRAWING NUMBER: M80-4000000FC-XX-XXX-00-000

SHT 6 OF 6