

Customer Information Sheet

DRAWING No.: M80-400000F2-XX-XXX-00-000

SHEET 5 OF 8

IF IN DOUBT - ASK

©

NOT TO SCALE

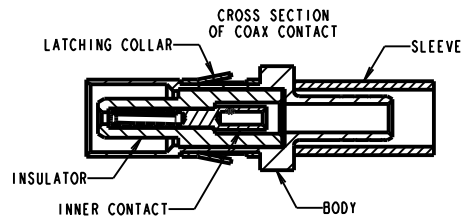
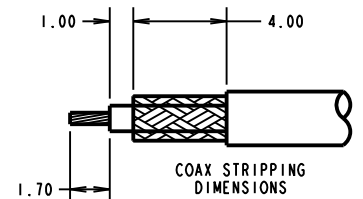
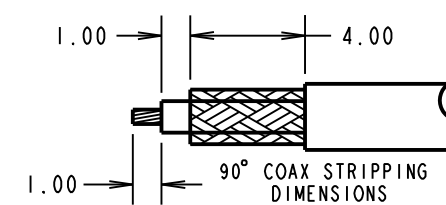
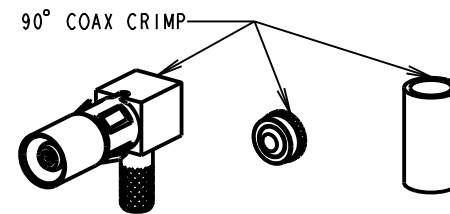
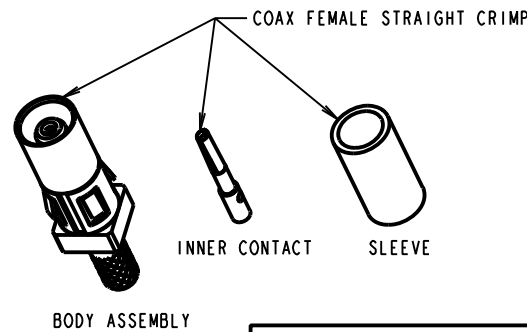
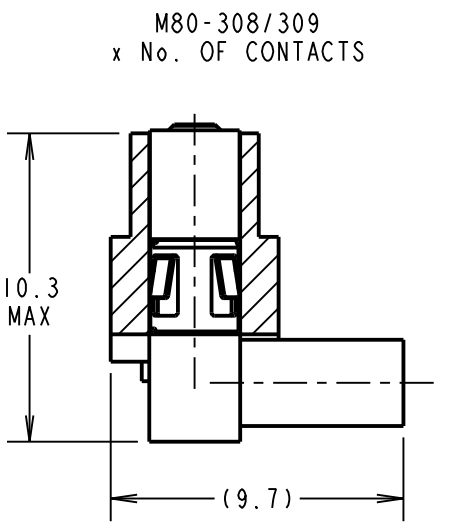
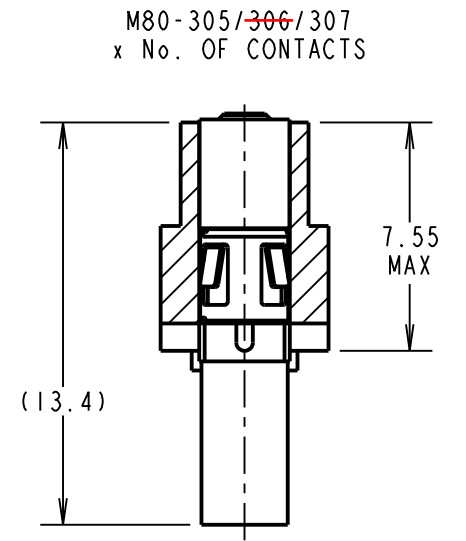
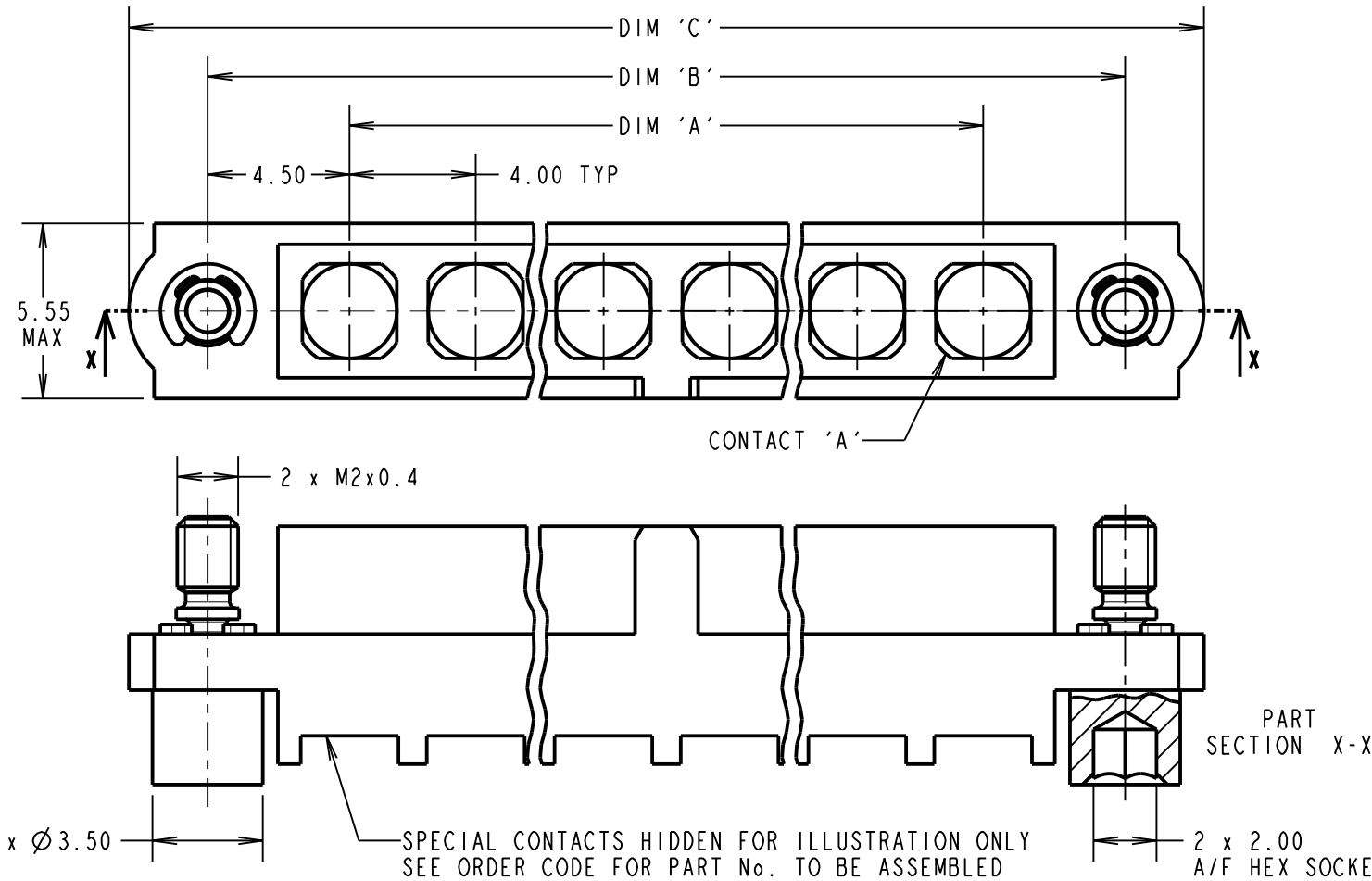
THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

SPECIFICATIONS:

MATERIAL:
 Moulding: GLASS FILLED PPS, UL94V-0, BLACK
 COAX CONTACT:
 BODY, SLEEVE, END PLUG = COPPER ALLOY
 INNER CONTACT, LATCHING COLLAR = BERYLLIUM COPPER
 INSULATOR = PTFE
 JACKSCREW, CIRCLIP = STAINLESS STEEL
FINISH:
 COAX CONTACT
 BODY, SLEEVE, INNER CONTACT, END PLUG = GOLD
 LATCHING COLLAR: = NICKEL
ELECTRICAL:
 INSULATION RESISTANCE = 100MΩ MIN
 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 = 10⁶MΩ @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 AND SOLDER CONTACTS ONLY



ORDER CODE: (COAX CRIMP/SOLDER)
M80-400000F2-XX-XXX-00-000
 TOTAL No. OF CONTACTS: _____
 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/SOLDER 2.0mm M80-308
 309 = 90° COAX CONTACT CRIMP/SOLDER 2.7mm M80-309

- 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. SLEEVE AND INNER CONTACT ARE SEPARATE.
 3. 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. COAX CONTACT EXTRACTION TOOL = Z80-290.
 6. INSTRUCTION SHEETS ARE AVAILABLE.

SB	5	08.04.15	12566
NAME	ISS.	DATE	C/NOTE
APPROVED:		S.BENNETT	
CHECKED:		M.PLESTED	
DRAWN:		C.PENROSE	
CUSTOMER REF.:			
ASSEMBLY DRG:			

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: CONNECTOR WITH 08 COAX CONTACTS,
 M80-400000F2-08-305-00-000
 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm,
 DIM 'C' = 42.00mm

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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: mm²

TITLE: DATAMATE MIX-TEK FEMALE ASSEMBLY WITH HEX SOCKET J/SCREWS
 DRAWING NUMBER: **M80-400000F2-XX-XXX-00-000**
 SHT 5 OF 8

Customer Information Sheet

DRAWING No.: M80-400000F2-XX-XXX-00-000

SHEET 6 OF 8

IF IN DOUBT - ASK

(C)

NOT TO SCALE

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

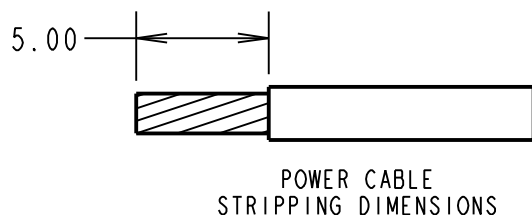
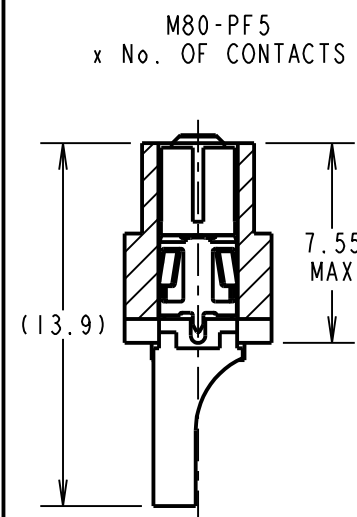
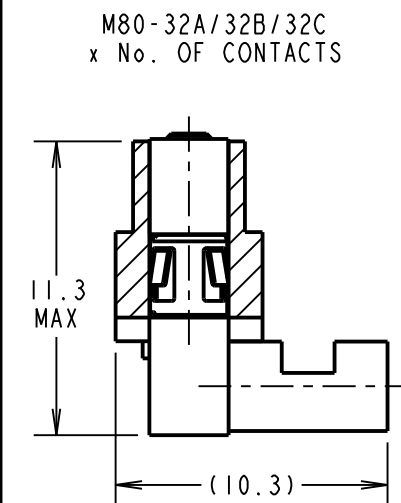
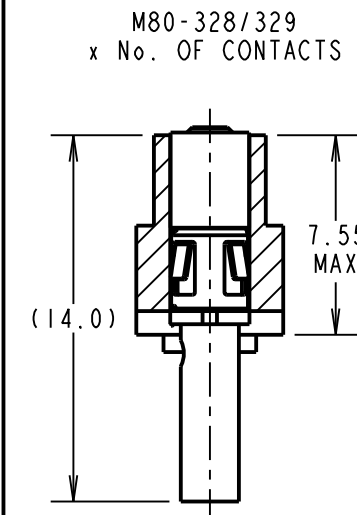
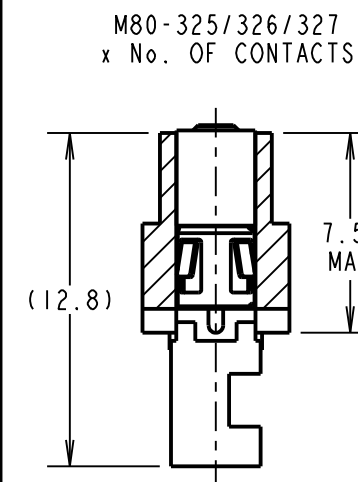
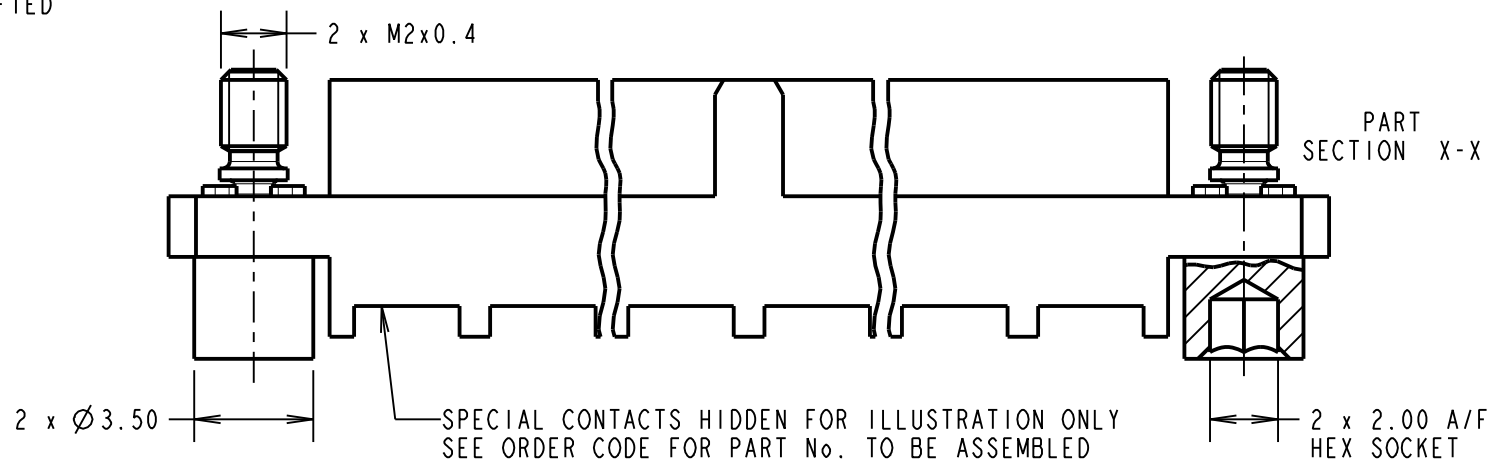
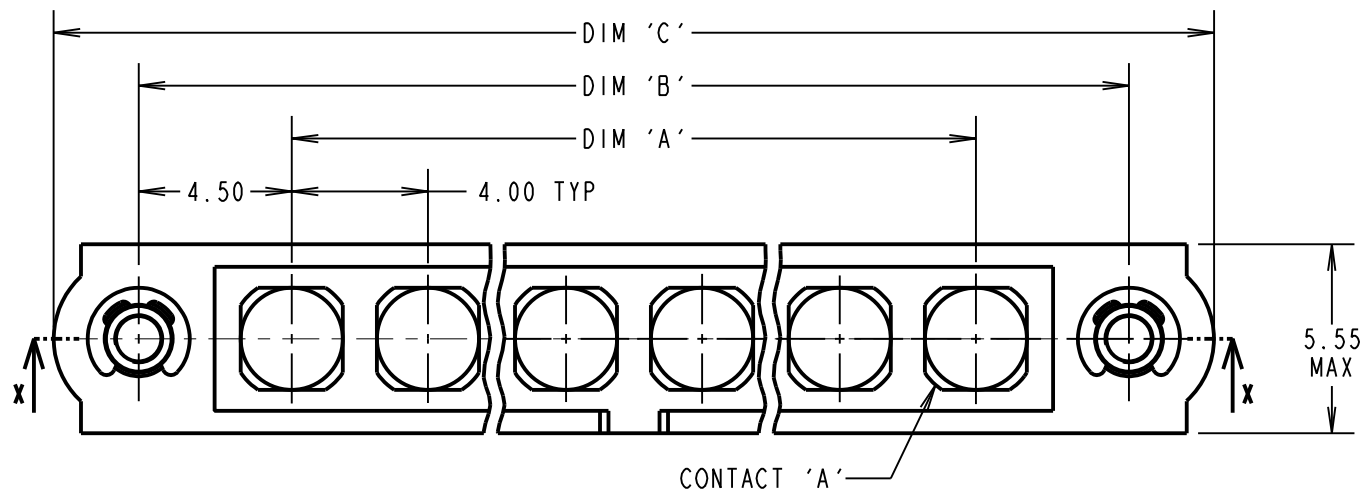
SPECIFICATIONS:

MATERIAL:
 Moulding: GLASS FILLED PPS, UL94V-0, BLACK
 POWER CONTACT:
 BODY = COPPER ALLOY
 LATCHING COLLAR = BERYLLIUM COPPER
 JACKSCREW, CIRCLIP = 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 = M80-325 = 20A MAX WITH 12AWG
 M80-326 = 15A MAX WITH 14AWG
 M80-327 = 10A MAX WITH 16AWG
 M80-328 = 8A MAX WITH 18AWG
 M80-329 = 5A MAX WITH 20AWG
 M80-32A = 20A MAX WITH 12AWG
 M80-32B = 15A MAX WITH 14AWG
 M80-32C = 10A MAX WITH 16AWG
 M80-PF5 = 40A MAX WITH 10AWG
 CONTACT AS SPECIFIED

MECHANICAL:
 DURABILITY = 500 OPERATIONS
 POWER CONTACT:
 INSERTION FORCE:
 M80-325/326/327/328/329/
 32A/32B/32C = 8N MAX
 M80-PF5 = 15N MAX
 WITHDRAWAL FORCE = 0.5N MIN
ENVIRONMENTAL:
 TEMPERATURE RANGE:
 M80-325/326/327/328/329/
 32A/32B/32C = -55°C TO +125°C
 M80-PF5 = -55°C TO +150°C

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

POWER CRIMP AND SOLDER CONTACTS ONLY



ORDER CODE: (POWER CRIMP/SOLDER)
M80-400000F2-XX-XXX-00-000

TOTAL No. OF CONTACTS: _____
 02 TO 12

SPECIAL CONTACTS:
 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
 PF5 = POWER CONTACT SOLDER 10AWG M80-PF5

NOTES:

- CONNECTORS ARE SUPPLIED WITH CONTACTS LOOSE.
- FOR EXTRA POWER CONTACTS, USE PART NUMBERS: M80-325/326/327/328/329/32A/32B/32C/PF5.
- POWER CONTACT EXTRACTION TOOL = Z80-290.
- INSTRUCTION SHEETS ARE AVAILABLE.
- RECOMMENDED HAND CRIMP TOOL FOR CONTACTS M80-328/329 = Z80-294 WITH POSITIONER Z80-295.
- POWER CONTACT WIRE, STRIP BY 5.00mm MINIMUM.

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: CONNNECTOR WITH 08 POWER CONTACTS, M80-400000F2-08-305-00-000 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm	

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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: mm²

TITLE: DATAMATE MIX-TEK FEMALE ASSEMBLY WITH HEX SOCKET J/SCREWS
DRAWING NUMBER: M80-400000F2-XX-XXX-00-000
 SHT 6 OF 8

SB	5	08.04.15	12566
NAME	ISS.	DATE	C/NOTE
APPROVED:		S.BENNETT	
CHECKED:		M.PLESTED	
DRAWN:		C.PENROSE	
CUSTOMER REF.:			
ASSEMBLY DRG:			

Customer Information Sheet

DRAWING No.: M80-400000F2-XX-XXX-00-000

SHEET 7 OF 8

IF IN DOUBT - ASK

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NOT TO SCALE

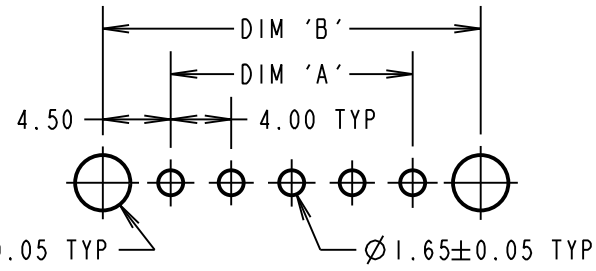
THIRD ANGLE PROJECTION

ALL DIMENSIONS IN mm

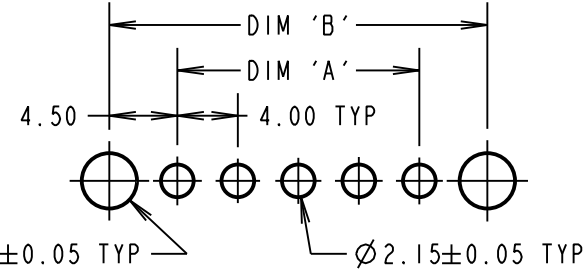
SPECIFICATIONS:

MATERIAL:
 MOULDING: GLASS FILLED PPS, UL94V-0, BLACK
 POWER CONTACT: COPPER ALLOY
 COAX CONTACT:
 BODY = COPPER ALLOY
 INNER CONTACT = COPPER ALLOY
 INSULATOR = PTFE
 JACKSCREW, CIRCLIP = 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:
 M80-321/322 = 20A MAX
 M80-PF1/PF2 = 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 = 10⁶MΩ @250V AC
 OPERATING VOLTAGE = 180V AC @ 500mA
 MAXIMUM VOLTAGE = 1000V AC
MECHANICAL:
 DURABILITY = 500 OPERATIONS
POWER CONTACT:
 INSERTION FORCE:
 M80-321/322 = 8N MAX
 M80-PF1/PF2 = 15N MAX
 WITHDRAWAL FORCE = 0.5N MIN
COAX CONTACT:
 INSERTION FORCE = 8N MAX
 WITHDRAWAL FORCE = 0.5N MIN
ENVIRONMENTAL:
 TEMPERATURE RANGE:
 M80-301/302/321/322 = -55°C TO +125°C
 M80-PF1/PF2 = -55°C TO +150°C
PACKING:
 TUBE
 FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)

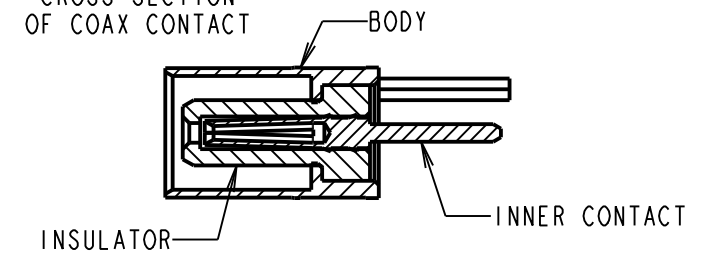
RECOMMENDED PCB LAYOUT FOR POWER CONTACTS: M80-321/322



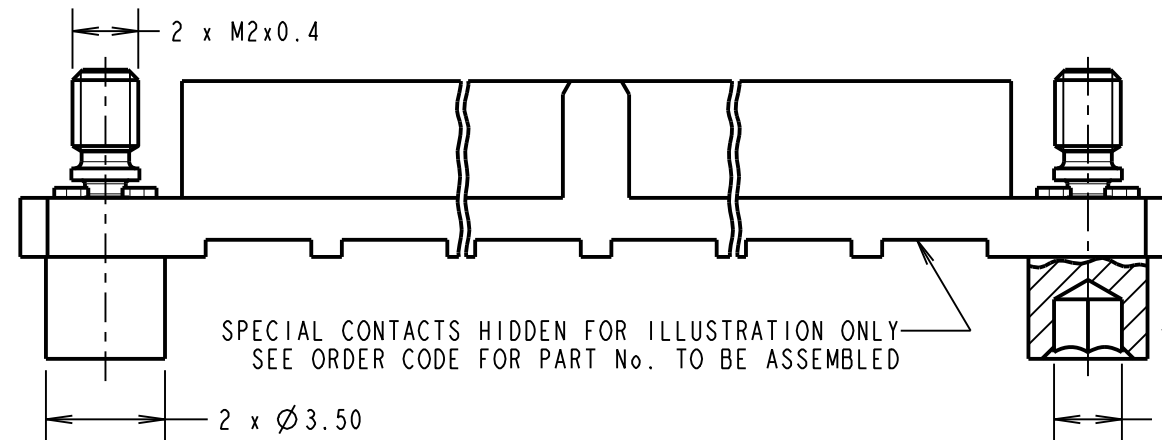
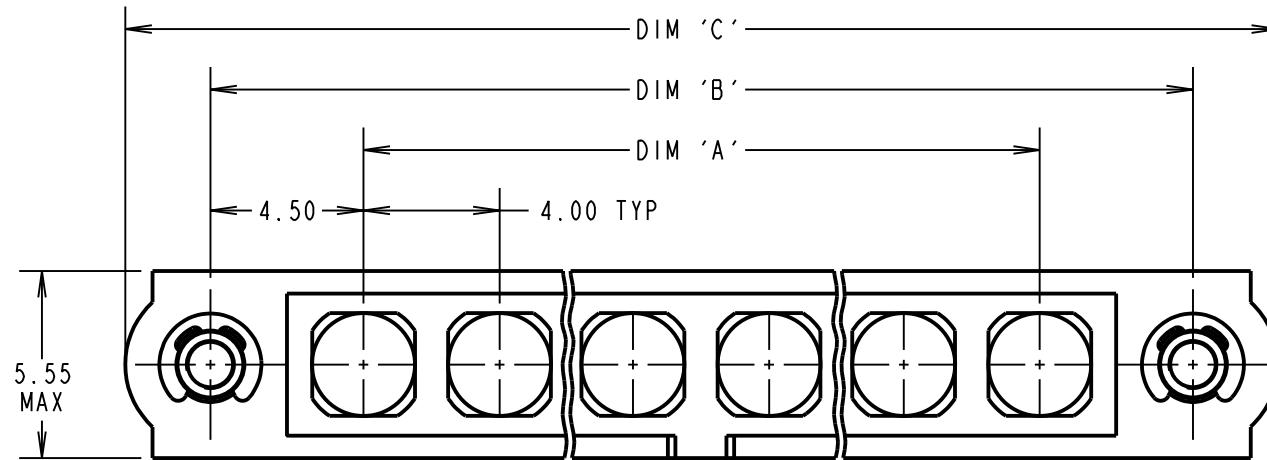
RECOMMENDED PCB LAYOUT FOR POWER CONTACTS: M80-PF1/PF2



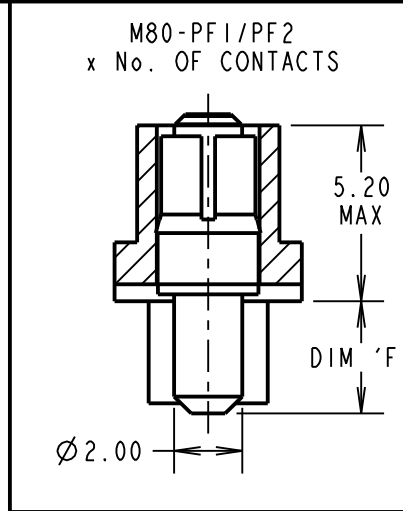
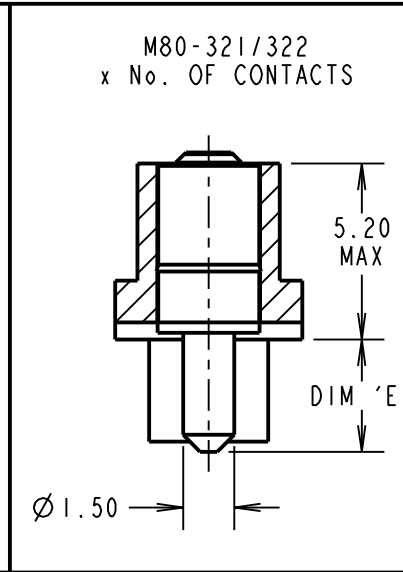
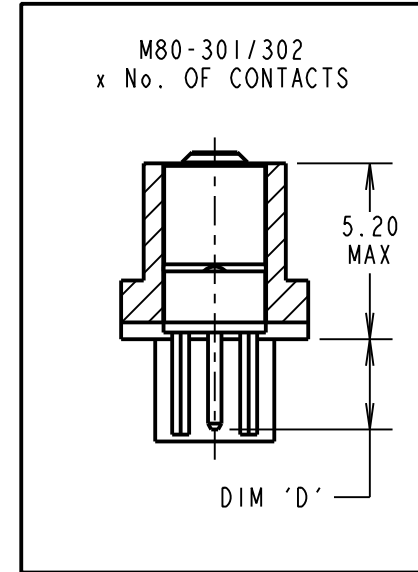
CROSS-SECTION OF COAX CONTACT



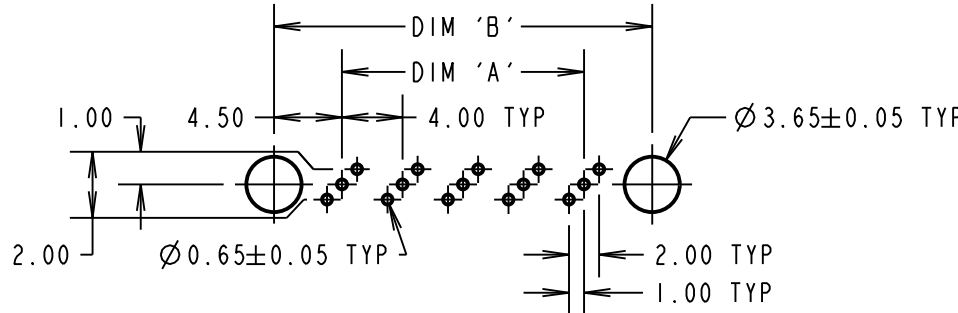
PC TAIL VERTICAL CONTACTS ONLY



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



RECOMMENDED PCB LAYOUT FOR COAX CONTACTS: M80-301/302



ORDER CODE: (PC TAIL CONTACTS ONLY)

M80-400000F2-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 = 20A POWER CONTACT PC TAIL 3.5mm M80-321
 322 = 20A POWER CONTACT PC TAIL 5.0mm M80-322
 PF1 = 40A POWER CONTACT PC TAIL 3.5mm M80-PF1
 PF2 = 40A POWER CONTACT PC TAIL 5.0mm M80-PF2

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
DIM 'F'	M80-PF1 = 3.50mm, M80-PF2 = 5.00mm

EXAMPLE 1: CONNECTOR WITH 08 COAX CONTACTS,
 M80-400000F2-08-301-00-000
 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm
 DIM 'D' = 3.00mm

EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS,
 M80-400000F2-10-321-00-000
 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm
 DIM 'E' = 3.50mm

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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: mm²

TITLE: DATAMATE MIX-TEK FEMALE ASSEMBLY WITH HEX SOCKET J/SCREWS
 DRAWING NUMBER: **M80-400000F2-XX-XXX-00-000**
 SHT 7 OF 8

SB	5	08.04.15	12566
NAME	ISS.	DATE	C/NOTE
APPROVED:		S.BENNETT	
CHECKED:		M.PLESTED	
DRAWN:		C.PENROSE	
CUSTOMER REF.:			
ASSEMBLY DRG:			

Customer Information Sheet

DRAWING No.: M80-400000F2-XX-XXX-00-000

SHEET 8 OF 8

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: COPPER ALLOY
 COAX CONTACT:
 BODY = COPPER ALLOY
 INNER CONTACT = COPPER ALLOY
 INSULATOR = PTFE
 JACKSCREW, CIRCLIP = 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

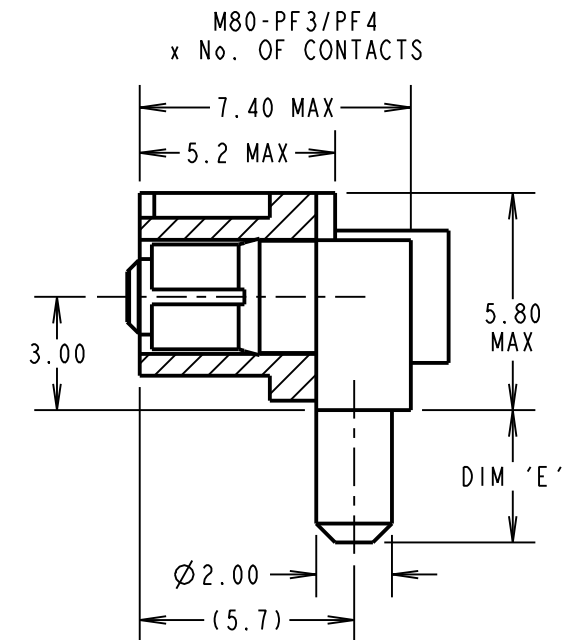
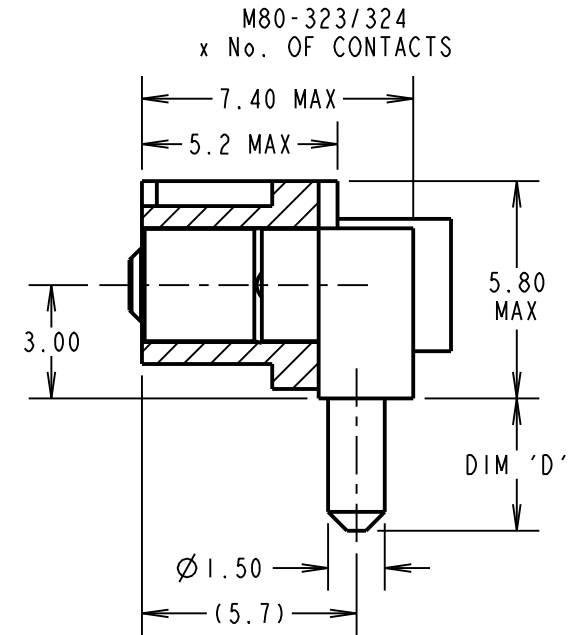
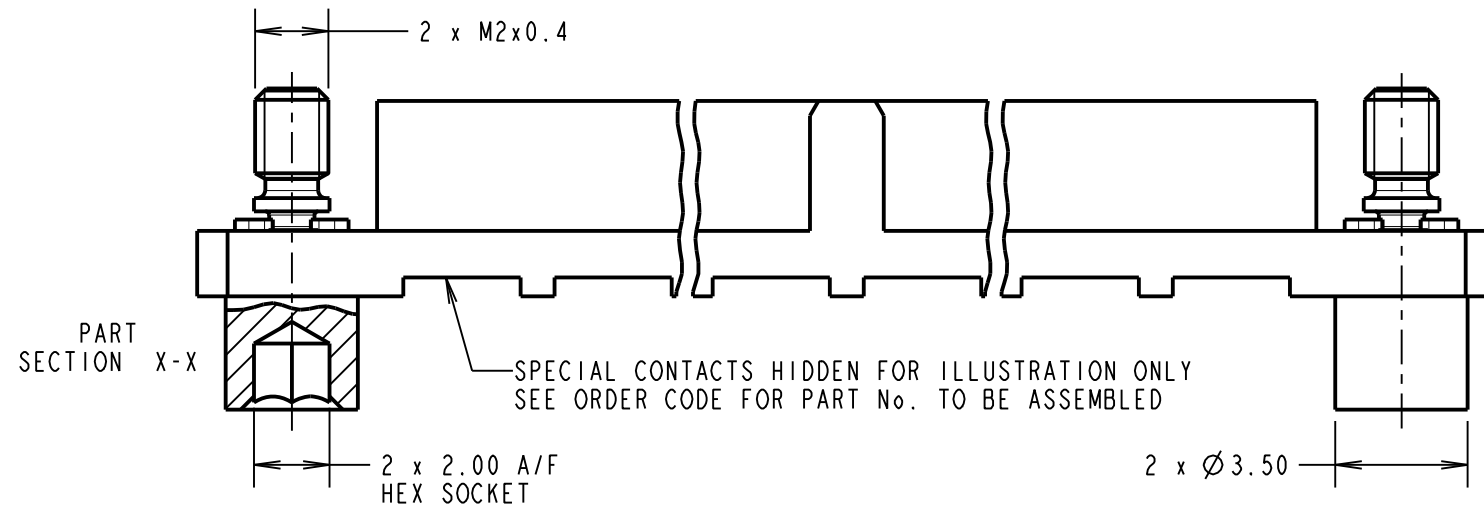
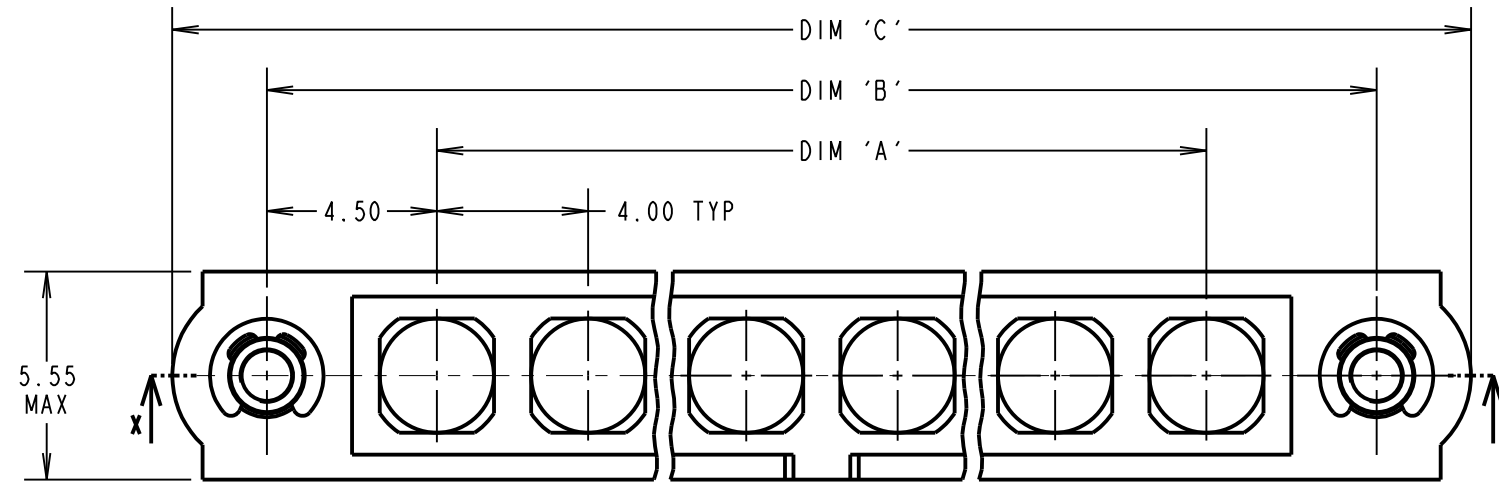
POWER CONTACT:
 CONTACT RESISTANCE = 6mΩ MAX
 CURRENT RATING:
 M80-323/324 = 20A MAX
 M80-PF3/PF4 = 40A MAX

MECHANICAL:
 DURABILITY = 500 OPERATIONS
 POWER CONTACT:
 INSERTION FORCE:
 M80-323/324 = 8N MAX
 M80-PF3/PF4 = 15N MAX
 WITHDRAWAL FORCE = 0.5N MIN

ENVIRONMENTAL:
 TEMPERATURE RANGE:
 M80-323/324 = -55°C TO +125°C
 M80-PF3/PF4 = -55°C TO +150°C

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

PC TAIL HORIZONTAL CONTACTS ONLY



ORDER CODE:
 (FEMALE HORIZONTAL POWER CONTACTS ONLY)

M80-400000F2-XX-XXX-00-000

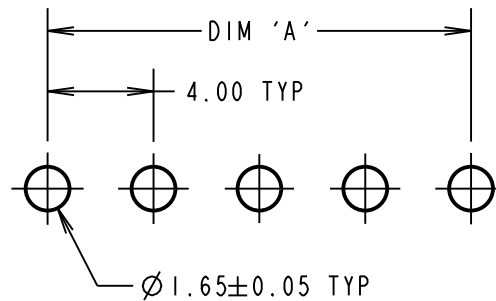
TOTAL No. OF CONTACTS:
 02 TO 12

FEMALE HORIZONTAL POWER CONTACTS:
 323 = 20A POWER CONTACT PC TAIL 3.5mm M80-323
 324 = 20A POWER CONTACT PC TAIL 5.0mm M80-324
 PF3 = 40A POWER CONTACT PC TAIL 3.5mm M80-PF3
 PF4 = 40A POWER CONTACT PC TAIL 5.0mm M80-PF4

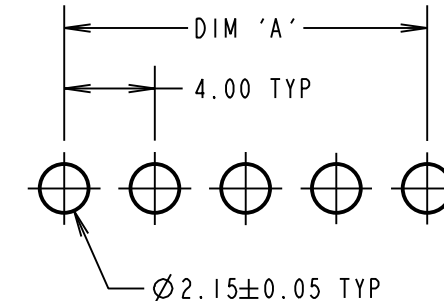
DIMENSION	CALCULATION
DIM 'A'	4 x No. OF CONTACTS - 4.00
DIM 'B'	4 x No. OF CONTACTS + 5.00
DIM 'C'	4 x No. OF CONTACTS + 10.00
DIM 'D'	M80-323 = 3.50mm, M80-324 = 5.00mm
DIM 'E'	M80-PF3 = 3.50mm, M80-PF4 = 5.00mm

EXAMPLE 1: CONNECTOR WITH 10 POWER CONTACTS 3.5mm,
 M80-400000F2-10-323-00-000
 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm
 DIM 'D' = 3.50mm

RECOMMENDED PCB LAYOUT FOR
 POWER CONTACTS: M80-323/324



RECOMMENDED PCB LAYOUT FOR
 POWER CONTACTS: M80-PF3/PF4



SB	5	08.04.15	12566
NAME	ISS.	DATE	C/NOTE
APPROVED:		S.BENNETT	
CHECKED:		M.PLESTED	
DRAWN:		C.PENROSE	
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:

mm²

TITLE:

DATAMATE MIX-TEK
 FEMALE ASSEMBLY WITH
 HEX SOCKET J/SCREWS

DRAWING NUMBER:

M80-400000F2-XX-XXX-00-000

SHT
 8 OF 8