

Customer Information Sheet

DRAWING No.: M80-5000000M3-XX-XXX-00-000

SHEET 3 OF 4

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 & POWER CONTACT:

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

LATCHING COLLAR = BERYLLIUM COPPER

INSULATOR = PTFE

BOARD MOUNT JACKSCREW, NUT: STAINLESS STEEL

FINISH:

COAX & 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

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 = 10⁶MΩ @250V AC

OPERATING VOLTAGE = 180V AC @ 500mA

MAXIMUM VOLTAGE = 1000V AC

MECHANICAL:

DURABILITY = 500 OPERATIONS

COAX & POWER CONTACT:

INSERTION FORCE = 8N MAX

WITHDRAWAL FORCE = 0.5N MIN

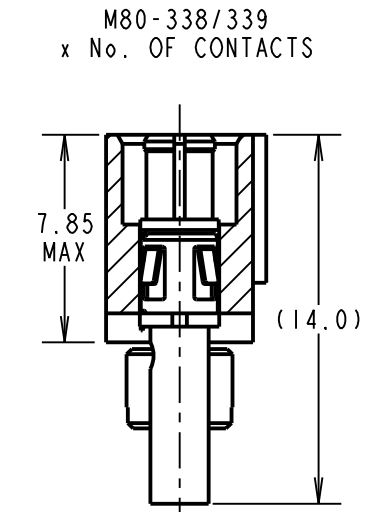
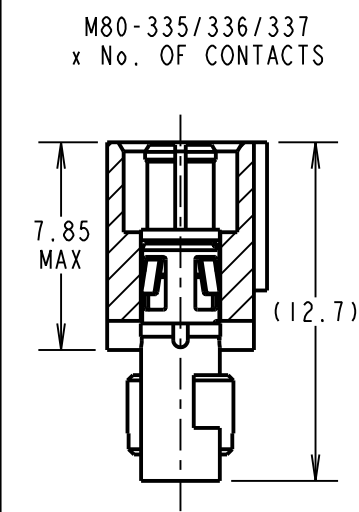
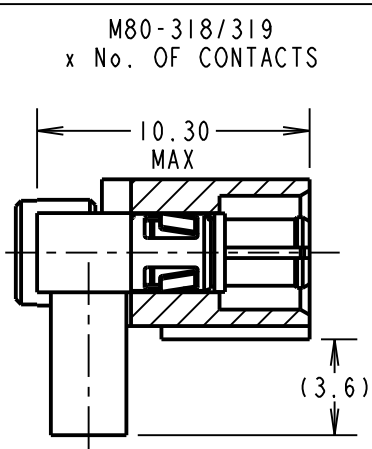
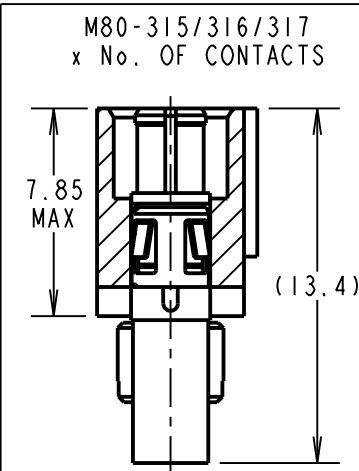
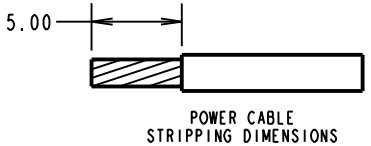
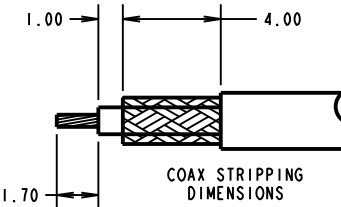
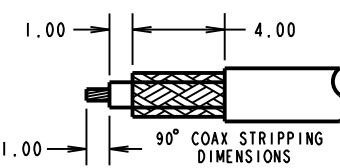
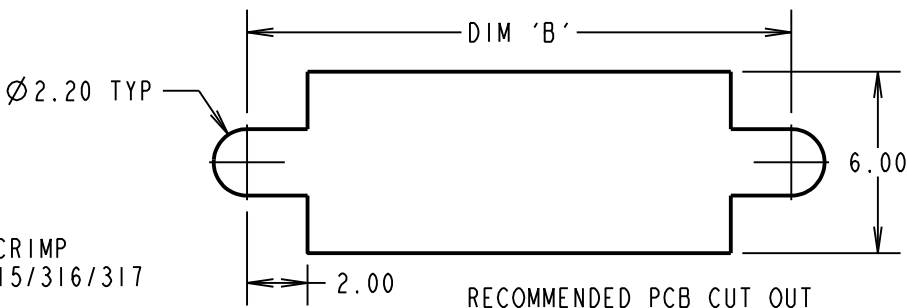
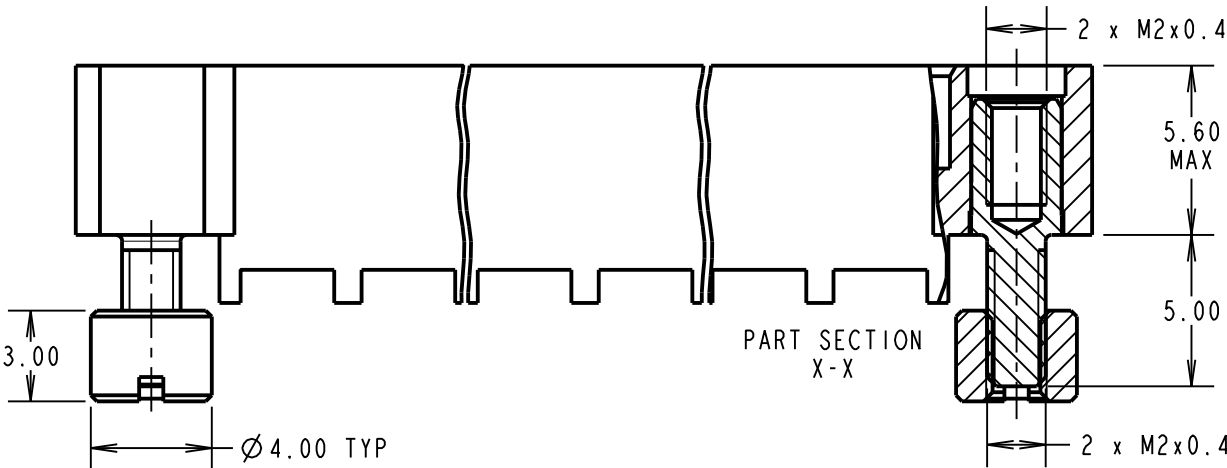
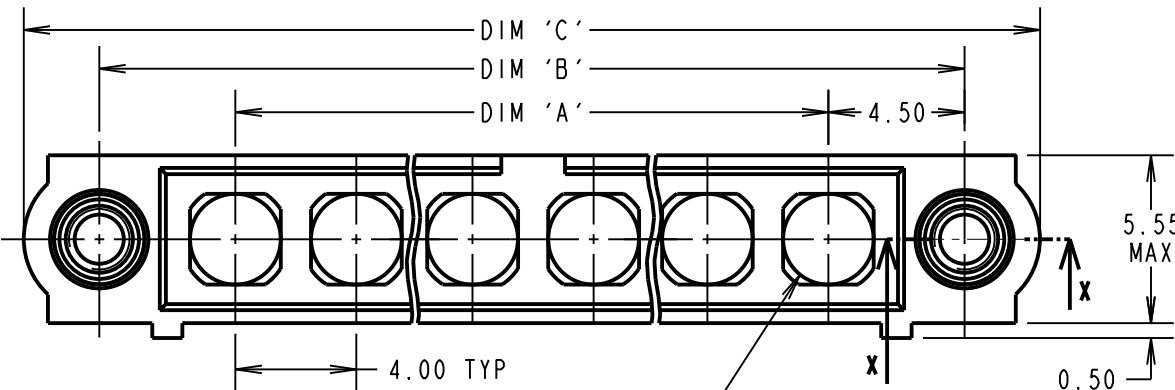
ENVIRONMENTAL:

TEMPERATURE RANGE = -55°C TO +125°C

PACKING:

BAG

FOR COMPLETE SPECIFICATION SEE COMPONENT SPECIFICATION C005XX (LATEST ISSUE)



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.
- FOR EXTRA POWER CONTACTS USE PART NUMBERS M80-335/336/337/338/339.
- COAX & POWER CONTACT EXTRACTION TOOL = Z80-290.
- RECOMMENDED HAND CRIMP TOOL FOR CONTACTS 338/339 = Z80-294 AND POSITIONER Z80-295.
- 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: (CRIMP/SOLDER CONTACTS)

M80-5000000M3-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 HORZ' CRIMP M80-318
319 = COAX CONTACT 2.70mm HORZ' CRIMP M80-319
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

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, M80-5000000M3-08-315-00-000 DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm	
EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS, M80-5000000M3-10-335-00-000 DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm	

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technical@harwin.com

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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:

DATAMATE MIX-TEK
MALE ASSEMBLY
WITH BOARD MOUNT J/SCREW

DRAWING NUMBER:

M80-5000000M3-XX-XXX-00-000

SHT

3 OF 4

MGP	2	16.01.13	11898
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SF			
DRAWN: R.ADDE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

Customer Information Sheet

DRAWING No.: M80-5000000M3-XX-XXX-00-000

SHEET 4 OF 4

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 = PHOSPHOR BRONZE

INSULATOR = PTFE

BOARD-MOUNT JACKSCREW, NUT: 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 = 100M Ω MIN

POWER CONTACT:

CONTACT RESISTANCE 6m Ω 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

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MECHANICAL:

DURABILITY = 500 OPERATIONS

COAX AND POWER CONTACT:

INSERTION FORCE = 8N MAX

WITHDRAWAL FORCE = 0.5N MIN

ENVIRONMENTAL:

TEMPERATURE RANGE = -55°C TO +125°C

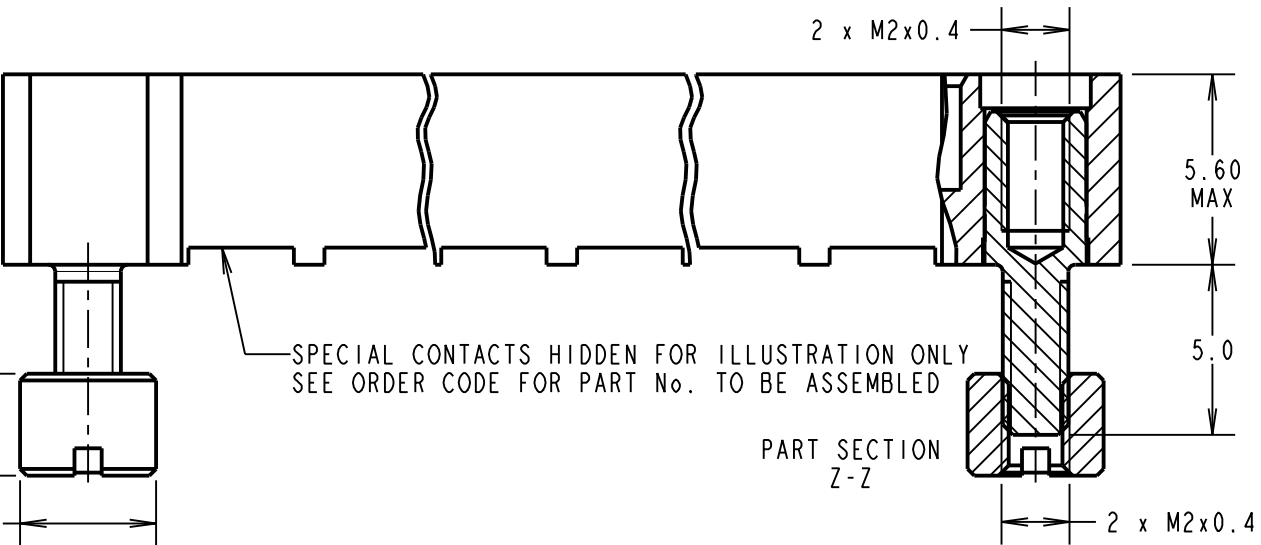
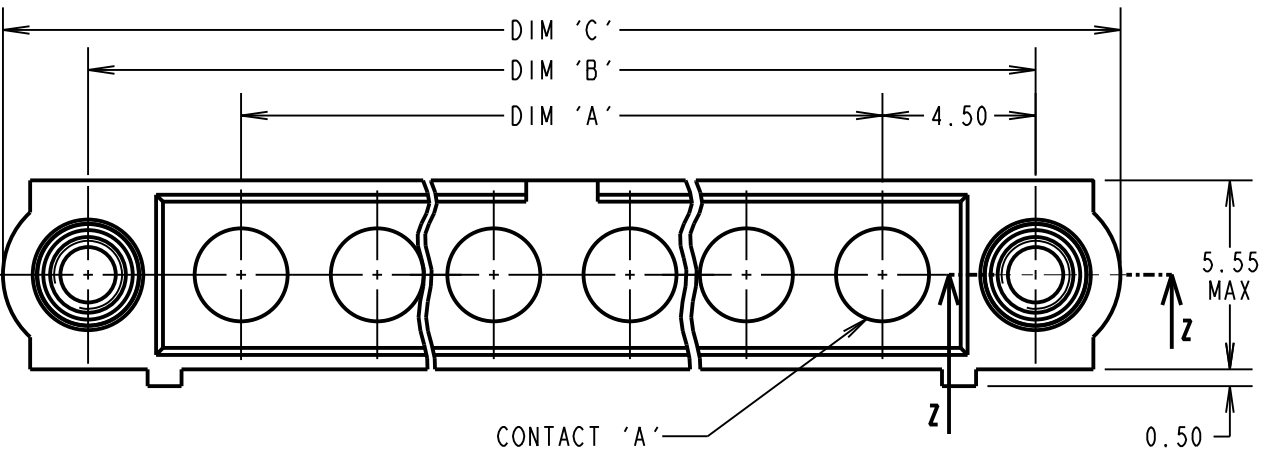
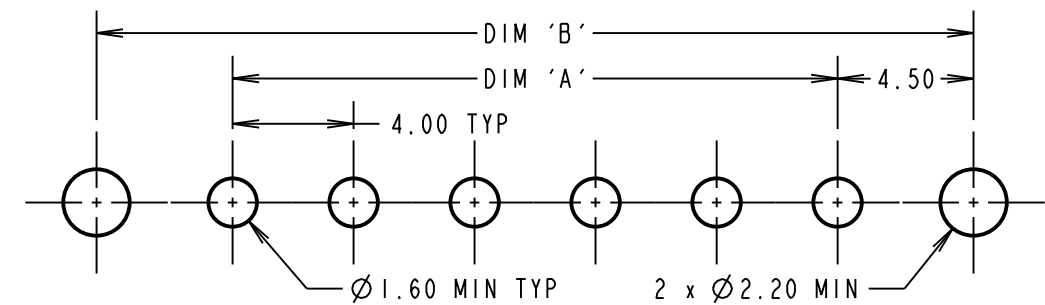
PACKING:

TUBE

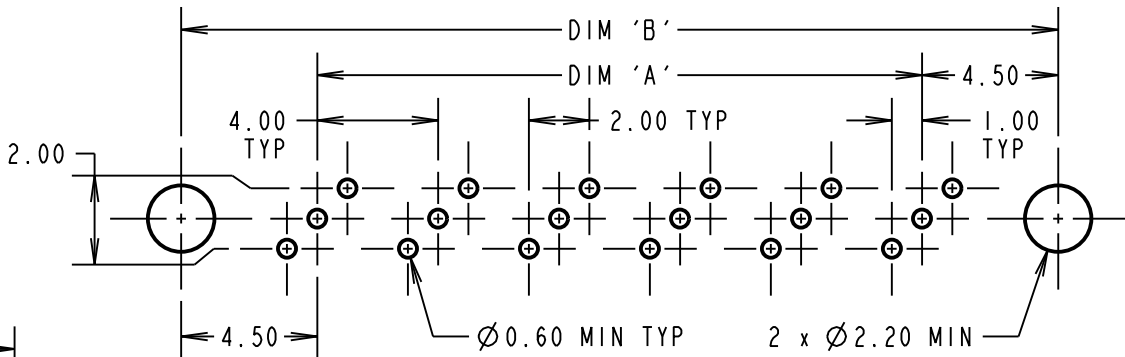
FOR COMPLETE SPECIFICATION SEE COMPONENT

SPECIFICATION C005XX (LATEST ISSUE)

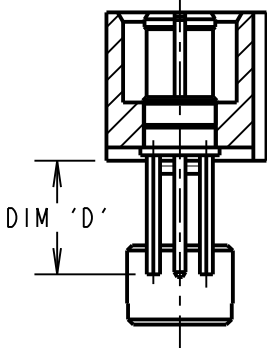
RECOMMENDED PCB LAYOUT FOR ALL POWER ONLY



RECOMMENDED PCB LAYOUT FOR ALL COAX ONLY

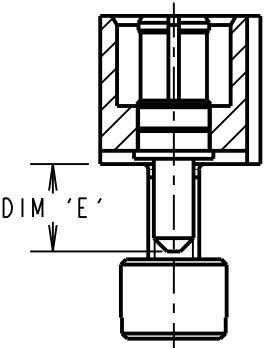


M80-311/312
x No. OF CONTACTS



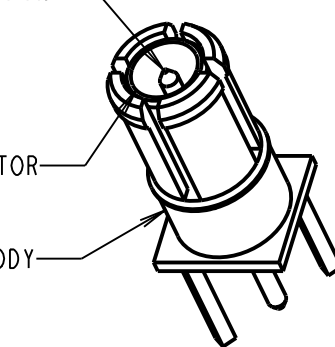
DIM 'D'

M80-331/332
x No. OF CONTACTS



DIM 'E'

VIEW OF
COAX CONTACT



PIN

INSULATOR

BODY

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'	M80-311=3.0mm, M80-312=4.5mm
DIM 'E'	M80-331=3.5mm, M80-332=5.0mm

EXAMPLE 1: CONNNECTOR WITH 08 COAX CONTACTS,
M80-5000000M3-08-312-00-000
DIM 'A' = 28.00mm, DIM 'B' = 37.00mm, DIM 'C' = 42.00mm
DIM 'D' = 4.5mm

EXAMPLE 2: CONNECTOR WITH 10 POWER CONTACTS,
M80-5000000M3-10-331-00-000
DIM 'A' = 36.00mm, DIM 'B' = 45.00mm, DIM 'C' = 50.00mm
DIM 'E' = 3.5mm

ORDER CODE:(PC TAIL CONTACTS)

M80-5000000M3-XX-XXX-00-000

TOTAL No. OF CONTACTS
02 TO 12

SPECIAL CONTACTS

311 = COAX CONTACT 3.0mm PC TAIL M80-311
312 = COAX CONTACT 4.5mm PC TAIL M80-312
331 = POWER CONTACT 3.5mm PC TAIL M80-331
332 = POWER CONTACT 5.0mm PC TAIL M80-332

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TOLERANCES

X. = ± 1 mm
X.X = ± 0.25 mm
X.XX = ± 0.10 mm
X.XXX = ± 0.01 mm
ANGLES = $\pm 5^\circ$
UNLESS STATED

MATERIAL:

SEE ABOVE

FINISH:

SEE ABOVE

S/AREA:

mm²

TITLE:

DATAMATE MIX-TEK
MALE ASSEMBLY
WITH BOARD MOUNT J/SCREW

DRAWING NUMBER:

M80-5000000M3-XX-XXX-00-000

SHT

4 OF 4

MGP	2	16.01.13	11898
NAME	ISS.	DATE	C/NOTE
APPROVED: MGP			
CHECKED: SF			
DRAWN: R.ADDE			
CUSTOMER REF.:			
ASSEMBLY DRG:			

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Harwin:

[M80-5000000M3-04-331-00-000](#)