



\*A wide variety of transmissionline topologies and pcb-parameters like permittivity, substrate thickness, and board-stackup are applied by customers. These parameters have a strong impact on the high frequency performance of the mounted connector. Please note, that the given layout is not optimised to fit all of the possible board configurations regarding RF-performance, it represents a recommendation for optimum solderability of the connector. In order to guarantee optimum high frequency properties of the connector, an RF-analysis of the connector to board transition is recommended.

All dimensions are in mm; tolerances according to ISO 2768 m-H

**Documents**

N/A

**Material and plating**

**Connector parts**

- Center contact
- Outer contact male
- Outer contact female
- Body
- Dielectric

**Material**

- CuBe or equiv.
- CuBe
- Spring bronze
- Brass
- PTFE

**Plating**

- AuroDur®, gold plated
- AuroDur®, gold plated
- AuroDur®, gold plated
- AuroDur®, gold plated

Mini-Coax 8 CHANNEL BLOCK  
STRAIGHT

**MF2C118-40ML5-NM**

#### Electrical data

Impedance	50 Ω
Frequency	DC to 20 GHz
Return loss	≥ 25 dB, DC to 2 GHz
Insertion loss	≤ 0.02 x √f(GHz) dB
Insulation resistance	≥ 1 x10 <sup>3</sup> MΩ
Center contact resistance	≤ 10 mΩ
Outer contact resistance	≤ 3 mΩ
Test voltage (at sea level)	750 V rms
Working voltage (at sea level)	500 V rms
RF-leakage	≥ 80 dB up to 1 GHz ≥ 60 dB up to 4 GHz

- Connector only, Return loss in application depends decisive on PCB layout -

#### Mechanical data

Mating cycles	≥ 500
Engagement force	max. 32 N typical 20 N
Extraction force	max. 48 N typical 42 N

#### Environmental data

Temperature range	-40°C to +125°C
Climatic class	IEC 60068-2-1 40/85/21 IEC 60068-2-2 IEC 60068-2-3
Mechanical shock	IEC 60068-2-27 50G halfsinus, 2 shocks/axis during 11 sec.
Max. soldering temperature	IEC 61760-1, +260°C for 10 sec.
2002/95/EC (RoHS)	compliant
MR capability	non-magnetic

#### Tooling

N/A

#### Suitable cables

N/A

#### Packing

Standard	25 pcs in blister
Weight	3.4 g/pce

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
F.Michelmann	15.03.11	F.Michelmann	27.06.12	c00	12-0432	M. Raethlein	27.06.12
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