



\*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

**Interface**

According to Rosenberger Mini-Coax

**Documents**

N/A

**Material and plating**

**Connector parts**

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

**Material**

- CuBe or equiv.
- CuBe
- Brass
- Brass
- PTFE

**Plating**

- AuroDur®, gold plated
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Mini-Coax 4 Channel Block  
Straight

**23C12E-40ML5**

**Electrical data**

Impedance 50 Ω  
 Frequency DC to 20 GHz  
 Return loss ≥ 25 dB @ DC to 3 GHz  
 ≥ 20 dB @ 3 GHz to 6 GHz  
 ≥ 16 dB @ 6 GHz to 20 GHz  
 Insertion loss ≤ 0.05 x √f [GHz] dB  
 Insulation resistance ≥ 1GΩ  
 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 @ DC to 1 GHz  
 ≥ 60 dB @ 1 GHz to 4 GHz

- Connector only, VSWR in application depends decisive on PCB layout -

**Mechanical data**

Mating cycles ≥ 500  
 Engagement force max. 16 N typical 10 N  
 Extraction force max. 24 N typical 21 N

**Environmental data**

Temperature range -40 °C to +125 °C  
 Climatic category IEC 60068-2-1 40/85/21  
 Dry heat IEC 60068-2-2  
 Damp heat IEC 60068-2-78  
 Shock IEC 60068-2-27 (50g halvesinus, 2 shocks/axis during 11 sec.)  
 Max. soldering temperature IEC 61760-1, +260 °C for 10 sec.  
 RoHS compliant

**Tooling**

N/A

**Suitable cables**

N/A

**Weight**

Weight 1.9 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.

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