



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

Mini-Coax 2 Channel Block
Right Angle

23C21F-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. 8 N typical 5 N
 Extraction force max. 12 N typical 10.5 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 halfsinus, 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 1.1 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
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