



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

Interface

According to

Rosenberger EBC™

Documents

Application note

EBC

Material and plating

Connector parts

Center contact
Outer contact
Dielectric

Material

Cu
Brass
PTFE

Plating

Silver ≥ 1,5 µm
Flash white bronze over silver(e.g. Optargen®)

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RF_35/09.14/6.2

Electrical data

Impedance	50 Ω
Frequency	DC to 10 GHz
Return loss	≥ 26 dB @ DC to 6 GHz*
Insertion loss	≤ 0.05 x √f [GHz] dB
Insulation resistance	≥ 5 GΩ
Center contact resistance	≤ 10 mΩ
Outer contact resistance	≤ 5 mΩ
Test voltage (at sea level)	500 V rms
Working voltage (at sea level)	335 V rms
Power handling (sea level, VSWR 1.0)	100 W @ 2.2 GHz @ 25°C
Contact Current	≤ 2A DC
Screening attenuation – Interface only	≥ 50 dB up to 4 GHz ≥ 40 dB @ 4 GHz to 6 GHz
Crosstalk – Next / Fext	≤ -70 dB @ DC to 4 GHz – B2B distance 16.8mm ≤ -60 dB @ 4 GHz to 6 GHz – B2B distance 16.8mm
Intermodulation (3 rd order)	≥ 160 dBc (2 x 43 dBm)

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

* Dependent on axial misalignment

Mechanical data

Mating cycles	≥ 100
Center contact captivation	≥ 5 N
Engagement force EBC LD	13 N < F < 35 N
Engagement force EBC SB	4 N < F < 12 N
Disengagement force EBC LD	3 N < F < 9 N
Disengagement force EBC SB	1 N < F < 2.5 N
Working range	1.6 mm (± 0.8 mm)
Radial misalignment	± 0.7 mm / max. 4°
Min. B2B-distance	12 mm

Environmental data

Temperature range	-55 °C to +105 °C
Thermal shock	MIL-STD-202, Method 107, Condition B
Climatic category	IEC 61169-1, Sub-clause 9.4.5
Moisture resistance	MIL-STD-202, Method 106
Vibration	MIL-STD-202, Method 204, Condition B
Shock	MIL-STD-202, Method 213, Condition A
RoHS	compliant

Weight

Weight	1.05g/pc
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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.

For the installation of the electrotechnical equipment, particular electrotechnical expertise is required.



Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
M. Schmid	09.01.19	B. Aicher	20.02.24	b00	24-0066	S. Schier	20.02.24

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