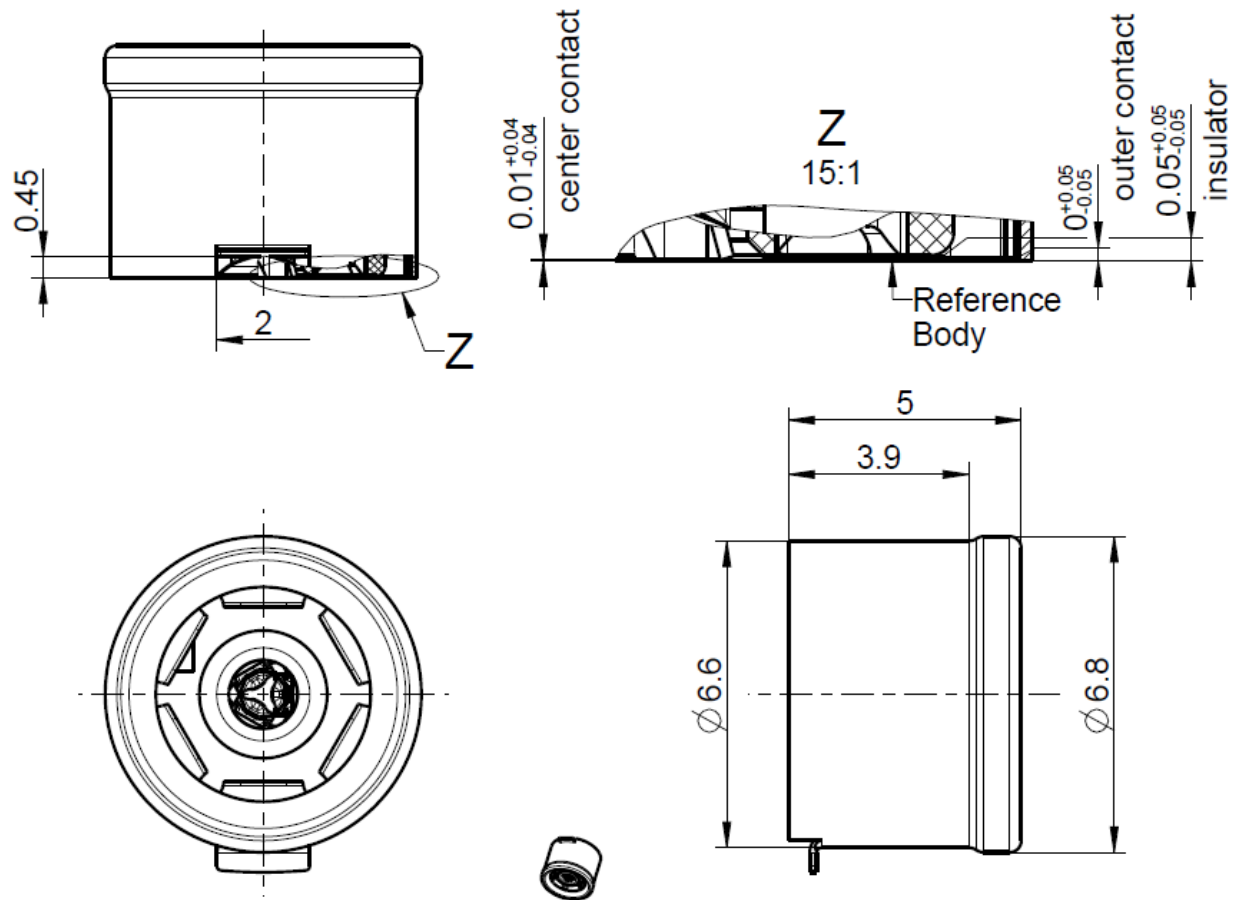




All dimensions are in mm; tolerances acc. to ISO 2768 m-H

Interface

According to

Rosenberger EBC ®

Documents

PCB Layout

Application note

B 730D

EBC

Material and plating

Connector parts

Center contact

Outer contact

Body

Dielectric

Material

CuBe or equiv.

Spring bronze

Brass

LCP

Plating

AuroDur®, gold plated

White bronze(e.g. Optalloy®)

Tin, 2-4 µm

Technical Data Sheet

Rosenberger

EBC

Straight Jack PCB
Microstrip Design

EBCK11T-40MN5

Electrical data

Impedance	50 Ω
Frequency	DC to 10 GHz
Return loss	≥ 26 dB @ DC to 6 GHz*
Insertion loss	≤ 0.05 x $\sqrt{f \text{ [GHz]}}$ 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
Moisture resistance	MIL-STD-202, Method 106
Vibration	MIL-STD-202, Method 204, Condition B
Shock	MIL-STD-202, Method 213, Condition A
Max. soldering temperature	IEC 61760-1, +260°C for 10 sec.
RoHS	compliant

Weight

Weight	0,25 g/pce
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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	08.07.19	B. Aicher	11.04.22	a00	22-s100	Tobi Stzadler	12.04.22

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Page

2 / 2

intern | internal