



All dimensions are in mm; tolerances according 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®)

Dieses Dokument ist urheberrechtlich geschützt • This document is protected by copyright • Rosenberger Hochfrequenztechnik GmbH & Co. KG

RFB00035/12.20/6.4

**Electrical Data**

Impedance	50 Ω
Frequency	DC to 6 GHz
Return loss	≥ 26 dB @ DC to 6 GHz <sup>1)</sup>
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 @ 3.5 GHz at 105 °C <sup>2)</sup>
Contact Current	≤ 2A DC
Screening attenuation – Interface	≥ 50 dB up to 4 GHz
Intermodulation (3 <sup>rd</sup> order)	≥ 160 dBc (2 x 43 dBm)

1) Dependent on axial misalignment

2) Power value is dominated by the application

**Mechanical Data**

Mating cycles	≥ 50
Center contact captivation	≥ 5 N
Engagement force	
-Limited detent	≤ 35 N (typ. 30 N)
-Smooth bore	≤ 12 N
Disengagement force	
-Limited detent	≤ 12 N
-Smooth bore	≤ 5 N
Working range	1.6 mm (± 0.8 mm)
Radial misalignment	max. 4°
Pitch	≥ 6.9 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**

1.8 g/pc

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
S. Graf	15.04.2021	S. Graf	15.04.2021	a00	21-0767	B. Wollitzer	15.04.2021
Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany <a href="http://www.rosenberger.com">www.rosenberger.com</a>						Tel. : +49 8684 18-0 Email : <a href="mailto:info@rosenberger.com">info@rosenberger.com</a>	
							Page 2 / 2