



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  $\geq 1,5 \mu\text{m}$   
Flash white bronze over silver(e.g. Optargen®)

**Electrical data**

|   |                                       |
|---|---------------------------------------|
| Impedance                               | 50 Ω                                  |
| Frequency                               | DC to 8 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 @ 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            | ≤ 35N (typ.30N)   |
| -smooth bore               | ≤ 12N             |
| Disengagement force        |                   |
| -Limited detent            | ≤ 12N             |
| -smooth bore               | ≤ 5N              |
| 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**

|        |          |
|--------|----------|
| Weight | 1.62g/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.



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| Draft  | Date     | Approved | Date     | Rev. | Engineering change number | Name   | Date          |
|--|----------|----------|----------|------|---------------------------|--|---------------|
| L. Bombik  | 23.04.20 | B.Aicher | 24.03.21 | B00  | 20-2036                   | Tobias Stadler   | 24.03.21      |
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