



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

Interface

According to IEC 61169-4, EN 122190, DIN 47223

Documents

Assembly instruction 64 I2

Material and plating

Connector parts

| | | |
|----------------|----------|---------------|
| Center contact | Material | Spring bronze |
| Outer contact | | Brass |
| Body | | Brass |
| Dielectric | | PTFE |
| Gasket | | Silicone |

Plating

Silver, 3-6 µm
Flash white bronze over silver(e.g. Optargen®)
Flash white bronze over silver(e.g. Optargen®)

Electrical data

| | |
|--|---|
| Impedance | 50 Ω |
| Frequency | DC to 7.5 GHz |
| Return loss | ≥ 35 dB, DC to 1 GHz ≥ 30 dB, 1 to 2.7 GHz |
| Insertion loss | ≤ 0.05 x √f [GHz] dB |
| Insulation resistance | ≥ 10 GΩ |
| Center contact resistance | ≤ 0.4 mΩ |
| Outer contact resistance | ≤ 1.5 mΩ |
| Working voltage (at sea level) | 500 V rms |
| Power handling (at 20 °C, sea level, VSWR 1.0) | 1800 W @ 1 GHz 800 W @ 4 GHz |
| RF-leakage | ≥ 128 dB @ DC to 1 GHz |
| Intermodulation (3 rd order) | ≤ -117 dBm @ 2 x 20 W |

- Limitations are possible due to the used cable type -

Mechanical data

| | |
|-----------------------------------|-------------|
| Mating cycles | ≥ 500 |
| Coupling nut retention | ≥ 1000 N |
| Center contact captivation: axial | ≥ 200 N |
| radial | ≥ 2 Ncm |
| Coupling torque (recommended) | 25 to 30 Nm |
| Proof torque | ≤ 35 Nm |

Environmental data

| | |
|-----------------------------------|--|
| Temperature range | -45 °C to +85 °C |
| Rapid change of temperature | DIN EN 122190, Sub-clause 4.6.7 |
| Corrosion resistance | DIN EN 122190, Sub-clause 4.6.10 |
| Vibration | DIN EN 122190, Sub-clause 4.6.3 |
| Climatic category | DIN EN 122190, Sub-clause 4.6.5 (45/85/56) |
| Damp heat | DIN EN 122190, Sub-clause 4.6.6 |
| Degree of protection (mated pair) | IEC 60529, IP68 2.5 bar |
| RoHS | compliant |

Tooling

N/A

Suitable cables

Leoni 1/4" S (recommended)
Andrew FSJ 1-50A

Weight

Weight 122.2 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.

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



| | | | | | | | |
|--|----------|-------------|----------|------|--|----------------|---------------|
| Draft | Date | Approved | Date | Rev. | Engineering change number | Name | Date |
| F. Fraunhofer | 26.07.17 | Chr. Janßen | 02.03.21 | b00 | 20-1927 | S. Huber-Siegl | 02.03.21 |
| Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany www.rosenberger.com | | | | | Tel. : +49 8684 18-0 Email : info@rosenberger.com | | Page 2 / 2 |