



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

Interface

According to SMA side: IEC 60169-15; EN 122110; MIL-STD-348
BNC side: IEC 60169-8, MIL-PRF-39012, CECC 22120

Documents

N/A

Material and plating

Connector parts

| Connector parts | Material |
|------------------------|--------------------|
| Center contact | Brass |
| Outer contact SMA side | CuBe or equivalent |
| Outer contact BNC side | Brass |
| Dielectric | PTFE |
| Gasket | Silicone |
| Coupling nut SMA side | CuBe or equivalent |

Plating

| |
|-----------------------|
| AuroDur®, gold plated |
| AuroDur®, gold plated |
| Nickel, 2.5-5 µm |
| Gold, 0.1 µm |

Electrical data

| | | |
|--|--|-------------------------|
| Impedance | 50 Ω | |
| Frequency | DC to 6 GHz | |
| VSWR | $\leq 1.05 + 0.005 \times f$ [GHz] | |
| Insertion loss | $\leq 0.05 \times \sqrt{f(\text{GHz})}$ dB | |
| Insulation resistance | $\geq 5 \times 10^3$ MΩ | |
| Center contact resistance | ≤ 3 mΩ, SMA side | ≤ 1.5 mΩ, BNC side |
| Outer contact resistance | ≤ 2 mΩ, SMA side | ≤ 1 mΩ, BNC side |
| Test voltage | 1000 V rms | |
| Working voltage | 400 V rms | |
| Power handling (at 20 °C, sea level, VSWR 1.0) | ≤ 80 W @ 2 GHz | |

Mechanical data

| | | |
|-----------------------------------|------------------|-------------|
| | SMA side | BNC side |
| Mating cycles | min. 500 | min. 500 |
| Coupling nut retention | ≥ 270 N | N/A |
| Center contact captivation: axial | ≥ 27 N | ≥ 27 N |
| Coupling test torque | max. 1.7 Nm | N/A |
| Recommended torque | 0.8 Nm to 1.1 Nm | N/A |

Environmental data

| | |
|---------------------|---------------------------------|
| Temperature range | -65°C to +165°C |
| Thermal shock | MIL-STD-202, Meth. 107, Cond. B |
| Corrosion | MIL-STD-202, Meth. 101, Cond. B |
| Vibration | MIL-STD-202, Meth. 204, Cond. D |
| Shock | MIL-STD-202, Meth. 213, Cond. I |
| Moisture resistance | MIL-STD-202, Meth. 106 |
| RoHS | compliant |

Tooling

N/A

Suitable cables

N/A

Weight

Weight 15.2 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.

| Draft | Date | Approved | Date | Rev. | Engineering change number | Name | Date |
|--|----------|-----------------|----------|------|--|-----------|---------------|
| Rong Fang | 13/09/04 | J_Krautenbacher | 21.07.16 | i00 | 15-1629 | I_Wallner | 21.07.16 |
| Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany www.rosenberger.de | | | | | Tel.: +49 8684 18-0 email: info@rosenberger.de | | Page 2 / 2 |