



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

**Interface**

According to SMA side: IEC 60169-15; EN 122110; MIL-STD-348A, Fig. 310  
 BNC side: IEC 60169-8, MIL-PRF-39012, CECC 22120

**Documents**

N/A

**Material and plating**

**Connector parts**

|                        | <b>Material</b>    |
|------------------------|--------------------|
| Center contact         | CuBe               |
| 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 |
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| 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                      | $\leq 3$ mΩ, SMA side                      | $\leq 1.5$ mΩ, BNC side |
| Outer contact resistance                       | $\leq 2$ mΩ, SMA side                      | $\leq 1$ mΩ, BNC side   |
| Test voltage                                   | 1000 V rms                                 |                         |
| Working voltage                                | 400 V rms                                  |                         |
| Power handling (at 20 °C, sea level, VSWR 1.0) | $\leq 80$ W @ 2 GHz                        |                         |

**Mechanical data**

|                                   |                  |             |
|-----------------------------------|------------------|-------------|
|                                   | SMA side         | BNC side    |
| Mating cycles                     | min. 500         | min. 500    |
| Coupling nut retention            | $\geq 270$ N     | N/A         |
| Center contact captivation: axial | $\geq 27$ N      | $\geq 27$ 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 9.0 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 | Sa. Krautenbacher | 17.03.14 | h00  | 14-0352  | T. Krojer | 17.03.14      |
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