



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

**Interface**

According to IEC 61169-40  
Mechanically compatible with RPC-1.85

**Documents**

PCB layout B 208

**Material and plating**

**Connector parts**

|                |                 |   |
|----------------|-----------------|---|
| Center contact | CuBe            | <b>Plating</b><br>Gold, min. 1.27 µm, over chemical nickel<br>Gold, min. 0.8 µm, over chemical nickel |
| Outer contact  | Brass           |   |
| Dielectric 1   | PEEK            |   |
| Dielectric 2   | PTFE            |   |
| Screws         | Stainless steel |   |

**Electrical data**

|                                |                                   |
|--------------------------------|-----------------------------------|
| Impedance                      | 50 Ω                              |
| Frequency                      | DC to 50 GHz                      |
| Return loss                    | ≥ 12 dB, DC to 50 GHz             |
| Insertion loss                 | ≤ 0.1 x $\sqrt{f(\text{GHz})}$ dB |
| Insulation resistance          | ≥ 5 GΩ                            |
| Test voltage (at sea level)    | 500 V rms                         |
| Working voltage (at sea level) | 150 V rms                         |
| RF-leakage                     | ≥ 100 dB up to 1 GHz              |

- Connector only, VSWR in application depends decisive on PCB layout -

**Mechanical data**

|                            |                    |
|----------------------------|--------------------|
| Mating cycles              | ≥ 500              |
| Center contact captivation | ≥ 20 N             |
| Coupling test torque       | 1.65 Nm            |
| Recommended torque         | 0.80 Nm to 1.10 Nm |

**Environmental data**

|                            |                                 |
|----------------------------|---------------------------------|
| Temperature range          | -40°C to +85°C                  |
| Thermal shock              | IEC 61169-1, Subclause 9.4.4    |
| Corrosion                  | IEC 61169-1, Subclause 9.4.6    |
| Vibration                  | IEC 61169-1, Subclause 9.3.3    |
| Shock                      | IEC 61169-1, Subclause 9.3.14   |
| Moisture resistance        | IEC 61169-1, Subclause 9.4.3    |
| Max. soldering temperature | IEC 61760-1, +260°C for 10 sec. |
| RoHS                       | compliant                       |

**Tooling**

N/A

**Suitable cables**

N/A

**Weight**

4.7 g/pce

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|             |          |           |          |      |                           |        |          |
|-------------|----------|-----------|----------|------|---------------------------|--------|----------|
| Draft       | Date     | Approved  | Date     | Rev. | Engineering change number | Name   | Date     |
| H. Babinger | 05.09.06 | F. Reiner | 10.07.18 | b01  | 18-1026                   | M. Ruf | 06.07.18 |

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