



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

**Interface**

RPC-TNC according to  
SMA according to  
SMA mechanically compatible with

IEC 60169-26  
IEC 60169-15; EN 122110; MIL-STD 348A/310  
RPC-2.92 and RPC-3.50

**Documents**

N/A

**Material and plating**

**Connector parts**

Center contact  
Outer contact  
Coupling nut  
Dielectric 1  
Dielectric 2  
Gasket SMA

**Material**

Beryllium copper  
Stainless steel  
Stainless steel  
PTFE  
PPE  
Silicone

**Plating**

Gold, min. 1.27 µm, over chemical nickel  
Passivated  
Passivated

**Electrical data**

|                                   |                                   |
|-----------------------------------|-----------------------------------|
| Impedance                         | 50 Ω                              |
| Frequency                         | DC to 18 GHz                      |
| Return loss                       | ≥ 19 dB, DC to 18 GHz             |
| Insertion loss                    | ≤ 0.1 x $\sqrt{f(\text{GHz})}$ dB |
| Insulation resistance             | ≥ 5 GΩ                            |
| Center contact resistance RPC-TNC | ≤ 1.5 mΩ                          |
| Outer contact resistance RPC-TNC  | ≤ 1.0 mΩ                          |
| Center contact resistance SMA     | ≤ 3.0 mΩ                          |
| Outer contact resistance SMA      | ≤ 2.0 mΩ                          |
| Test voltage                      | 1000 V rms                        |
| Working voltage                   | 480 V rms                         |
| RF-leakage                        | ≥ 90 dB up to 1 GHz               |

**Mechanical data**

|                              |                    |
|------------------------------|--------------------|
| Mating cycles                | ≥ 500              |
| Center contact captivation   | ≥ 27 N             |
| Coupling test torque RPC-TNC | 1.70 Nm            |
| Recommended torque RPC-TNC   | 0.46 Nm to 0.69 Nm |
| Coupling test torque SMA     | 1.70 Nm            |
| Recommended torque SMA       | 0.80 Nm to 1.10 Nm |

**Environmental data**

|                     |                                      |
|---------------------|--------------------------------------|
| Temperature range   | -40°C to +85°C                       |
| Thermal shock       | MIL-STD-202, Method 107, Condition B |
| Corrosion           | MIL-STD-202, Method 101, Condition B |
| Vibration           | MIL-STD-202, Method 204, Condition D |
| Shock               | MIL-STD-202, Method 213, Condition I |
| Moisture resistance | MIL-STD-202, Method 106              |
| RoHS                | compliant                            |

**Tooling**

N/A

**Suitable cables**

N/A

**Weight**

32.2 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          |
|--|----------|--------------|----------|------|--|------------|---------------|
| Herbert Babinger   | 02.12.04 | Martin Moder | 26.01.16 | c00  | 16-0128  | Maik Knoll | 26.01.16      |
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