



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
Dielectric 1
Dielectric 2

Material

Beryllium copper
Stainless steel
PTFE
PPE

Plating

Gold, min. 1.27 μ m, over chemical nickel
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

30.8 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 | 28.01.16 | d00 | 16-0128 | Maik Knoll | 28.01.16 |
| Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany www.rosenberger.de | | | | | Tel.: +49 8684 18-0 Fax: +49 8684 18-499 email: info@rosenberger.de | | Page 2 / 2 |