



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

Interface

RPC-7 according to
SMA according to
SMA mechanically compatible with

IEC 457-2
IEC 60169-15; EN 122110; MIL-STD-348A, Fig. 310
RPC-2.92 and RPC-3.50

Documents

N/A

Material and plating

Connector parts

- Center contact
- Outer contact RPC-7
- Outer contact SMA
- Coupling nut
- Dielectric 1
- Dielectric 2

Material

- CuBe
- CuBe
- Stainless steel
- Stainless steel
- PPE
- PTFE

Plating

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

Dieses Dokument ist urheberrechtlich geschützt • This document is protected by copyright • Rosenberger Hochfrequenztechnik GmbH & Co. KG

RF_35/09;14/6.2

Electrical data

| | |
|--------------------------------|-----------------------------------|
| Impedance | 50 Ω |
| Frequency | DC to 18 GHz |
| Return loss | ≥ 23 dB, DC to 18 GHz |
| Insertion loss | ≤ 0.1 x $\sqrt{f(\text{GHz})}$ dB |
| Insulation resistance | ≥ 5 GΩ |
| Test voltage (at sea level) | 1000 V rms |
| Working voltage (at sea level) | 480 V rms |
| RF-leakage | ≥ 90 dB up to 1 GHz |

Mechanical data

| | |
|----------------------------|--------------------|
| Mating cycles RPC-7 | ≥ 5000 |
| Mating cycles SMA | ≥ 500 |
| Center contact captivation | ≥ 28 N |
| Coupling test torque RPC-7 | 1.95 Nm |
| Recommended torque RPC-7 | 1.36 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, 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

45.5 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 | 05.08.04 | F. Reiner | 20.06.18 | b01 | 18-1026 | M.Ruf | 20.06.18 |

| | | | | | | | |
|--|--|--|--|--|--|--|---------------|
| 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 |
|--|--|--|--|--|--|--|---------------|