



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

Interface

RPC-3.50 according to
RPC-3.50 mechanically compatible with
SMP according to

IEC 60169-23
RPC-2.92 and SMA
MIL-STD-348

Documents

N/A

Material and plating

Connector parts

Center contact
Outer contact
Flange
Dielectric

Material

CuBe
Stainless steel
Brass
PS

Plating

Gold, min. 1.27 µm, over chemical nickel
Passivated
Flash white bronze over silver(e.g. Optargen®)

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RF_35/09.14/6.2

Electrical data

| | |
|--------------------------------|--|
| Impedance | 50 Ω |
| Frequency | DC to 26.5 GHz |
| Return loss | ≥ 30 dB, DC to 12 GHz ≥ 20 dB, 12 GHz to 26.5 GHz |
| Insertion loss | ≤ 0.04 x √f(GHz) dB |
| Insulation resistance | ≥ 5 GΩ |
| Test voltage (at sea level) | 500 V rms |
| Working voltage (at sea level) | 335 V rms |

Mechanical data

| | |
|-------------------------------------|---|
| Mating cycles RPC-3.50 | ≥ 500 |
| Mating cycles SMP full detent | ≥ 100 |
| Center contact captivation | ≥ 27 N |
| Coupling test torque RPC-3.50 | 1.70 Nm |
| Recommended torque | 0.80 Nm to 1.10 Nm |
| Engagement force SMP full detent | ≤ 68 N |
| Disengagement force SMP full detent | ≥ 22 N |
| Misalignment | radial 0.7 mm min |
| Spring force | min. 8 N at rest max. 15 N at max. spring travel |
| Spring travel | 2.3 mm max. |

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

8.8 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.

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|-------------|----------|-----------|----------|------|---------------------------|--------|----------|
| Draft | Date | Approved | Date | Rev. | Engineering change number | Name | Date |
| H. Babinger | 13.05.04 | F. Reiner | 26.06.18 | f01 | 18-1026 | M. Ruf | 25.06.18 |

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| 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 |
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