



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-348A, Fig. 326

Documents

N/A

Material and plating

Connector parts

- Center contact
- Outer contact
- Flange
- Dielectric

Material

- Beryllium copper
- Stainless steel
- Brass
- PS

Plating

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

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
Center contact resistance RPC-3.50	≤ 3.0 mΩ
Outer contact resistance RPC-3.50	≤ 2.0 mΩ
Center contact resistance SMP	≤ 6.0 mΩ
Outer contact resistance SMP	≤ 2.0 mΩ
Test voltage	500 V rms
Working voltage	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 RPC-3.50	0.80 Nm to 1.10 Nm
Engagement force SMP full detent	68 N max.
Disengagement force full detent	22 N min.
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 B
Shock	MIL-STD-202, Method 213, Condition A
Moisture resistance 2002/95/EC (RoHS)	MIL-STD-202, Method 106 compliant

Tooling

N/A

Suitable cables

N/A

Packing

Standard	1 pce in box
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.

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
Herbert Babinger	13/05/04	Martin Moder	20/08/12	f00	12-0003	Georg Schiele	20/08/12
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