



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

**Interface**

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

IEC 60169-23  
RPC-2.92 and SMA  
IEC 60169-16 ; CECC 22 210 ; MIL-STD 348A/304

**Documents**

N/A

**Material and plating**

**Connector parts**

- Center contact
- Outer contact
- Coupling nut
- Dielectric
- Gasket

**Material**

- Beryllium copper
- Stainless steel
- Stainless steel
- PPE
- Silicone

**Plating**

- Gold, min. 1.27  $\mu$ m, over chemical nickel
- Passivated
- Passivated

**ADAPTOR**  
**RPC-3.50 PLUG – RPC-N 50 Ω JACK**

**03S105-K00S3**

**Electrical data**

Impedance	50 Ω
Frequency	DC to 18 GHz
Return loss	≥ 26 dB, DC to 18 GHz
Insertion loss	≤ 0.05 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 RPC-N	≤ 1.0 mΩ
Outer contact resistance RPC-N	≤ 1.0 mΩ
Test voltage	1000 V rms
Working voltage	335 V rms
RF-leakage	≥ 90 dB up to 1 GHz

**Mechanical data**

Mating cycles	≥ 500
Center contact captivation	≥ 28 N
Coupling test torque RPC-3.50	1.70 Nm
Recommended torque RPC-3.50	0.80 Nm to 1.10 Nm
Coupling test torque RPC-N	1.70 Nm
Recommended torque RPC-N	0.70 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
2002/95/EC (RoHS)	compliant

**Tooling**

N/A

**Suitable cables**

N/A

**Packing**

Standard	1 pce in box
Weight	39.0 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	17/05/04	J. Krautenbacher	16/10/06	b00	06-0478	S. Huber-Siegl	16/10/06
Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany <a href="http://www.rosenberger.de">www.rosenberger.de</a>					Tel.: +49 8684 18-0 Fax: +49 8684 18-499 email: <a href="mailto:info@rosenberger.de">info@rosenberger.de</a>		Page 2 / 2