



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

**Interface**

RPC-3.50 according to	IEC 60169-23
RPC-3.50 mechanically compatible with	RPC-2.92 and SMA
RPC-SP according to	MIL-STD 348A and IEC 61169-33
RPC-SP mechanically compatible with	OSP and BMA

**Documents**

N/A

**Material and plating**

**Connector parts**

Center contact  
Outer contact RPC-3.50  
Outer contact RPC-SP  
Body  
Flange  
Dielectric

**Material**

CuBe  
Stainless steel  
Brass  
Stainless steel  
Stainless steel  
PS

**Plating**

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

**Electrical data**

Impedance	50 Ω
Frequency	DC to 22 GHz
Return loss	≥ 26 dB, DC to 18 GHz ≥ 23 dB, 18 GHz to 22 GHz
Insertion loss	≤ 0.05 x √f(GHz) dB
Insulation resistance	≥ 5 GΩ
Test voltage (at sea level)	1000 V rms
Working voltage (at sea level)	335 V rms
RF-leakage	≥ 85 dB up to 1 GHz

**Mechanical data**

Mating cycles RPC-3.50	≥ 500
Mating cycles RPC-SP	≥ 1000
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 RPC-SP	≤ 13.5 N
Disengagement force RPC-SP	≥ 2 N
Misalignment	radial 0.15 mm min.
Spring force	min. 13 N at rest max. 20 N at max. spring travel
Spring travel	1.5 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**

8.9 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
H. Babinger	09.04.09	F. Reiner	26.06.18	b01	18-1026	M. Ruf	25.06.18

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