



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  $\mu$ m, over chemical nickel
- Passivated
- Flash white bronze over silver(e.g. Optargen®)

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**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.

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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