



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-SP according to
RPC-SP mechanically compatible with

IEC 60169-23
RPC-2.92 and SMA
MIL-STD 348A and IEC 61169-33
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
Center contact resistance RPC-3.50	≤ 3.0 mΩ
Outer contact resistance RPC-3.50	≤ 2.0 mΩ
Center contact resistance RPC-SP	≤ 2.0 mΩ
Outer contact resistance RPC-SP	≤ 2.0 mΩ
Test voltage	1000 V rms
Working voltage	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
2002/95/EC (RoHS)	compliant

Tooling

N/A

Suitable cables

N/A

Packing

Standard	1 pce in box
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
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