



1) restricted connection dimension

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-7 according to

IEC 60169-23
RPC-2.92 and SMA
IEC 457-2

Documents

N/A

Material and plating

Connector parts

Center contact
Outer contact RPC-3.50
Outer contact RPC-7
Coupling nut
Dielectric

Material

Beryllium copper
Stainless steel
Beryllium copper
Stainless steel
PPE/PTFE

Plating

Gold, min. 1.27 μ m, over chemical nickel
Passivated
Gold, min. 1.27 μ m, over chemical nickel
Passivated

Electrical data

Impedance	50 Ω
Frequency	DC to 18 GHz
Return loss	≥ 28 dB, DC to 18 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 RPC-7	≤ 1.0 mΩ
Outer contact resistance RPC-7	≤ 0.1 mΩ
Test voltage	1000 V rms
Working voltage	335 V rms
RF-leakage	≥ 100 dB up to 1 GHz

Mechanical data

Mating cycles RPC-3.50	≥ 500
Mating cycles RPC-7	≥ 5000
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-7	1.95 Nm
Recommended torque RPC-7	1.36 Nm
Recommended torque ruggedized nut	1.36 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 2002/95/EC (RoHS)	MIL-STD-202, Method 106 compliant

Tooling

N/A

Suitable cables

N/A

Packing

Standard	1 pce in box
Weight	79.9 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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