



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-SL

IEC 60169-23
RPC-2.92 and SMA
Interchangeable port connector system

Documents

N/A

Material and plating

Connector parts

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

Material

CuBe
Stainless steel
Stainless steel
Stainless steel
PS

Plating

Gold, min. 1.27 µm, over chemical nickel
Passivated
Gold, 0.1 µm min.
Passivated

Technical Data Sheet

Rosenberger

Adaptor
RPC-3.50 Jack – RPC-SL Plug

03K104-S0AS3

Electrical data

Impedance	50 Ω
Frequency	DC to 26.5 GHz
Return loss	≥ 21 dB, DC to 26.5 GHz
Insertion loss	$\leq 0.04 \times \sqrt{f(\text{GHz})}$ dB
Insulation resistance	≥ 5 G Ω
Center contact resistance	≤ 3.0 m Ω
Outer contact resistance	≤ 2.0 m Ω
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-SL	≥ 3000
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
Recommended torque RPC-SL	2 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
RoHS	compliant

Tooling

N/A

Suitable cables

N/A

Packing

Standard	1 pce in box
Weight	23 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
Scherbauer M.	05.12.14	Herbert Babinger	01.08.17	300	17-v521	Frank Tatzel	01.08.17
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