



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

Interface

RPC-7 according to
SMA according to
SMA mechanically compatible with

IEC 457-2
IEC 60169-15; EN 122110; MIL-STD-348A, Fig. 310
RPC-2.92 and RPC-3.50

Documents

N/A

Material and plating

Connector parts

Center contact
Outer contact RPC-7
Outer contact SMA
Coupling nut
Dielectric 1
Dielectric 2
Gasket

Material

CuBe
CuBe
Stainless steel
Stainless steel
PPE
PTFE
Silicone

Plating

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

Electrical data

Impedance	50 Ω
Frequency	DC to 18 GHz
Return loss	≥ 23 dB, DC to 18 GHz
Insertion loss	≤ 0.1 x $\sqrt{f(\text{GHz})}$ dB
Insulation resistance	≥ 5 GΩ
Test voltage (at sea level)	1000 V rms
Working voltage (at sea level)	480 V rms
RF-leakage	≥ 90 dB up to 1 GHz

Mechanical data

Mating cycles RPC-7	≥ 5000
Mating cycles SMA	≥ 500
Center contact captivation	≥ 28 N
Coupling test torque RPC-7	1.95 Nm
Recommended torque RPC-7	1.36 Nm
Coupling test torque SMA	1.70 Nm
Recommended torque SMA	0.80 Nm to 1.10 Nm

Environmental data

Temperature range	-40°C to +85°C
Thermal shock	MIL-STD-202, Meth. 107, Cond. B
Corrosion	MIL-STD-202, Meth. 101, Cond. B
Vibration	MIL-STD-202, Meth. 204, Cond. D
Shock	MIL-STD-202, Meth. 213, Cond. I
Moisture resistance	MIL-STD-202, Meth. 106
RoHS	compliant

Tooling

N/A

Suitable cables

N/A

Weight

47.g 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
Herbert Babinger	05.08.04	F. Reiner	20.06.18	b01	18-1026	M.Ruf	18.06.18