



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

Interface

According to IEC 60169-16, MIL-PRF-39012, CECC 22210

Documents

Assembly instruction 60 118

Material and plating

Connector parts

Center contact	Brass
Outer contact	Brass
Body	Brass
Dielectric	PTFE
Gasket	Silicone

Plating

Silver, 3-6 μ m
Flash white bronze over silver(e.g. Optargen®)
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N 50 Ω RIGHT ANGLE PLUG
(1/2"R)

53S215-C03N1

Electrical data

Impedance 50 Ω
 Frequency DC to 11 GHz
 Return loss ≥ 35 dB, DC to 1 GHz
 ≥ 30 dB, 1 to 2.7 GHz
 Insertion loss ≤ 0.05 dB, DC to 2.7 GHz
 Insulation resistance ≥ 5 x10³ MΩ
 Center contact resistance ≤ 1 mΩ
 Outer contact resistance ≤ 0.25 mΩ
 Test voltage 2500 V rms
 Working voltage 1400 V rms
 Power handling (at 20 °C, sea level, VSWR 1.0) 1000 W @ 1 GHz
 700 W @ 2 GHz
 RF-leakage ≥ 128 dB up to 1 GHz
 Intermodulation (3rd order) ≤ -117 dBm @ 2 x 20 W
- Limitations are possible due to the used cable type -

Mechanical data

Mating cycles min. 500
 Coupling nut retention ≥ 450 N
 Center contact captivation: axial ≥ 28 N
 radial ≥ 3 Ncm
 Coupling test torque max. 1.7 Nm
 Recommended torque 0.7 Nm to 1.1 Nm

Environmental data

Temperature range -45°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. B
 Shock MIL-STD-202, Meth. 213, Cond. I
 Moisture resistance MIL-STD-202, Meth. 106
 Degree of protection (mated pair) IEC 60529, IP68 2.5 bar
 2002/95/EC (RoHS) compliant

Tooling

N/A

Suitable cables

Leoni Flexline 1/2" R (recommended)
 Andrew LDF 4-50A
 RFS LCF 12-50

Packing

Standard 1 pce in bag
 Weight 159 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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