



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 53 B1

Material and plating

Connector parts

Center contact
Outer contact
Body
Dielectric
Gasket

Material

Brass
Brass
Brass
PTFE
Silicone

Plating

AuroDur®, gold plated
Flash white bronze over silver(e.g. Optargen®)
Flash white bronze over silver(e.g. Optargen®)

N 50 Ω STRAIGHT PLUG

53S114-006N5

Electrical data

Impedance	50 Ω
Frequency	DC to 11 GHz
Return loss	≥ 35 dB, DC to 1 GHz ≥ 27 dB, 1 to 2 GHz ≥ 22 dB, 2 to 3 GHz
Insertion loss	≤ 0.05 dB, DC to 3 GHz
Insulation resistance	$\geq 5 \times 10^3$ M Ω
Center contact resistance	≤ 1 m Ω
Outer contact resistance	≤ 0.25 m Ω
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

- 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
Coupling test torque	max. 1.7 Nm
Recommended torque	0.7 Nm to 1.1 Nm

Environmental data

Temperature range	-55°C to +155°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, IP67
RoHS	compliant

Tooling

N/A

Suitable cables

RG 58 C/U, KX 15, RG 141 /U

Weight

Weight 34.7 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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