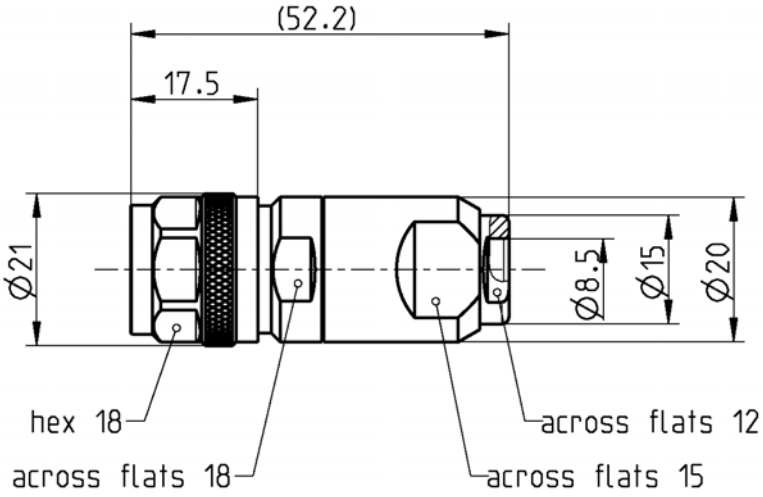
TECHNICAL DATA SHEET	Rosenberger®
N 50 Ω STRAIGHT PLUG (1/4"S)	**53S115-C09N1**



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 I23

Material and plating

Connector parts	**Material**	**Plating**
Center contact	Spring bronze	Silver, 3-6 µm
Outer contact	Brass	Flash white bronze over silver(e.g. Optargen®)
Body	Brass	Flash white bronze over silver(e.g. Optargen®)
Dielectric	PTFE	
Gasket	Silicone	

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TECHNICAL DATA SHEET

Rosenberger®

N 50 Ω STRAIGHT PLUG (1/4"S)

53S115-C09N1

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	≤ 0.1 dB
Insulation resistance	≥ 5 x10^3 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 1/4" S (recommended)
Andrew FSJ 1-50A
RFS SCF 14-50

Packing

Standard	1 pce in bag
Weight	86 g/pce

Draft	Date	Approved	Date
Rong Fang	08/06/04	Schwangler	15.02.07

Rev.	Engineering change number	Name	Date
c00	07-0046	B. Dandl	24.01.07

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