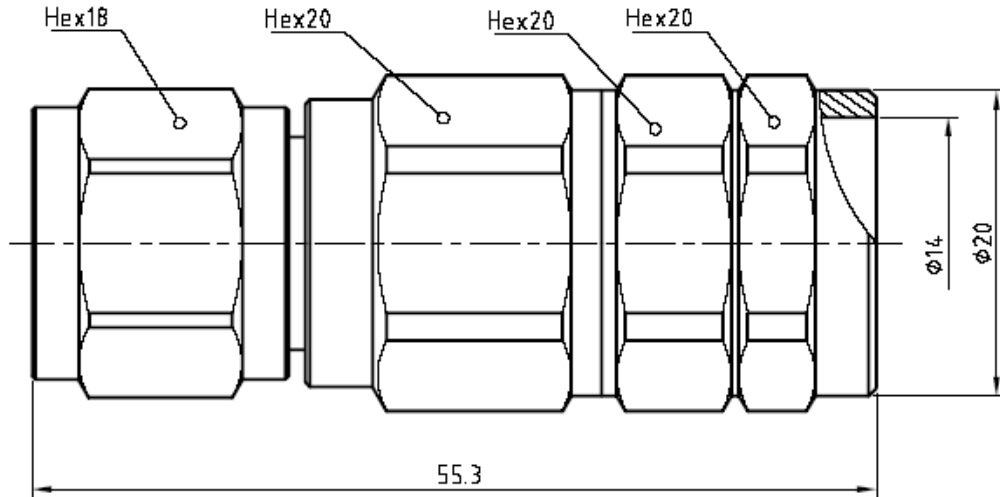


N Straight Plug (1/2" S)

53S1C7-C08N1



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

MA_1C7-C08

Material and plating

Connector parts

Center contact
Outer contact
Back nut
Sealing nut
Dielectric
Gasket
Coupling nut

Material

Spring bronze
Brass
Brass
Brass
TPX&POM
Silicone&EPDM
Brass

Plating

Silver, 3-6µm
Flash white bronze over silver(e.g. Optargen®)
Flash white bronze over silver(e.g. Optargen®)
Nickel, 2.5-5µm
Nickel, 2.5-5 µm

TECHNICAL DATA SHEET

Rosenberger
Rosenberger Site Solutions, LLC

N Straight Plug (1/2" S)

53S1C7-C08N1

Electrical data

Impedance	50 Ω
Frequency	DC to 11GHz
Return loss	$\geq 35\text{dB}$, DC to 1 GHz $\geq 30\text{dB}$, 1 to 2.7 GHz
Insertion loss	$\leq 0.05\text{ dB}$
Insulation resistance	$\geq 5 \times 10^3\text{ M}\Omega$
Center contact resistance	$\leq 1\text{m}\Omega$
Outer contact resistance	$\leq 0.25\text{m}\Omega$
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 @ 4 GHz
Intermodulation (3 rd order)	$\leq -115\text{dBm}$ @ 2 x 20 W

- Limitations are possible due to the used cable type -

Mechanical data

Mating cycles	min. 500
Coupling nut retention	$\geq 450\text{ N}$
Center contact captivation: axial	$\geq 28\text{ N}$
radial	$\geq 3\text{ Ncm}$
Coupling test torque	max. 1.7 Nm
Recommended torque	0.7 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
2002/95/EC (RoHS)	compliant

Tooling

60W110-C08

Suitable cables

SL 012S Series (recommended)

Packing

Standard	1pce in bag
Weight	78.9g/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	Checker	Approved	Date	Rev.	Engineering change number	Name	Date
ZhaiQK					c	-----	ZhaiQK	22/02/10
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