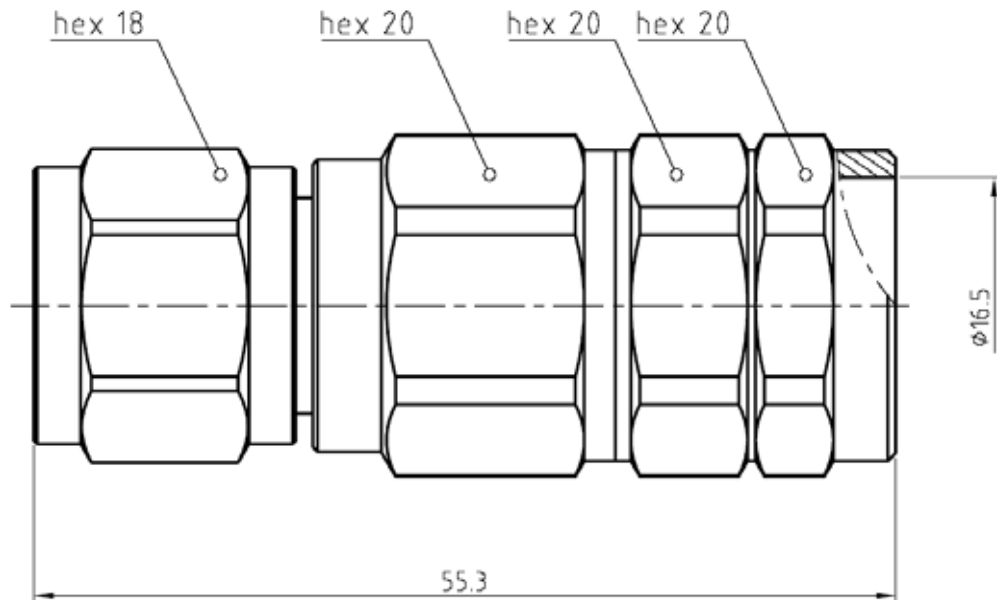


N Straight Plug (1/2" R)
53S1C7-C03N1


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-C03

Material and plating
Connector parts

Center contact
Outer contact
Body
Dielectric
Gasket
Coupling nut

Material

Spring bronze
Brass
Brass
TPX
Silicone & EPDM
Brass

Plating

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

TECHNICAL DATA SHEET

Rosenberger
Rosenberger Site Solutions, LLC

N Straight Plug (1/2" R)

53S1C7-C03N1

Electrical data

Impedance	50 Ω
Frequency	DC to 11 GHz
Return loss	≥ 35 dB, DC to 1 GHz ≥ 32 dB, 1 to 2.7 GHz
Insertion loss	≤ 0.05 dB
Insulation resistance	≥ 5 x10 ³ MΩ
Center contact resistance	≤ 1 mΩ
Outer contact resistance	≤ 0.25 mΩ
Test voltage (at sea level)	2500 V rms
Working voltage (at sea level)	1400 V rms
Power handling (at 20 °C, sea level, VSWR 1.0)	1000 W @ 1 GHz 700 W @ 2 GHz
Intermodulation (3 rd order)	≤ -115 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
2002/95/EC (RoHS)	compliant

Tooling

60W110-C03

Suitable cables

SL 012R series (Recommend)

Packing

Standard	1 pce in bag
Weight	62.5 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	Checker	Approved	Date	Rev.	Engineering change number	Name	Date
ZhaiQK	02/03/10				c	-----	ZhaiQK	02/03/10

Corporate Headquarters
Rosenberger Hochfrequenztechnik GmbH & Co. KG
P.O. Box 1260 D-84526 Tittmoning Germany
Tel. +49 8684 18-0

Rosenberger Site Solutions, LLC
P.O. Box 4268, Lake Charles, LA 70606
Ph.337.598.5250 Fax: 337.598.5290 rlss@rlss.us
www.rlss.us

Page
2 of 2