



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

**Interface**

According to IEC 61169-16, 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

**Material**

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

**Plating**

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

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RF\_35/09.14/6.2

N 50 Ω

STRAIGHT JACK  
(1/2" S)

**53K1C7-C08N1**

**Electrical data**

Impedance	50 Ω
Frequency	DC to 11 GHz
Return loss	≥ 35 dB @ DC to 1 GHz ≥ 30 dB @ 1 GHz to 2.7 GHz
Insertion loss	≤ 0.05 dB
Insulation resistance	≥ 5 GΩ
Center contact resistance	≤ 1 mΩ
Outer contact resistance	≤ 0.25 mΩ
Working voltage (at sea level)	500 V rms
Power handling (at 20 °C, sea level, VSWR 1.0)	1000 W @ 1 GHz 700 W @ 2 GHz
Intermodulation 3 <sup>rd</sup> order	≥ 159 dBc (2 x 43 dBm)

- Limitations are possible due to the used cable type -

**Mechanical data**

Mating cycles	≥ 500
Center contact captivation: axial	≥ 28 N
radial	≥ 3 Ncm
Coupling test torque	≤ 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, Method 107, Condition B
Corrosion resistance	MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition B
Shock	MIL-STD-202, Method 213, Condition I
Moisture resistance	MIL-STD-202, Method 106
Degree of protection (mated pair)	IEC 60529, IP68
2002/95/EC (RoHS)	compliant

**Tooling**

60W110-C08

**Suitable cables**

SL 012S Series (Recommend)

**Packing**

Standard	1 pce in bag
Weight	80.3 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
ZhaiQK	18/05/09	heanyang	26/07/16	e	15-0397	Songxianglong	26/07/16
Rosenberger Hochfrequenztechnik GmbH & Co. KG, Germany Tel.: +49 8684 18-0 Fax: +49 8684 18-499 www.rosenberger.de email: info@rosenberger.de				Rosenberger Asia Pacific Electronic Co., Ltd., China Tel.: +86 10 80481995 Fax: +86 10 80497052 www.rosenbergerap.com email: info@rosenbergerap.com			Page 2 / 2