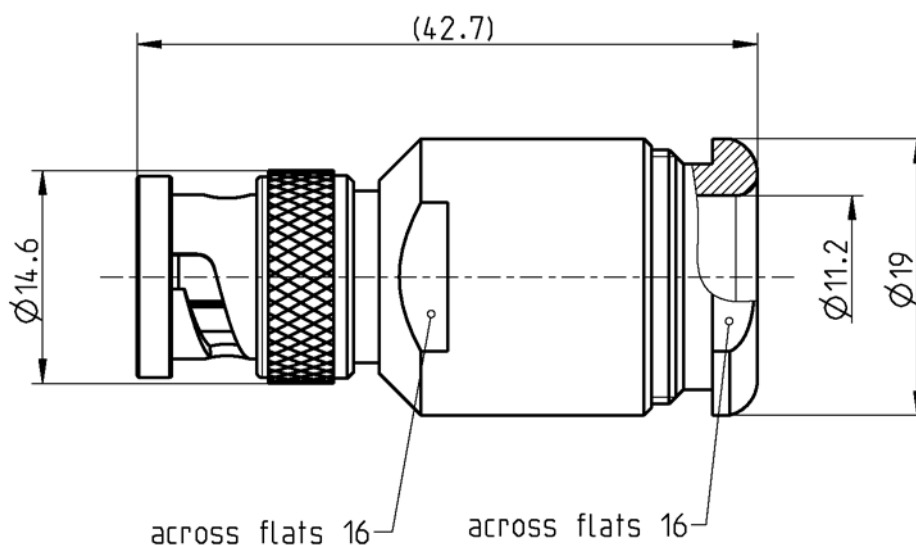
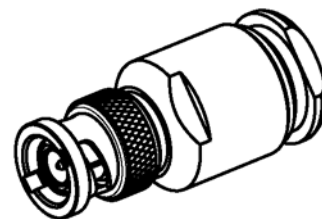


TECHNICAL DATA SHEET



BNC 50 Ω STRAIGHT PLUG

51S105-015N5



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

**Interface**

According to IEC 60169-8, MIL-PRF-39012, CECC 22120

**Documents**

Assembly instruction 51 D

**Material and plating**

Connector parts	Material	Plating
Center contact	Brass	AuroDur®, gold plated
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	
Gasket	NeopreneCR 50C6	

RF\_35/12.04/3.0

Rosenberger Hochfrequenztechnik GmbH & Co. KG  
 P.O.Box 1260 D-84526 Tittmoning Germany  
[www.rosenberger.de](http://www.rosenberger.de)

Tel.: +49 8684 18-0  
 Fax: +49 8684 18-499  
 email: [info@rosenberger.de](mailto:info@rosenberger.de)

Page  
 1 / 2

## TECHNICAL DATA SHEET

**Rosenberger®**

BNC 50 Ω STRAIGHT PLUG

51S105-015N5

**Electrical data**

Impedance	50 Ω
Frequency	DC to 10 GHz
Return loss	≥ 35 dB, DC to 1 GHz ≥ 30 dB, 1 to 2.5 GHz ≥ 27 dB, 2.5 to 4 GHz
Insertion loss	≤ 0.05 x $\sqrt{f}$ [GHz] dB, DC to 4 GHz
Insulation resistance	≥ 5 x10 <sup>3</sup> MΩ
Center contact resistance	≤ 1.5 mΩ
Outer contact resistance	≤ 1 mΩ
Test voltage	1500 V rms
Working voltage	400 V rms
Power handling (at 20 °C, sea level, VSWR 1.0)	≤ 80 W @ 2 GHz

*- Limitations are possible due to the used cable type -***Mechanical data**

Mating cycles	min. 500
---------------	----------

**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. G
Moisture resistance 2002/95/EC (RoHS)	MIL-STD-202, Meth. 106 compliant

**Tooling**

N/A

**Suitable cables**

RG 213 /U , RG 214 /U

**Packing**

Standard	1 pce in bag
Weight	40.2 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
Inge Mühlauer	20/07/04	J. Krautenbacher	18.06.08	e00	07-0154	S.Krautenb.	18/06/08
Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany <a href="http://www.rosenberger.de">www.rosenberger.de</a>					Tel.: +49 8684 18-0 Fax: +49 8684 18-499 email: <a href="mailto:info@rosenberger.de">info@rosenberger.de</a>		Page 2 / 2