



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 T

Material and plating

Connector parts

Center contact
Outer contact
Body
Dielectric
Gasket
Crimping ferrule

Material

Spring bronze
Brass
Brass
PTFE
NeopreneCR 50C6
Copper

Plating

AuroDur®, gold plated
Flash white bronze over silver(e.g. Optargen®)
Flash white bronze over silver(e.g. Optargen®)
Flash white bronze over silver(e.g. Optargen®)

BNC 50
Ω STRAIGHT PLUG

51S107-801N5

Electrical data

Impedance 50 Ω
 Frequency DC to 10 GHz
 Return loss ≥ 22 dB, DC to 1 GHz
 ≥ 17 dB, 1 to 2 GHz
 ≥ 14 dB, 2 to 4 GHz
 Insertion loss ≤ 0.07 x √ f [GHz] dB, DC to 2 GHz
 Insulation resistance ≥ 5 x10³ 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
 Center contact captivation: axial ≥ 15 N

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. G
 Moisture resistance MIL-STD-202, Meth. 106
 RoHS compliant

Tooling

Crimping tool 11W150-000
 Crimp insert 11W150-402

Suitable cables

RG 196 A/U, RG 178 B/U

Weight

Weight 10.3 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
Inge Mühlauer	20/07/04	Sa. Krautenbacher	18.03.14	e00	14-0352	T. Krojer	18.03.14
Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany www.rosenberger.de					Tel.: +49 8684 18-0 Fax: +49 8684 18-499 email: info@rosenberger.de		Page 2 / 2