



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 E

**Material and plating**

**Connector parts**

Connector parts	Material
Center contact	Brass
Outer contact	Brass
Body	Brass
Dielectric	PTFE
Gasket	NeopreneCR 50C6
Gasket	Silicone

**Plating**

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

**BNC 50**  
**Ω STRAIGHT PLUG**

**51S106-001N5**

**Electrical data**

Impedance 50 Ω  
 Frequency DC to 10 GHz  
 Return loss ≥ 20 dB, DC to 1 GHz  
 ≥ 15 dB, 1 to 2 GHz  
 ≥ 10 dB, 2 to 4 GHz  
 Insertion loss ≤ 0.15 x √ 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  
 Center contact captivation: axial ≥ 15 N

**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 MIL-STD-202, Meth. 106  
 RoHS compliant

**Tooling**

N/A

**Suitable cables**

RG 196 A/U, RG 178 B/U

**Weight**

Weight 18.2 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
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