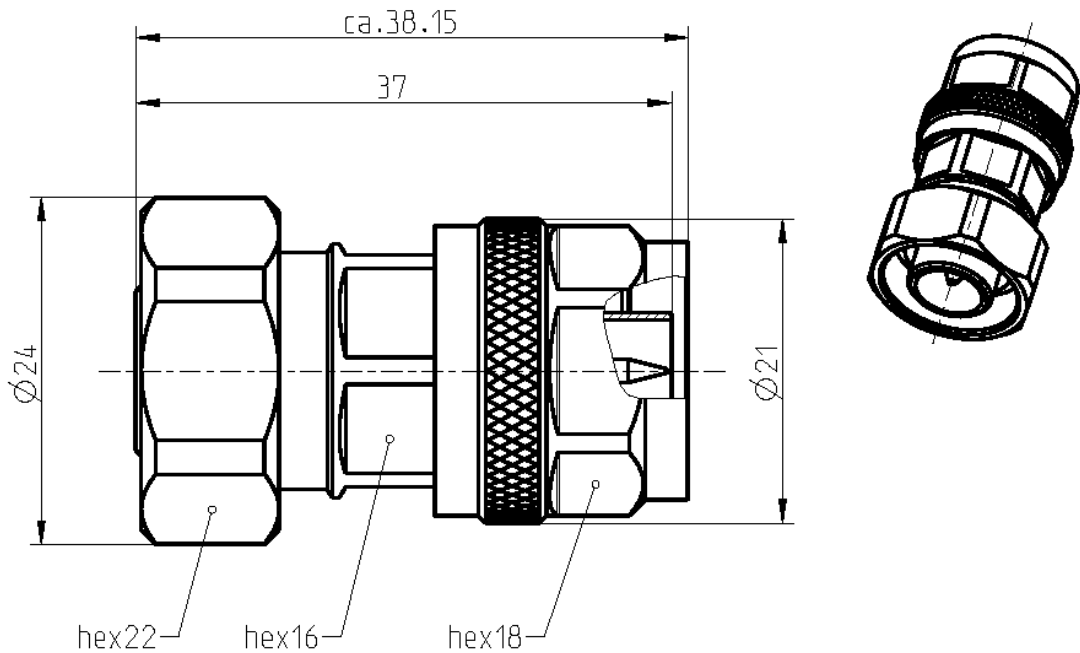


N 50 Ω  
4.1-9.5

ADAPTOR  
N Plug - 4.1/9.5 PLUG

**53S165-SIMN1**



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

**Interface**

According to	N side:	IEC 61169-16, MIL-PRF-39012, CECC 22210
	4.1/9.5 side:	IEC 60169-11, DIN 47231

**Material and plating**

**Connector parts**

Center contact  
Outer contact  
Dielectric  
Gasket

**Material**

Brass  
Brass  
PTFE  
Silicone

**Plating**

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

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N 50 Ω  
4.1-9.5 ADAPTOR  
N Plug - 4.1/9.5 PLUG

**53S165-SIMN1**

**Electrical data**

Impedance 50 Ω  
 Frequency DC to 11 GHz  
 Return loss ≥ 35 dB @ DC to 2.0 GHz  
 ≥ 30 dB @ 2.0 GHz to 6.0 GHz  
 Insertion loss ≤ 0.02 x √f [GHz] 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  
 RF-leakage ≥ 114 dB @ DC to 1 GHz  
 Intermodulation (3<sup>rd</sup> order) ≥ 168 dBc (2 x 43 dBm)

**Mechanical data**

Mating cycles ≥ 500  
 Coupling nut retention N ≥ 450 N  
 4.1/9.5 ≥ 500 N  
 Center contact captivation: axial ≥ 80 N  
 Coupling torque (recommended) N 0.7 Nm to 1.1 Nm  
 4.1/9.5 10 Nm  
 Proof torque N 1.7 Nm  
 4.1/9.5 15 Nm

**Environmental data**

Temperature range -55 °C to +155 °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 2.5 bar 1 h  
 RoHS compliant

**Weight**

Weight 53.7 g/pc

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
M. Wimmer	02.10.2013	J_Gramsamer	20.04.15	400	15-0397	J_Krautenb.	20.04.15
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							Page 2 / 2

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