



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

Female N connector for 1/2" corrugated cable

Interface

According to IEC 60169-16, MIL-PRF-39012, CECC 22210

Documents

Assembly instruction 60 I 38

Material and plating

Connector parts

Center contact
Outer contact
Body
Dielectric
Gasket

Material

Spring bronze
Brass
Brass
PTFE, TPX
Silicone

Plating

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

N 50 Ω STRAIGHT JACK
(1/2" S)

53K117-C08N1

Electrical data

Impedance	50 Ω
Frequency	DC to 11 GHz
Return loss	≥ 35 dB, DC to 1 GHz ≥ 33 dB, 1 to 2.7 GHz ≥ 26 dB, 2,7 to 4 GHz
Insertion loss	≤ 0.05 dB, DC to 4 GHz
Insulation resistance	≥ 5 x10 ³ MΩ
Center contact resistance	≤ 1 mΩ
Outer contact resistance	≤ 0.25 mΩ
Test voltage	2500 V rms
Working voltage	1400 V rms
Power handling (at 20 °C, sea level, VSWR 1.0)	1000 W @ 1 GHz 700 W @ 2 GHz
RF-leakage	≥ 128 dB up to 1 GHz
Intermodulation (3 rd order)	≤ -117 dBm @ 2 x 20 W

- Limitations are possible due to the used cable type -

Mechanical data

Mating cycles	min. 500
Center contact captivation: axial	≥ 28 N
radial	≥ 3 Ncm
Coupling test torque	max. 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, 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. I
Moisture resistance	MIL-STD-202, Meth. 106
Degree of protection (unmated condition) 2002/95/EC (RoHS)	IEC 60529, IP68 2.5 bar compliant

Tooling

N/A

Suitable cables

RosenbergerSLink™ 1/2" S (recommended)
Leoni Flexline 1/2" S

Packing

Standard	1 pce in bag
Weight	72 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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