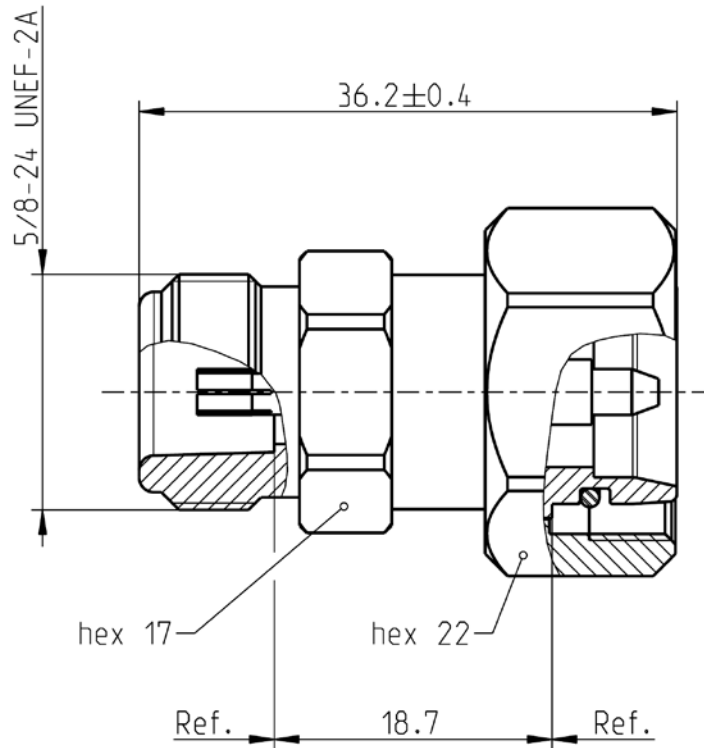


4.3-10

Adaptor
4.3-10 plug – N jack

53K164-S00N1



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

Interface

According to 4.3-10 side: IEC 61169-54
N side: IEC 61169-16, MIL-PRF-39012, CECC 22210

Documents

Assembly instruction N/A

Material and plating

Connector parts

Center contact 4.3-10 side:
Center contact N side:
Outer contact
Body
Dielectric
Gasket

Material

Brass
CuBe
Brass
Brass
PTFE
Silicone

Plating

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

Technical Data Sheet

4.3-10

Adaptor
4.3-10 plug – N jack

53K164-S00N1

Electrical data

Impedance	50 Ω
Frequency	DC to 12 GHz
Return loss	≥ 36 dB @ DC to 4 GHz ≥ 32 dB @ 4 GHz to 6 GHz
Insertion loss	≤ 0.05 x $\sqrt{f \text{ [GHz]}}$ dB
Insulation resistance	≥ 5 GΩ
Center contact resistance	≤ 1.0 mΩ, 4.3-10 side ≤ 1.0 mΩ, N side
Outer contact resistance	≤ 1.0 mΩ, 4.3-10 side ≤ 0.25 mΩ, N side
Test voltage	2500 V rms
Working voltage	500 V rms
RF-leakage	≥ 128 dB @ DC to 1 GHz
Power handling (at 20 °C, sea level, VSWR 1.0)	1000 W @ 1 GHz 700 W @ 2 GHz
Intermodulation (3 rd order)	≥ 155 dBc (2 x 43 dBm)

- RL values only valid for the interface -

Mechanical data

	4.3-10 side	N side
Mating cycles	≥ 100	min. 500
Center contact captivation: axial	≥ 30 N	≥ 28 N
radial	> 5 Ncm	≥ 3 Ncm
Center contact retention force	1.5 N – 20 N	
Recommended torque	5 Nm	0.7 to 1.1 Nm

Environmental data

Temperature range	-55 °C to +90 °C operating temperature
Thermal shock	IEC 60169-1, Sub-clause 16.4
Corrosion resistance	ISO 21207 method B
Vibration	IEC 61169-1 9.3.3 and IEC 60068-2-64
Shock	IEC 61169-1 9.3.14
Degree of protection (mated pair)	IEC 60529, IP68 1h / 25m
RoHS	compliant

Tooling

N/A

Suitable cables

N/A

Weight

Weight	57g/pce
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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
F. Fraunhofer	04.02.13	F. Fraunhofer	28.03.14	a00	14-s121	S. Krautenb.	26.03.14
Corporate Headquarters Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O. Box 1260 D-84526 Tittmoning Germany Tel. +49 8684 18-0				Rosenberger Site Solutions, LLC P.O. Box 4268, Lake Charles, LA 70606 Ph.337.598.5250 Fax: 337.598.5290 rlss@rlss.us www.rlss.us			Page 2 of 2