

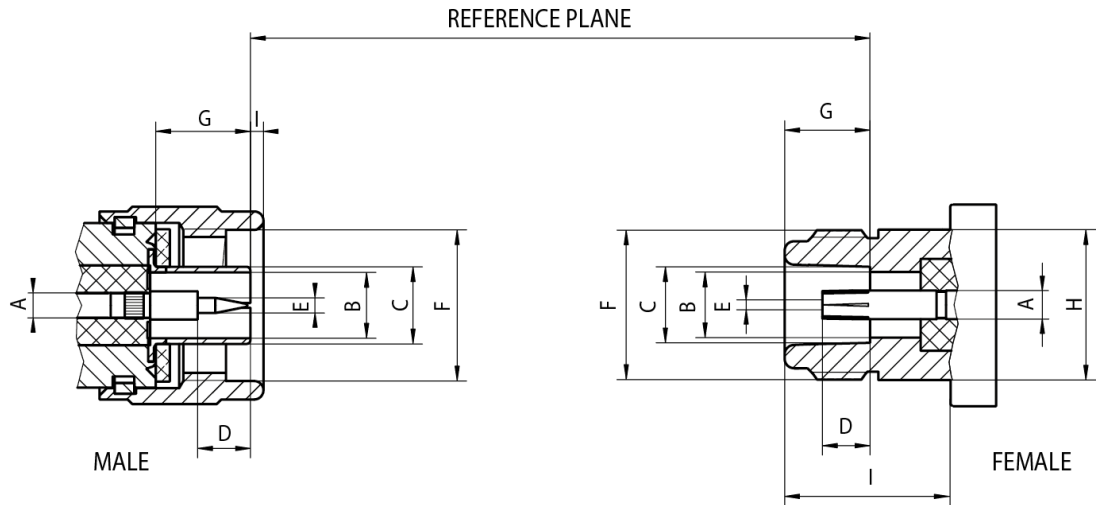
Technical Data

Rosenberger

53

N (50 Ω)

53-000-000_TD



	Male		Female	
	min.	max.	min.	max.
A	Ø 3.04 nom.		Ø 3.04 nom.	
B	Ø 7.00 nom.		Ø 7.00 nom.	
C	–	Ø 8.027	Ø 8.03	Ø 8.13
D	5.28	–	4.75	5.26
E	Ø 1.60	Ø 1.676	1)	
F	5/8-24 UNEF-2B		5/8-24 UNEF-2A	
G	9.25	–	9.15	9.19
H	–	–	–	Ø 15.93
I	0.41	1.52	10.72	–

Dimensions in mm

1) Resilient, dimension to meet electrical and mechanical requirements

Interface

According to

IEC 61169-16, MIL-PRF-39012, CECC 22210

Dieses Dokument ist urheberrechtlich geschützt • This document is protected by copyright • Rosenberger Hochfrequenztechnik GmbH & Co. KG

RFB00035

Draft	Date	Approved	Date	Rev.	Engineering Change Number	Name	Date
Chr. Janßen	06.03.2019	Chr. Janßen	06.03.2019	a00	19-s083	J_Krautenbac	12.03.2019
Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O. Box 1260 D-84526 Tittmoning Germany www.rosenberger.com					Tel. : +49 8684 18-0 Email : info@rosenberger.com		Page 1 / 2

Technical Data

Rosenberger

53

N (50 Ω)

53-000-000_TD

Electrical data

Impedance	50 Ω
Frequency range	DC to 11 GHz
Return loss (cable connector straight)	≥ 26 dB (typ.)
Insertion loss	≤ 0.1 x √f [GHz] dB
Insulation resistance	≥ 5 GΩ
Center contact resistance	≤ 1 mΩ
Outer contact resistance	≤ 0.25 mΩ
Working voltage	500 V rms
Power handling	1000 W @ 1 GHz 700 W @ 2 GHz
RF leakage – Interface	≥ 128 dB @ DC to 1 GHz
Intermodulation 3rd order	≤ -155 dBc (2 x 43 dBm)

Mechanical data

Mating cycles	≥ 500
Coupling nut retention	≥ 450 N
Center contact captivation	axial: ≥ 28 N radial: ≥ 3 Ncm
Coupling test torque	≤ 1.7 Nm
Coupling torque recommended	0.7 Nm to 1.1 Nm

Environmental data

Temperature range	-65 °C to +165 °C
Thermal shock	MIL-STD-202, Method 107, Condition B
Degree of protection (mated pair)	IEC 60529, IP 68
Corrosion resistance	MIL-STD-202, Method 101, Condition B
Moisture resistance	MIL-STD-202, Method 106
Vibration	MIL-STD-202, Method 204, Condition B
Shock	MIL-STD-202, Method 213, Condition I
Max. soldering temperature (PCB connectors)	IEC 61760-1, +260 °C for 10 sec.

Materials

Connector parts

Spring loaded contact parts
Center contact
Outer contact
Crimping ferrule
Dielectric
Gasket

Material

CuBe
CuZn
CuZn
Cu
PTFE
Rubber

Plating

Au
Au / Ag
Ag / white bronze
white bronze

While the information (including technical data) has been carefully compiled to the best of our knowledge at the time of publication, the information is provided "AS IS" without warranties of any kind either express or implied. Apart from this, no statement herein shall be construed as recommendation to infringe existing patents. Individual values may deviate depending upon circumstances including but not limited to application, design, type of cable, assembly and workmanship. Furthermore, we reserve the right to change the design and technical specification of our products when deemed necessary.

Draft	Date	Approved	Date	Rev.	Engineering Change Number	Name	Date
Chr. Janßen	06.03.2019	Chr. Janßen	06.03.2019	a00	19-s083	J_Krautenbac	12.03.2019
Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O. Box 1260 D-84526 Tittmoning Germany www.rosenberger.com					Tel. : +49 8684 18-0 Email : info@rosenberger.com		Page 2 / 2