



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

Interface

According to	NEX10 side:	NEX10™
	N side:	IEC 61169-16, MIL-PRF-39012, CECC 22210

Material and Plating

Connector parts

		Material	Plating
Center contact	NEX10 side:	CuBe	Silver, 3-6 µm
Center contact	N side:	Spring bronze	Silver, 3-6 µm
Outer contact	N side:	Brass	White bronze(e.g. Optalloy®)
Outer contact	NEX10 side:	Brass	White bronze(e.g. Optalloy®)
Body		Brass	White bronze(e.g. Optalloy®)
Dielectric		PTFE	
Gasket		Silicone	

Electrical Data

Impedance	50 Ω
Frequency	DC to 11 GHz
Return loss	≥ 30 dB @ DC to 6 GHz
Insertion loss	≤ 0.05 x √ f [GHz] dB
Insulation resistance	≥ 5 GΩ
Center contact resistance	≤ 1.5 mΩ, NEX10 side ≤ 1.0 mΩ, N side
Outer contact resistance	≤ 1.5 mΩ, NEX10 side ≤ 0.25 mΩ, N side
Working voltage	500 V rms
RF-leakage	≥ 110 dB @ DC to 6 GHz
Power handling	100 W @ 2.0 GHz and 85°C ambient temperature
Intermodulation (3 rd order)	≥ 155 dBc (2 x 43 dBm) @ 0.4 – 6.0 GHz

Mechanical Data

	NEX10 side	N side
Mating cycles	≥ 100	≥ 100
Recommended torque	1.5 Nm	0.7 Nm to 1.1 Nm

Environmental Data

Temperature range	-55 °C to +125 °C operating temperature
Thermal shock	IEC 61169-1 9.4.4
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 24h / 1m
RoHS	compliant

Tooling

N/A

Suitable Cables

N/A

Weight

26.25 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
F. Fraunhofer	21.04.2017	J. Krautenbacher	02.10.2018	b00	18-1829	B. Wollitzer	02.10.2018
Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany www.rosenberger.de						Tel. : +49 8684 18-0 Email : info@rosenberger.de	
						Page 2 / 2	

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Rosenberger:](#)

[53K189-K00N1](#)