

4.3-10 GENERAL DATASHEET

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Applicable Standards

Interface according to IEC 61169-54

Electrical characteristics

Characteristic impedance	50	Ω
Frequency range	DC to 12	GHz
Return loss (typical)	≥ 36 dB @ DC to 4 GHz	
	≥ 32 dB @ 4 GHz to 6 GHz	
Insertion loss	$\leq 0.05 \times \sqrt{f}$ (GHz) dB	
Insulation resistance	≥ 5	G Ω
Center contact resistance	≤ 1	m Ω
Outer contact resistance	≤ 1	m Ω
Test voltage	2500	V rms
Working voltage	500	V max.
Power handling	500 W @ 2 GHz / 90°C	
RF-Leakage	≥ 120 dB @ DC to 6 GHz (screw type)	
Intermodulation 3rd order	≥ -160 dBc (2x46dBm) @ 0,4 to 4 GHz	
	≥ -166 dBc (2x43dBm) @ 0,4 to 4 GHz	

Mechanical characteristics

Durability (matings)	≥ 100
Coupling nut retention	≥ 450 N
Centre contact captivation	axial: ≥ 450 N
	radial: ≥ 5 Ncm
Coupling torque	≥ 5 Nm
Pitch	$\geq 25,4$ mm

Materials

Spring loaded contacts	CuBe / Bronze
Outer contact	CuBe / Bronze / CuZn
Center contact	CuBe / CuZn
Body	CuZn
Coupling nut	CuZn
Dielectric	PTFE
Gasket	Rubber

Standard plating

Spring loaded contacts	Silver
Outer contact	White bronze
Centre contact	Silver
Body	White bronze
Coupling nut	White bronze

Environmental influences

Temperature range	-55°C up to +90°C
Thermal shock	IEC 61169-1, Sub-clause 9.4.4
Damp heat	IEC 61169-1, Sub-clause 9.4.3
Climatic category	IEC 60068-2-1 55/155/56
Degree of protection	IEC 60529: IP 68
Corrosion resistance	ISO 21207 Method B
Vibration	IEC 61169-1, Sub-clause 9.3.3
Shock	IEC 60068-2-27
max. soldering temperature (PCB connectors)	IEC 61760-1, +260°C for 10 sec.

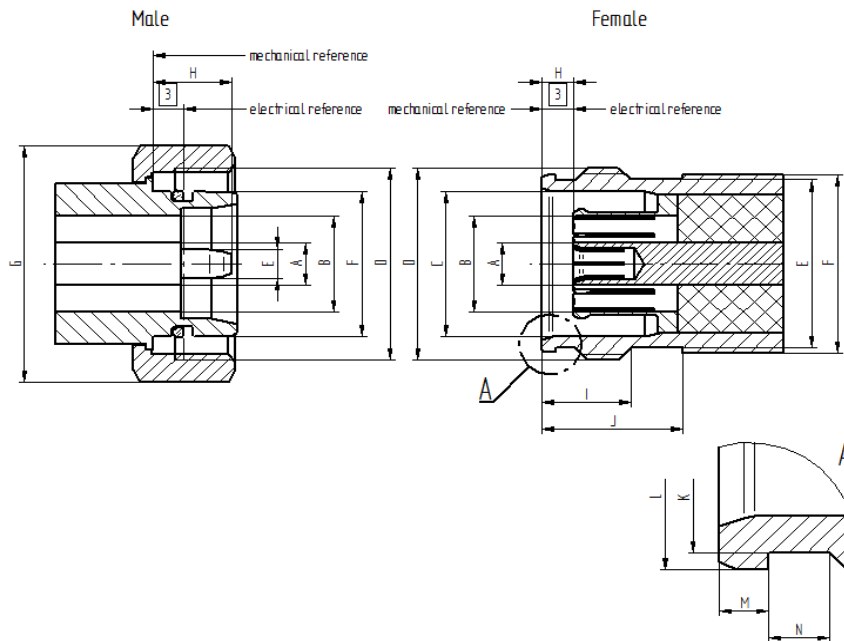
Date: 24.08.2016 Fasold

Revision: a

Approved: 31.08.2016 RBg

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Interface dimensions



	Male		Female	
	min.	max.	min.	max.
A	4,35 nom.		4,35 nom.	
B	10,00 nom.		9,8	10,2
C	-	-	15,13	15,19
D	M 20 x 1		M 20 x 1	
E	3,07	3,13	17,45	17,55
F	15,07	15,11	18,6	-
G	SW 22		-	-
H	-	8	3,1	3,5
I	-	-	8,7	9
J	-	-	13,9	14,1
K	-	-	17,4	17,5
L	-	-	18,44	18,5
M	-	-	1,44	1,5
N	-	-	1,7	1,9

Dimension in mm

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.

Update History

Rev.	Date	Alteration	Signature	Formblatt-Nr.: Form-TK - 265
				Rev. 01
a	24.08.2016	revised	Fasold	Released 10. Jul 14

Date: 24.08.2016 Fasold

Revision: a

Approved: 31.08.2016 RBg