

## MCX GENERAL DATASHEET

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### Applicable Standards

Interface according to

Standards: IEC 61169-36, CECC 22220

### Electrical characteristics

Characteristic impedance		50	$\Omega$	
Frequency range		DC to 6	GHz	
Return loss (typical)	DC - 1 GHz	$\geq 30$	dB	straight, semi-rigid cable
	1 - 4 GHz	$\geq 23$	dB	straight, semi-rigid cable
	4 - 6 GHz	$\geq 20$	dB	straight, semi-rigid cable
RF-Leakage	DC - 1 GHz	$\geq -70$	dB	Interface
Insertion loss		$\leq -x \sqrt{f}[\text{GHz}]$	dB	
Insulation resistance		$\geq 1$	G $\Omega$	
Center contact resistance		$\leq 5,0$	m $\Omega$	
Outer contact resistance		$\leq 2,5$	m $\Omega$	
Working current		$\leq 1,5$	A DC	
Test voltage		500	V rms	
Working voltage		170	V max.	
Intermodulation 3rd order	( 2x43dBm )	-	dBc	
Power handling	@1.0G		W	Data on request
	@4.0GHz		W	Data on request

### Mechanical characteristics

Durability (matings)		$\geq 500$		
Engagement force		max. 25	N	
Disengagement force		min. 8 - max. 20	N	
Retention force		$\geq 10$	N	

### Materials

Outer contact	CuBe / CuZn
Center contact	CuBe / CuZn
Crimp ferrule	Cu / CuZn
Other metal parts	CuZn / bronze
Dielectric	PTFE

### Standard plating

Outer contact	Au / white bronze
Centre contact	Au / white bronze
Crimp ferrule	Au / white bronze
Other metal parts	Au / white bronze
Gasket	Rubber

### Environmental influences

Temperature range	-55°C up to +125°C
Test categories	DIN 40045 / IEC 55/125/56
Relative humidity	MIL-STD-202, Method 106
Thermal shock	MIL-STD-202, Method 107, Cond. B
Shock	MIL-STD-202, Method 213, Cond. J
Vibration	MIL-STD-202, Method 204, Cond. B

RoHS

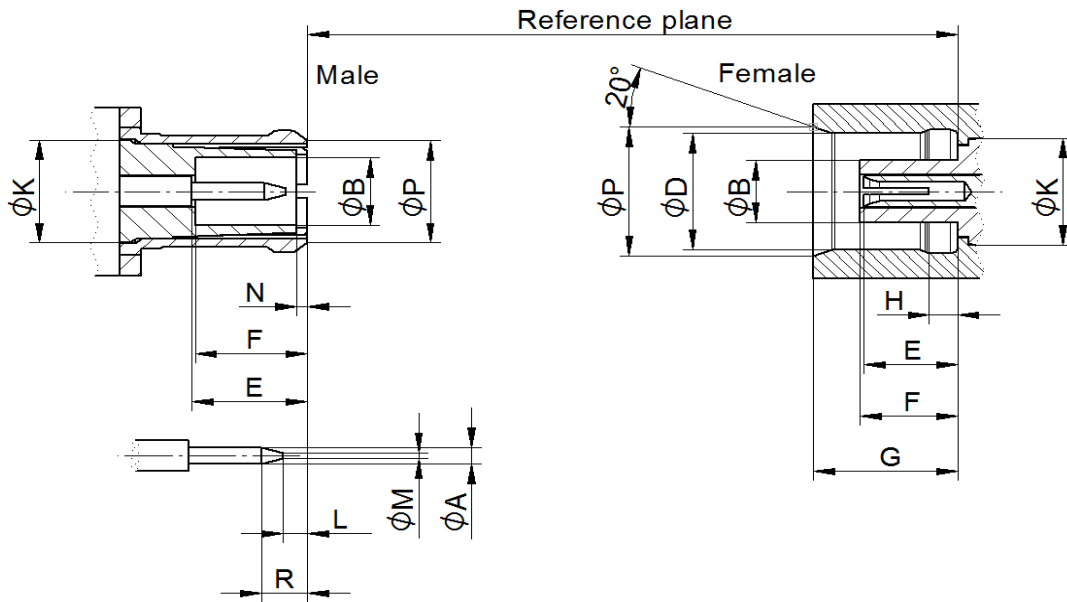
compliant

Date: 04.12.2019 U. Mayer

Revision:

Approved: 17.12.2019 P. Schuh

**MCX GENERAL DATASHEET**



	Male		Female	
	min.	max.	min.	max.
A	0,48	0,53		
B	2			1,98
D			3,42	3,48
E	2,8	3,2	2,3	2,8
F	2,8		2,6	2,8
G	4,15		4	4,12
H			0,75	0,85
K	3,05 nom.		3,05 nom.	
L	0,15			
M		0,25		
N		0,3		
P		3,6	3,8	
R		1,2		

Dimension in mm

Some connectors may have a specification that differs from the above mentioned data.

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.

Date	Alteration	Signature		

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