

## MCA GENERAL DATA SHEET

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### Applicable Standards

Interface according to

### Electrical characteristics

Characteristic impedance	50	Ω
Frequency range	DC to 20	GHz
Return loss ( typical)	≥ 25 dB @ DC to 3 GHz	
	≥ 20 dB @ 3 GHz to 6 GHz	
	≥ 18 dB @ 6 GHz to 9 GHz	
	≥ 12 dB @ 9 GHz to 15 GHz	
Insertion loss	≤ 0.1 x √ f (GHz) dB	
Cross Talk (typical)	≥ 60 dB @ DC to 3 GHz	
	≥ 55 dB @ 3 GHz to 6 GHz	
	≥ 50 dB @ 6 GHz to 9 GHz	
	≥ 40 dB @ 9 GHz to 15 GHz	
Shielding Effectiveness (typical)	≥ 60 dB @ DC to 3 GHz	
	≥ 55 dB @ 3 GHz to 6 GHz	
	≥ 50 dB @ 6 GHz to 9 GHz	
	≥ 40 dB @ 9 GHz to 15 GHz	
Insulation resistance	~ 1	GΩ
Center contact resistance	≤ 15	mΩ
Outer contact resistance	≤ 7,5	mΩ
Test voltage	500	V rms
Working voltage	60	V max.

### Mechanical characteristics

Mating cycles	≥ 25	
Mating force	max. 75	N
Unmating force	max. 60	N
Retention force locked system	min 120	N

### Materials

Plastic Housing	PPA / PA-GF
Outer contact	Brass
Center contact	Brass / Bronze
Insulator	SPS
Other metal parts	GD-Zn / Stainless steel

### Standard plating

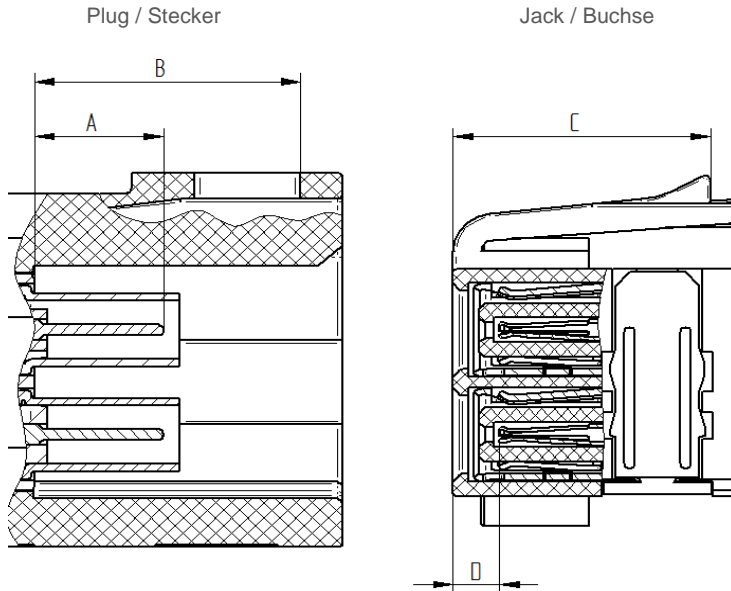
Outer contact	Sn
Center contact	Ag
Other parts	Sn

### Environmental influences

Temperature range	-40°C up to +105°C
Mechanical shock	IEC 60068-2-27
Vibration	IEC 60068-02-64 Severity 1
Thermal change	IEC 60068-2-14
Damp heat, cyclic	IEC 60068-2-30
Dry heat	IEC 60068-2-2 (+105°C)
RoHS	compliant
Solder profile	according to JEDEC 020 (260°C)

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### Interface dimensions



	Plug / Stecker		Jack / Buchse	
	(mm)		(mm)	
	min.	max.	min.	max.
A	4,35	4,85		
B	9,45	9,55		
C			9,1	9,3
D			1,5	1,8

### Coding Types

Coding Type	Plug	Color	Similar to RAL
A		jet black	9005
B		pure white	9010
C		light blue	5012
D		claret violet	4004
E		may green	6017
F		nut brown	8011
Z		waterblue	5021

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### Notes

\* Connector performance strongly depends on PCB type and layout.  
 All details are typical values and may vary in individual cases. Please refer to detail specification.

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