

## Family specification - SSMB Nano

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The **SSMB-Nano** connectors are a minimized version of the standard SMB connector and incorporate a 'snap-on' latching action or a 'slide-on' coupling for ease of connection. Due to extremely precise manufacturing tolerances this range of connectors is suitable for use at high operational frequencies.



This connector range is suitable for the standard ranges of flexible and semi rigid cables and is also available in PCB and panel mount versions.

The characteristic impedance of the SSMB-Nano coaxial connectors is 50 ohm.

SSMB-Nano coaxial connectors meet the specification of IEC 169-19.

<b>Electrical characteristics:</b>	
Impedance	50 Ohm
Operating frequency	DC-12,4 GHz
VSWR-Value	
Straight connector semi-rigid cable	1,05 + 0,005 f (GHz)
Angle connector semi-rigid cable	1,10 + 0,020 f (GHz)
Straight connector flexible cable	1,10 + 0,010 f (GHz)
Angle connector flexible cable	1,10 + 0,025 f (GHz)
Withstand voltage (depending on cable type)	≥ 500 V / 50 Hz
Operating voltage (depending on cable type)	≤ 250 V / 50 Hz
RF-leakage	
Straight and angle connector	≥ 100 dB-f GHz
Semi-rigid cable	≥ 100 dB-f GHz
Straight and angle connector	≥ 60 dB-f GHz
Flexible cable	≥ 60 dB-f GHz
Insulation resistance	≥ 1 GOhm
Contact resistance	
Center contact	≤ 5 mOhm
Outer contact	≤ 2,5 mOhm
Current carrying capacity	1 A DC
Admissible power (depends on: frequency, application, design, VSWR, environmental characteristics)	Data on Request

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<b>Mechanical characteristics:</b>	
Engagement force	max. 27 N
Seperation force	min. 4,5 N

Mating cycles	> 500
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<b>Environmental specification:</b>	
Operating temperature range	-55° C (-67° F) up to +125° C (257° F)
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
Corrosion	MIL-STD-202 Method 101 Cond.B

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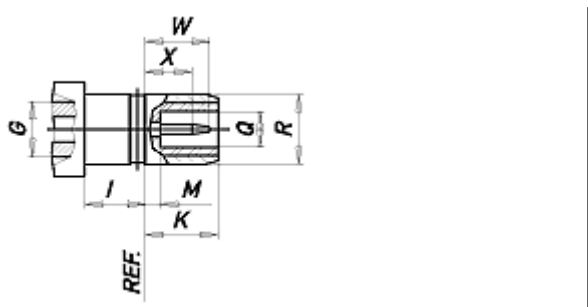
<b>Materials:</b>	
Housing	Brass Copper beryllium Diecast
Center contact	Brass
Spring loaded contacts	Copper beryllium Bronze
Spring washer	Copper beryllium
Crimp ferrule	Copper Brass
Lock washer	Bronze
Insulator	PTFE
Gasket	Silicone rubber
All products are RoHS conform.	

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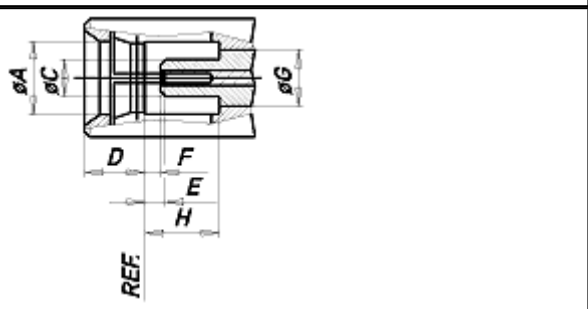
<b>Plating:</b>	
Housing	Au, White bronze
Center contact	Au
Spring loaded contacts	Au, White bronze
Spring washer	Au, White bronze
Crimp ferrule	Au, White bronze
lock washer	Au, White bronze
Other platings on request.	

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<b>Interface dimensions:</b>	
Plug	



Jack



	Plug		Jack	
	mm		mm	
	min.	max	min.	max
A	0	0	2,74	0
C	0	0	0	1,35
D	0	0	0	2,26
E	0	0	0,53	0,89
F	0	0	0,53	0
G	2,11 nom.		2,11 nom.	
H	0	0	2,74	0
J	0	0	2,46	0
K	0	2,77	0	0
L	2,30	0	0	0
M	0	0,56	0	0
Q	1,37	0	0	0
R	0	2,69	0	0
W	0	2,44	0	0
X	1,78	0	0	0
Z	0,356	0,381	0	0

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