

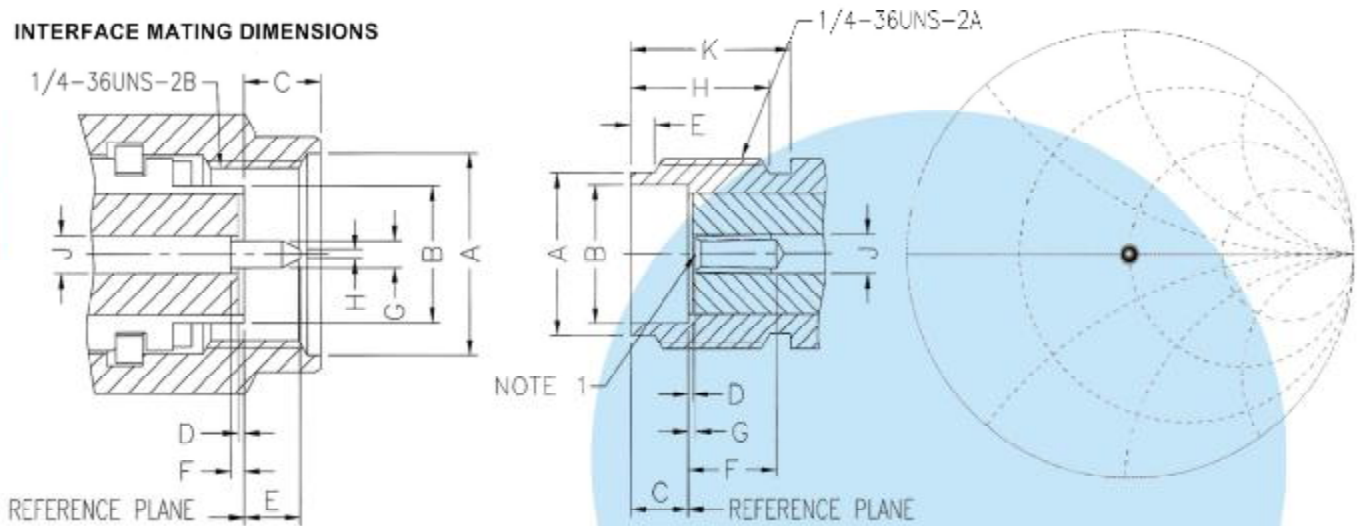
# SMA Series

Songtech

SMA connectors are subminiature units designed to provide high electrical performance for microwave applications up to 18 GHz.

Constructed with Brass or high quality stainless steel, SMA connectors ensure excellent durability and mechanical strength.

## INTERFACE MATING DIMENSIONS



**NOTE 1:** I.D. TO MEET VSWR AND CONTACT RESISTANCE WHEN MATED WITH 0.9/0.94 MM DIA. PIN.



PLUG		
Letter	Millimeters	
	Minimum	Maximum
A	6.35	6.73
B	4.53	4.59
C	2.54	3.43
D	0.00	0.25
E	1.91	2.54
F	0.00	0.25
G	0.90	0.94
H	0.00	0.38
J	1.24	1.23

JACK		
Letter	Millimeters	
	Minimum	Maximum
A	5.28	5.49
B	4.60	4.67
C	1.88	1.98
D	0.00	0.25
E	0.38	1.14
F	2.92	-
G	0.00	0.25
H	4.32	-
J	1.24	1.30
K	5.54	-

## Specifications

SMA

Electrical		
Impedance	50 ohm	
Frequency Range	0 - 12.4 GHz on Flexible cable 0 - 18 GHz on Semi-rigid cable	
Working Voltage	RG-178:170 VRMS max. RG-316,.085" :250 VRMS max. RG-142,.141" :335 VRMS max.	
Dielectric Withstanding Voltage	RG-178:500 VRMS min. RG-316 .085" :750 VRMS min. RG-142,.141" :1000 VRMS min.	
VSWR	Straight	1.3 max
	Right Angle	1.5 max
Contact Resistance	Center Contact	6 Milliohms Max.
	Outer Contact	2 Milliohms Max.
Insulator Resistance	5000 Megohms min.	

Material		
Parts Name	Material	Finish
Body, Metal Parts	Brass per QQ-B-626 or Non-magnetic stainless steel per QQ-S-764#303	Nickel, Gold or passivated per requirement.
Center Contacts	Plug: Brass per QQ-B-626	Gold
	Jack: Beryllium copper per QQ-C-530 or Phosphor Bronze per QQ-B-750	Gold
Insulators	Teflon	None
Crimp Ferrules	Annealed copper	Nickel or Gold per requirement
Clamp Gaskets	Silicone rubber	None

NOTE: Other Material/Finish is Available on Request.

Mechanical & Environmental	
Engagement Force	2 in-lbs. max.
Disengagement Force	2 in-lbs. max.
Coupling Nut Retention	60 lbs. min.
Coupling Proof Torque	15 in-lbs. min.
Contact Retention	6 lbs. min.
Durability(Mating)	500 cycles min.(For Beryllium copper Jack contact only)
Temperature Range	-65° C to 165° C
Vibration	MIL-STD-202 Method 204 Test Cond.B.
Salt Spray	MIL-STD-202 Method 101 Test Cond.B.
Thermal Shock	MIL-STD-202 Method 107 Test Cond.B.