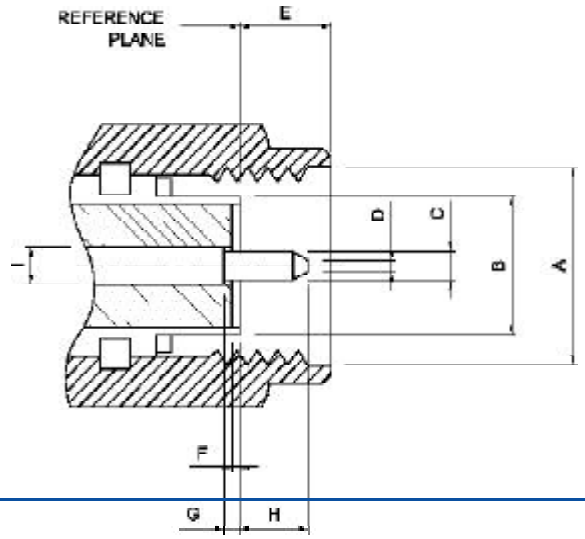
Lighthorse Technologies, Inc.

SMA Specifications

Interface Mating Dimensions

PLUG



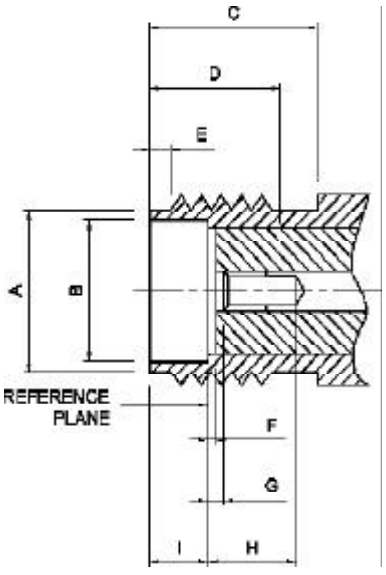
Letter	Minimum	Maximum
A	6.35	6.73
B	4.53	4.59
C	0.90	0.94
D	0.00	0.38
E	2.54	3.43
F	0.00	0.25
G	0.00	0.25
H	1.91	2.54
I	1.24	1.30

DIMENSIONS ARE IN MILLIMETERS

JACK

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

DIMENSIONS ARE IN MILLIMETERS



SMA Specifications

ELECTRICAL RATINGS

Impedance	50 ohm	
Frequency Range	DC to 4 GHz	
	RG-174,188,316	*RG-178,196*
Dielectric Withstanding Voltage (at sea level, in V rms, 50 Hz)	1000	750
Working Voltage (at sea level, in V rms, 50 Hz)	335 max	250 max
Insulation Resistance	1000 MΩ min	
RF Leakage	-55 dB max @ 2.5 GHz	
Insertion Loss	*Straight*	*Right Angle*
	.3 dB max @ 1.5 GHz	.6 dB max @ 1.5 GHz
Contact Resistance	*Center Contact*	*Outer Contact*
	5 mΩ max	1 mΩ max

MECHANICAL RATINGS

Mating	Snap-on coupling	
Durability	500 matings max	
Coupling Nut Retention Force	36 lbs min	
Contact Captivation	4 lbs min	
Cable Retention	*RG-174, 188, 316*	*RG-178, 196*
	20 lbs min	6 lbs min

ENVIRONMENTAL RATINGS

Temperature Range	-65°C to + 165°C
Thermal Shock	MIL-STD-202, Method 1017, Condition A
Vibration	MIL-STD-202, Method 204, Condition D
Corrosion	MIL-STD-202, Method 101, Condition B
Temperature Cycling	MIL-STD-1344, Method 1003, Condition A

MATERIALS

		Material	*Plating*
Connector Body		Brass per QQ-B-626	Gold/Nickel
Center Contact	*Male*	Brass per QQ-B-626	Gold
	Female	Beryllium Copper per QQ-C-530	Gold
Insulator		Teflon	None
Gasket		Silicone Rubber	None
Crimp Ferrule		Annealed Copper per WW-T-799	Same as body

VSWR

Cable Type	**Frequency Range**			
	1 GHz	**3 GHz**	**4 GHz**	
RG-55, 142, 223, 400	1.15	1.35	1.35	Typical VSWR for SMC straight connectors
RG-58	1.15	1.35	1.35	
RG-174, 188, 316	1.15	1.35	1.35	
RG-178, 196	1.15	1.35	1.35	
Semi-rigid .086”	1.15	1.35	1.35	
RG-55,142,223.400	1.15	1.3	1.3	Typical VSWR for SMC right angle connectors
RG-58	1.15	1.3	1.3	
RG-174, 188, 316	1.15	1.3	1.3	
RG-178, 196	1.15	1.3	1.3	
Semi-rigid .086”	1.15	1.3	1.3	
Semi-rigid .141”	1.15	1.3	1.3	