

RF Connectors SMA Series



SMA connectors with 50Ω impedance are high precision subminiature devices designed for microwave applications up to 18 GHz. These connectors are produced with brass or high quality stainless steel, which offer excellent durability and mechanical strength.

PLUG

Dimension	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	1.30

JACK

Dimension	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	--

NOTE
In order to meet the VSWR and CR values as specified, the inner hole diameter needs to be mated with a 0.9/0.94mm dia. pin.

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

Material		
Parts Name	Material	Finish
Body, Metal Parts	Brass per QQ-B-626	Gold 0.07μm (3 μ")
Center Contacts	Male: Brass per QQ-B-626 Female: Beryllium copper per QQ-C-530	Gold 0.75μm (30 μ") Gold 0.75μm (30 μ")
Insulators	Teflon	None
Crimp Ferrules	Annealed Brass	Gold 0.07μm (3 μ")
Crimp Gaskets	Silicone rubber	None

NOTE: Other materials and platings are available on request.

Mechanical & Environmental	
Engagement Force	22 cNm max.
Disengagement Force	22 cNm max.
Coupling Nut Retention	267 N min.
Coupling Proof Torque	170 cNm min.
Contact Retention	27 N min.
Durability(Mating)	500 cycles min. (for Beryllium copper female contact only)
Temperature Range	-65°C to +155°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.

How to order

RF X - SA X - XX X 5 xx - 58

Gender	Orientation	Mounting Type / Adaptor Type	Detail	Cable Group / Receptacle Type
P = Plug J = Jack	R = Right Angle S = Straight	B1 = THT Board Mount B3 = END Launch Board Mount C1 = Crimp Cable P1 = Panel Board Mount other types on request	N = Not defined L = End Launch A = Bulkhead, Front Mount others on request	Code allocated by E-tec

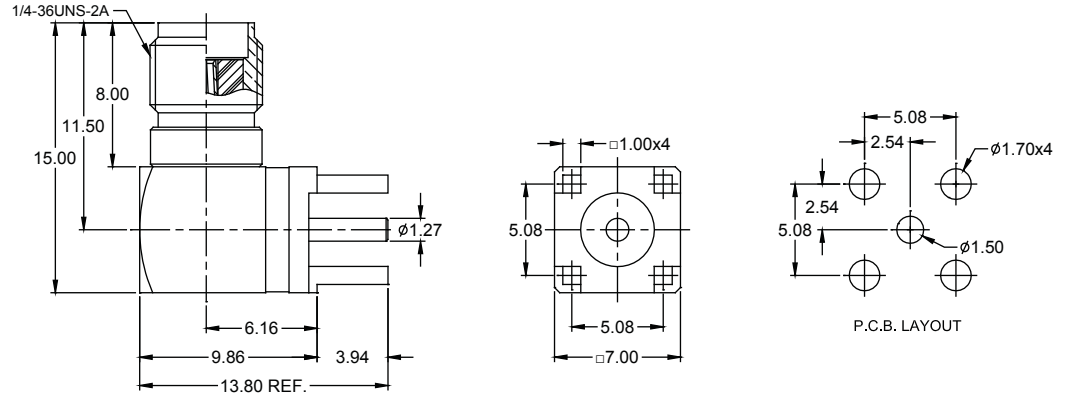
RF Connectors SMA Series



R/A THT JACK



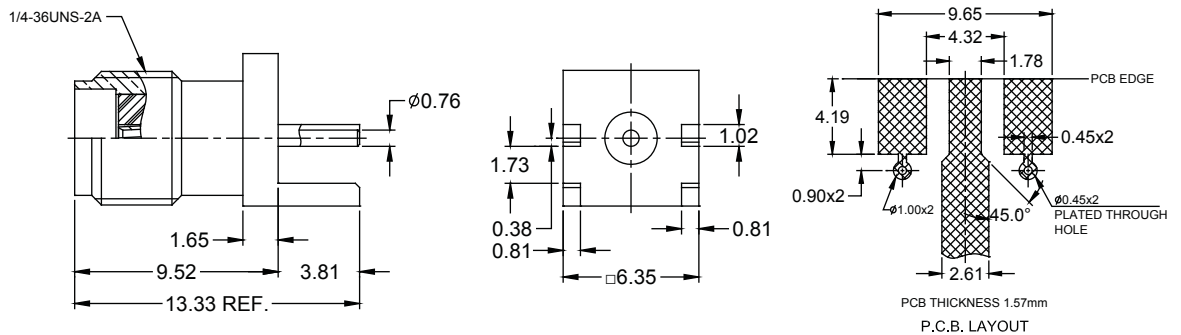
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STRAIGHT END LAUNCH JACK



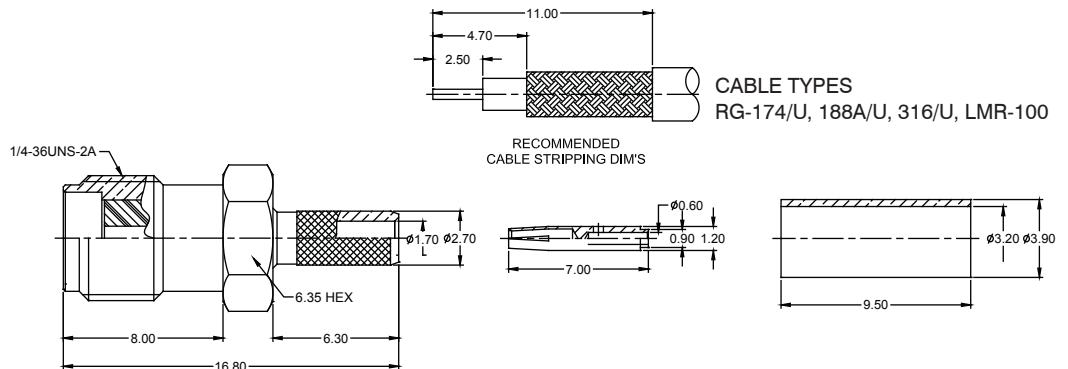
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CRIMP JACK



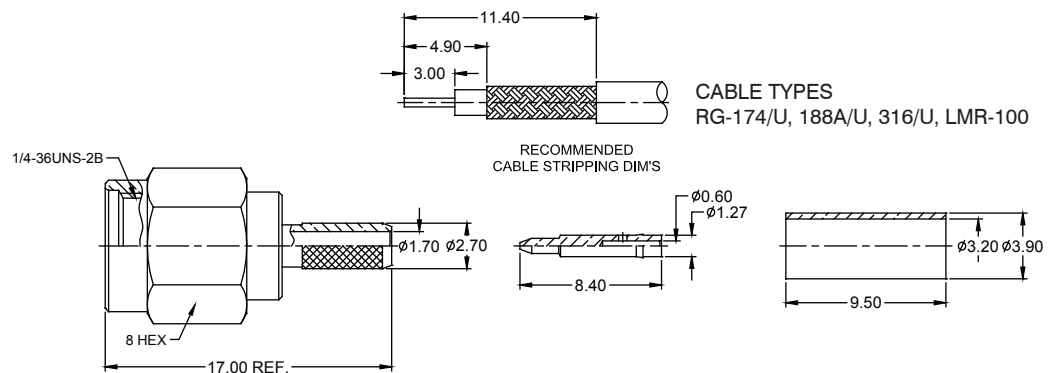
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CRIMP PLUG



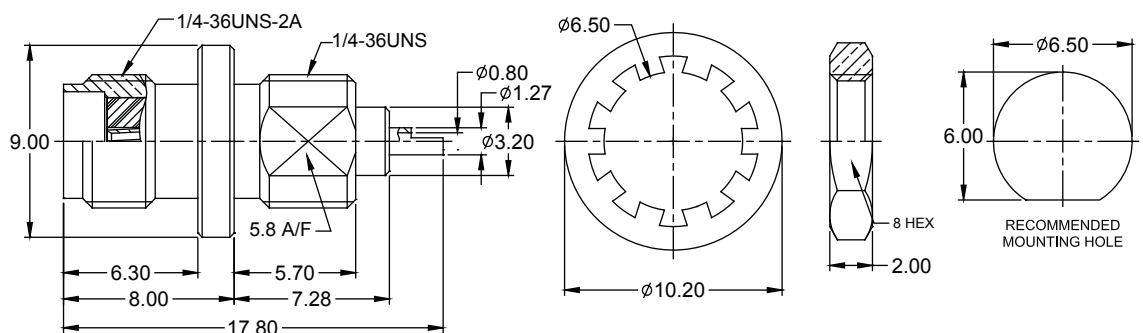
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PANEL JACK



Order Code
RFJ-SAS-P1A591-58



Other SMA types available on request