

# 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.

Dimension	PLUG	
	Millimeters	
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

Dimension	JACK	
	Millimeters	
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.

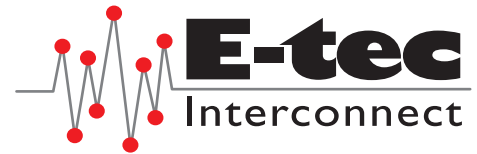
Mechanical & Environmental	
Engagement Force	22 cNm max.
Disengagement Force	22 cNm max.
Coupling Nut Retention	267 N min.
Coupling Proof Torque	170 cNm min.
Contact Retention	27 N min.
Durability (Mating)	500 cycles min. (for Beryllium copper female contact only)
Temperature Range	-65°C to +155°C
Vibration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

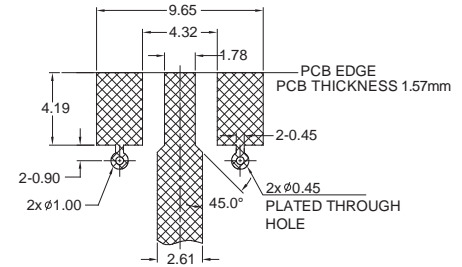
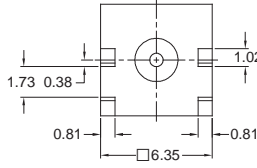
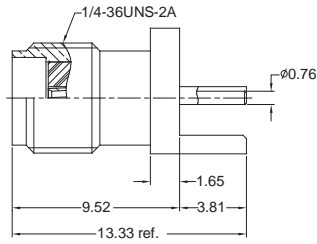
RF X - SA X - XX X 5 xx - 58

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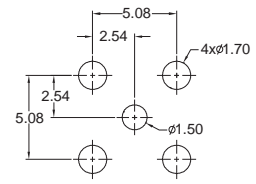
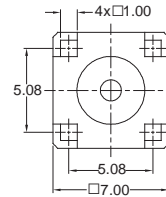
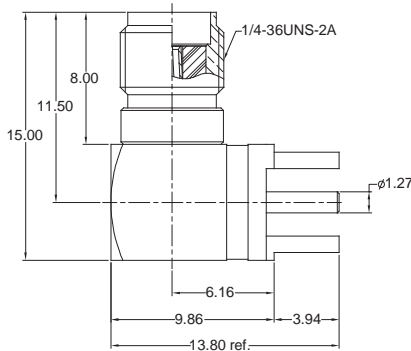
## SMT EDGE MOUNT JACK



PCB surface Mount Layout

Order Code  
RFJ-SAS-B3L592-58

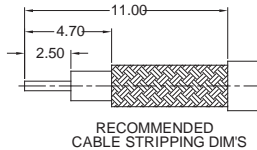
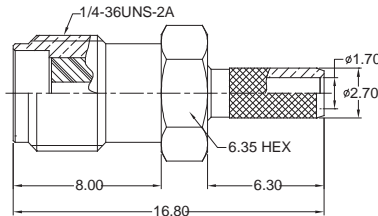
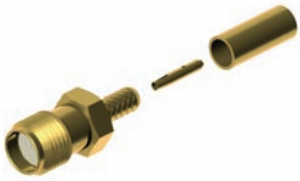
## R/A THT JACK



PCB Hole Layout

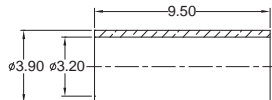
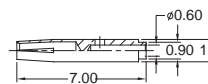
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## CRIMP JACK



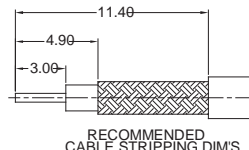
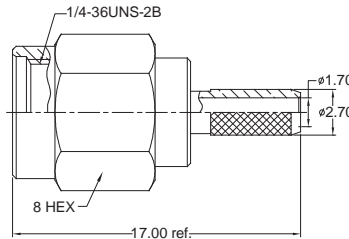
CABLE TYPES  
RG-174/U, 188A/U, 316/U, LMR-100

RECOMMENDED  
CABLE STRIPPING DIM'S



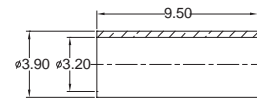
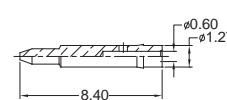
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## CRIMP PLUG



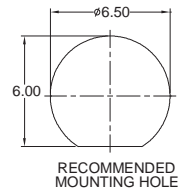
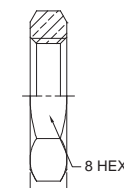
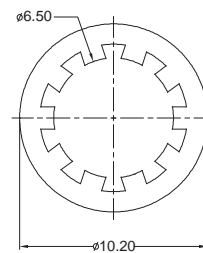
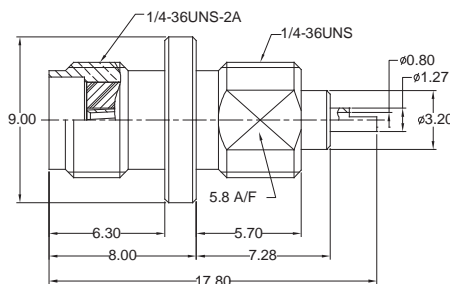
CABLE TYPES  
RG-174/U, 188A/U, 316/U, LMR-100

RECOMMENDED  
CABLE STRIPPING DIM'S



Order Code  
RFP-SAS-C1N502-58

## PANEL JACK



RECOMMENDED  
MOUNTING HOLE

Order Code  
RFJ-SAS-P1A591-58

Other SMA types available on request