

SMA8100-0178

SMA Jack Crimp For RG178,RG178-FEP;
3GHz VSWR 1.2

50Ω

Technical drawing of the SMA Jack Crimp connector showing dimensions in inches and millimeters:

- Overall length: 15.3 (.602)
- Threaded section length: 7.2 (.283)
- Threaded section diameter: 1/4-36UNS-2A
- Hex section diameter: 6.35 HEX (.250 HEX)
- Insulator diameter: 2.3 (ø.091)
- Body diameter: 3 (ø.118)

Parts	Material	Plating (Micro-inch)
Ferrule	Brass	Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20
Contact Pin	Beryllium Copper	Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20
Insulator	Teflon	
Body	Brass	Gold 4 Over Nickel-Phosphorus Alloy 80 Over Copper 20

Weight: 1.65 g

Suitable Cables: RG178, RG178-FEP

This part number complies with RoHS.

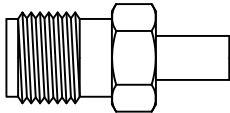
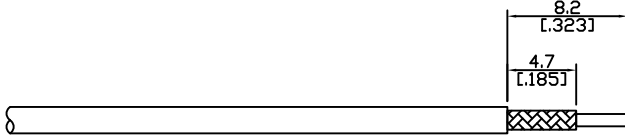
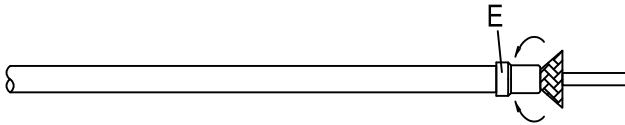
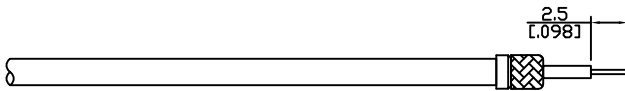
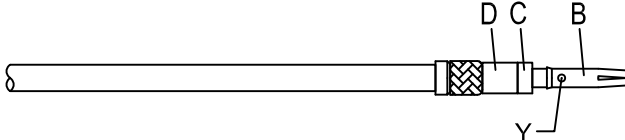
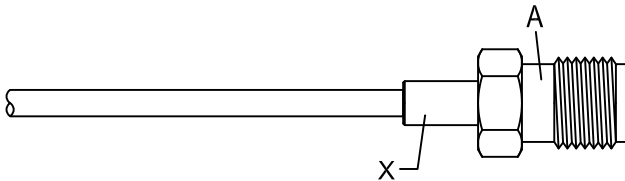
Notice: JYEBAO reserves the right to make modifications deemed appropriate.

SMA	SMA8100-0178
Interface MIL-STD-348B Mechanically compatible with 2.92 & 3.5	
Electrical Data Impedance 50Ω Frequency range DC to 3GHz VSWR ≤ 1.2 (DC to 3GHz) Insertion loss $\leq 0.04 \times \sqrt{f(\text{GHz})}$ dB Insulation resistance $\geq 5000\text{M}\Omega$ Contact resistance inner conductor $\leq 3\text{m}\Omega$ Contact resistance outer conductor $\leq 2\text{m}\Omega$ Dielectric withstanding voltage (at sea level) 750 V rms Working voltage (at sea level) 250 V rms	
Mechanical Data Recommended coupling nut torque 4 inch lbs Coupling proof torque 5.3 inch lbs Contact Captivation-axial ≥ 6.1 lbs Durability (mating) ≥ 100	
Environmental Data Temperature range -65°C to +165°C Thermal shock MIL-STD-202, Method 107, Condition B Moisture resistance MIL-STD-202, Method 106 Corrosion MIL-STD-202, Method 101, Condition B RoHS Compliant	
Tooling Crimping tool CRT-1 or CRT-2 Crimp insert INSERT-A	

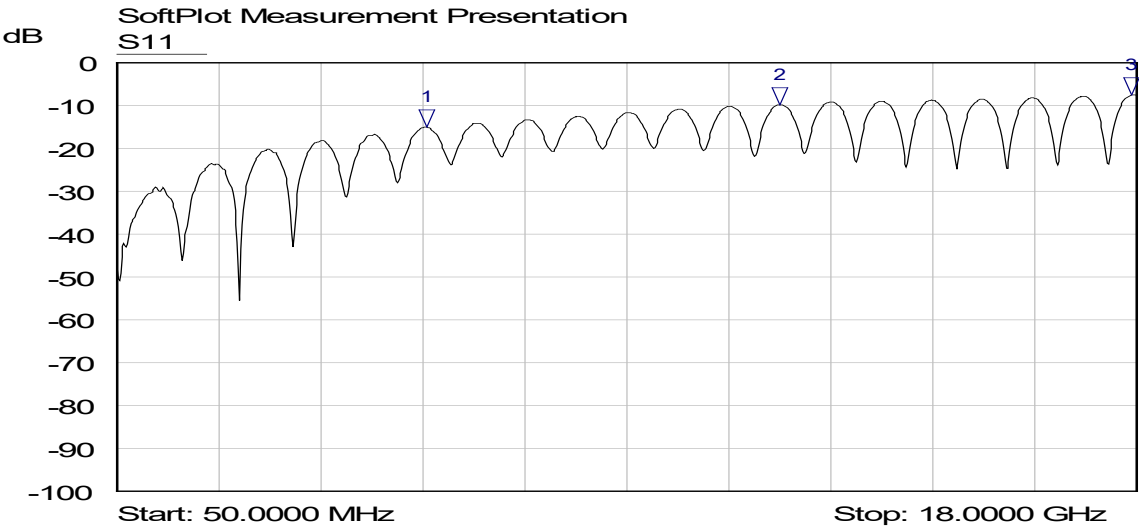
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JYE BAO CO., LTD.

CABLE ASSEMBLY INSTRUCTION

SMA8100-0178		DATE	2015/12/15	REV	—
A	B	C	D	E	
					
BODY	CONTACT PIN	INSULATOR	FERRULE	FERRULE	
DIAGRAM		ASSEMBLY INSTRUCTION			
		Step 1: STRIP AS SHOWN.			
		Step 2: SLIDE FERRULE " E " OVER CABLE. Step 3: WRAP THE BRAIDING OVER " E ".			
		Step 4: STRIP AS SHOWN.			
		Step 5: SLIDE PREPARED CABLE INTO FERRULE " D ". Step 6: PUT INSULATOR " C " AND CONTACT PIN " B " ON CENTER CONDUCTOR AND SOLDER OR CRIMP IN " Y ". (USE SQUARE 0.98mm/0.039inch SECTION OF INSERT-A IF CRIMPED)			
		Step 7: PUT PREPARED CABLE INTO CONNECTOR BODY " A " AND CRIMP IN " X ". (USE 2.55mm/0.100inch HEX SECTION OF INSERT-A)			
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APPROVED		CHECKED		DRAWING	
				Albert	

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Mkr	Trace	X-Axis	Value	Notes
1 ▽	S11	5.5009 GHz	-15.04 dB	
2 ▽	S11	11.7105 GHz	-9.80 dB	
3 ▽	S11	17.9201 GHz	-7.45 dB	