# **SWC-90SF-E7-2 and SWC-90SM-E7-2**

# X-Band Waveguide to SMA Connector Adapter, End Launch

**SWC-90SF-E7-2** and **SWC-90SM-E7-2** are end launch (180°) X-Band waveguide to SMA coax adapters that cover the frequency range of 8.2 to 12.4 GHz. They are designed and manufactured for instrumentation grade quality but offered at a commercial grade price, allowing for an efficient transition between the rectangular waveguide and SMA coax connector.



**Electrical Specifications:** 

Parameter	Minimum	Typical	Maximum
Frequency Range	8.2 GHz		12.4 GHz
Insertion Loss		0.3 dB	
Return Loss		20 dB	
Power Handling			150 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

# **Mechanical Specifications:**

Item	Specification	
Waveguide Port	WR-90 Waveguide with UG-39/U Flange	
Coaxial Port	SMA (F) for Model Number: SWC-90SF-E7-2	
Coaxial Port	SMA (M) for Model Number: SWC-90SM-E7-2	
Material	Aluminum	
Inner Finish	Silver Plated	
Outer Finish	Black Paint	
Weight	1.6 Oz	
Outline	WC-XE-BX1	

#### **ECCN**

EAR99

### **FEATURES**

- Full Waveguide Band Coverage
- Low Insertion Loss
- Instrumentation Grade
- DC Short Circuit

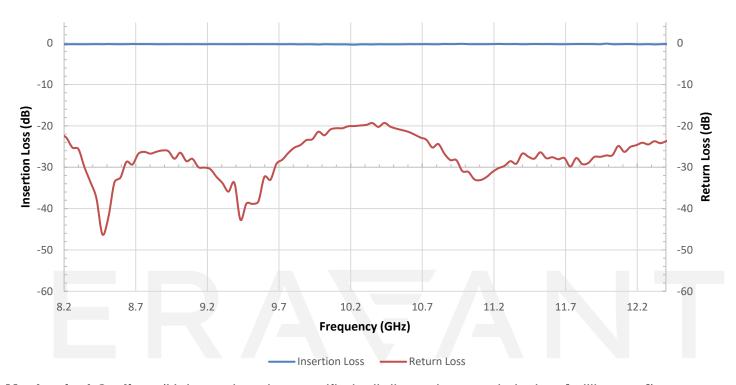
#### **APPLICATIONS**

- Test Lab
- Instrumentation
- Sub-assemblies

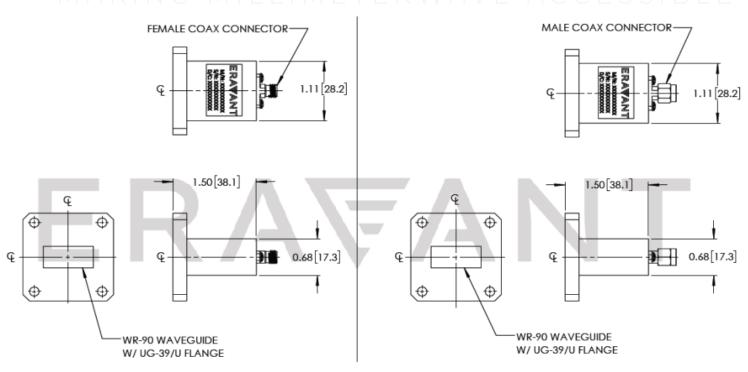
#### **SUPPLEMENTAL DETAILS**



## Insertion Loss and Return Loss vs. Frequency



### Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



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#### NOTE:

- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- On condition that simulated test data is provided, actual measured data may slightly vary.
- Eravant reserves the right to change the information presented without notice.

#### **CAUTION:**

- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model <u>SCH-08008-S1</u> is highly recommended.

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