

## E-Band Waveguide to 1.35 mm Connector Adapter, End Launch

## **Description:**

Models SWC-12EF-E1 and SWC-12EM-E1 are end launch (180°) E-Band waveguide to coax adapters that cover the frequency range of 60 to 90 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 1.35 mm (E) coax connector. The right angle (90°) versions are offered under model numbers SWC-12EF-R1 and SWC-12EM-R1.



### **Features:**

- Full Waveguide Coverage
- Lower Insertion Loss
- Higher Return Loss
- Instrumentation Grade
- DC Short Circuit

# **Applications:**

- Test Lab
- Instrumentation
- Sub-assemblies

## **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Frequency Range	60 GHz		90 GHz
Insertion Loss		0.6 dB	
Return Loss		14 dB	
Power Handling	/\	//	20 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

# **Mechanical Specifications:**

Item	Parameter	
Waveguide	WR-12 with UG-387/U Flange	
Coaxial	1.35 mm (V) Female for Model Number: SWC-12EF-E1	
Coaxial	1.35 mm (V) Male Model Number: SWC-12EM-E1	
Size	0.41" (L) x 0.75" (Ø)	
Housing Material	Aluminum	
Finish	Gold Plated	
Weight	0.3 Oz	
Outline	WC-EE	

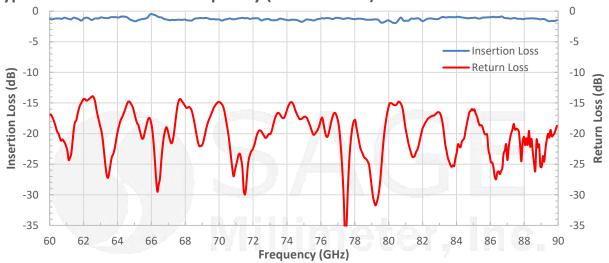


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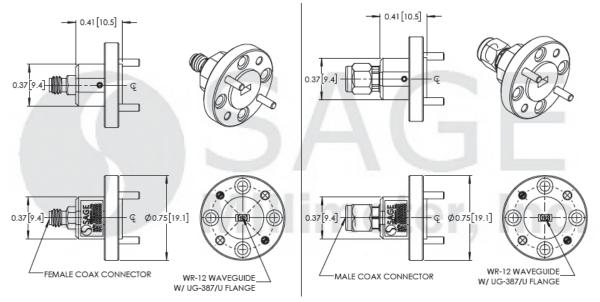


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## Typical Performance vs. Frequency (Back to Back)



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



#### Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit.
- All testing was performed under +25°C case temperature.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

#### **Caution:**

- Any foreign objects in the waveguide will cause performance degradation and may damage the adapter.
- Proper torque,  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm), should be used. **SAGE Millimeter** torque wrench, model SCH-08008-U3, is highly recommended.



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