



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*		1.2 dB	1.5 dB
Return Loss	12 dB	15 dB	
Power Handling			20 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

*Insertion loss is tested back to back with a male and female adapter, the result is divided by 2.

Mechanical Specifications:

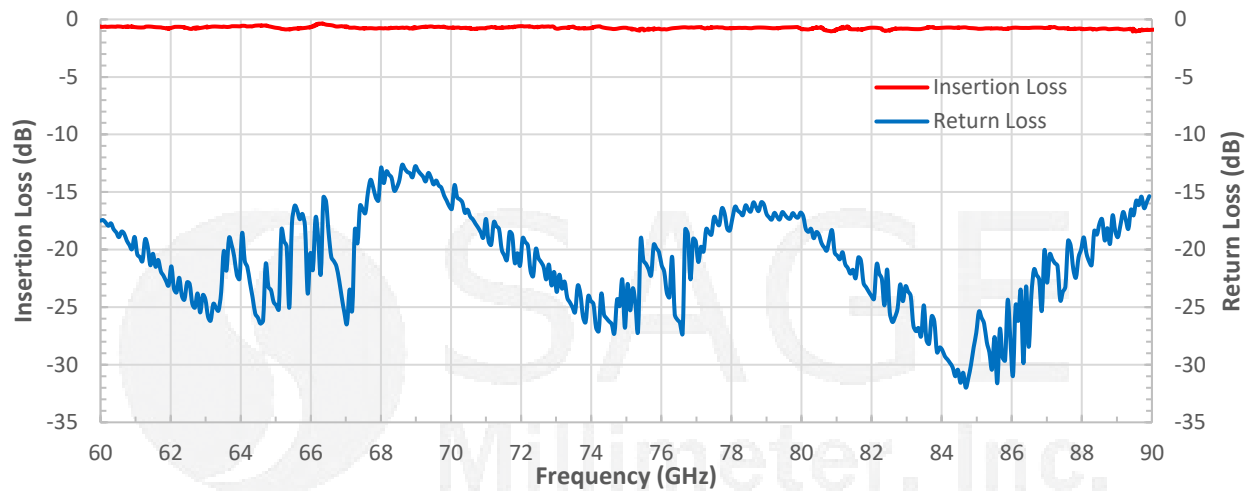
Item	Parameter
Waveguide	WR-12 with UG-387/U Flange
Coaxial	1.35 mm (V) Female for Model Number: SWC-12EF-E1
Coaxial	1.35 mm (V) Male Model Number: SWC-12EM-E1
Size	0.41" (L) x 0.75" (Ø)
Housing Material	Aluminum
Finish	Gold Plated
Weight	0.3 Oz
Outline	WC-EE



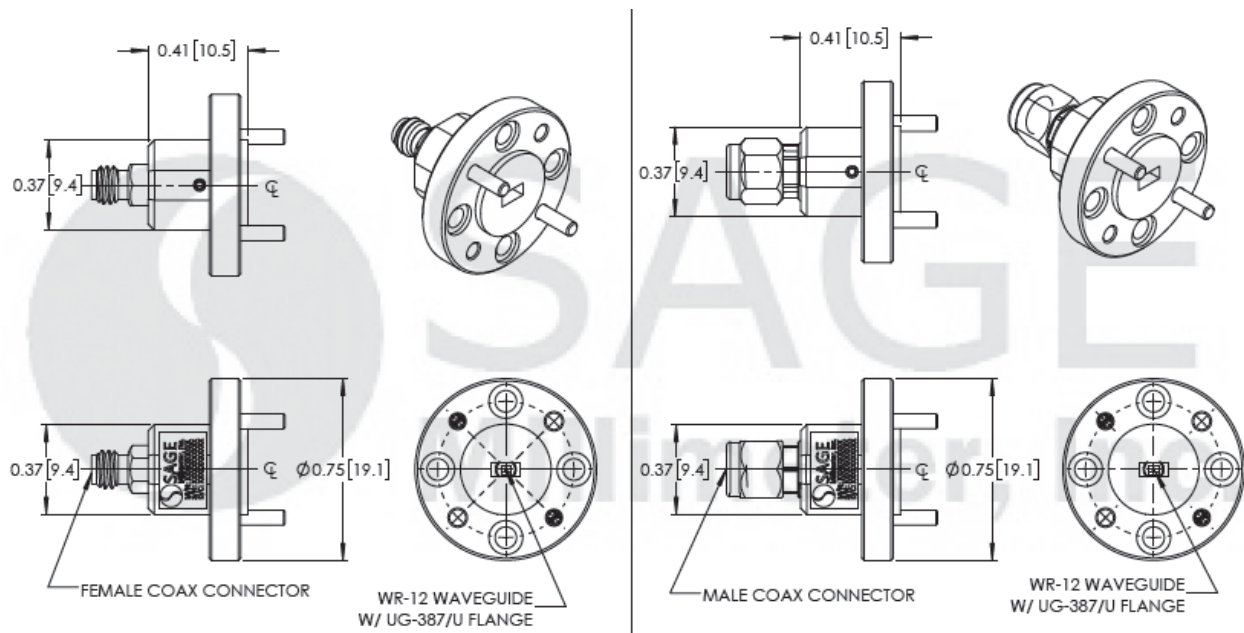


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Typical Performance vs. Frequency (Back to Back)



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, slightly.
- 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 ± 0.15 inch-pounds (0.90 ± 0.02 Nm), should be used. **SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.**



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