



E-Band Waveguide to 1.85 mm Connector Adapter, End Launch

Description:

Models SWC-12VF-E1 and SWC-12VM-E1 are end launch (180°) E-band waveguide to coax adapters that cover the frequency range of 60 to 72 GHz. The upper frequency limitation of these adapter is due to the TEM mode operation of the 1.85 mm connector. The full E-band coverage is offered under the model numbers **SWC-12EF-E1, SWC-12EM-E1, SWC-121F-E1 and SWC-121M-E1**. These adapters 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 1.85 mm (V) coax connector.



Features:

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

Applications:

- Test Lab
- Instrumentation
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	60 GHz		72 GHz
Insertion Loss*		0.8 dB	1.2 dB
Return Loss	12 dB	14 dB	
Power Handling			10 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:

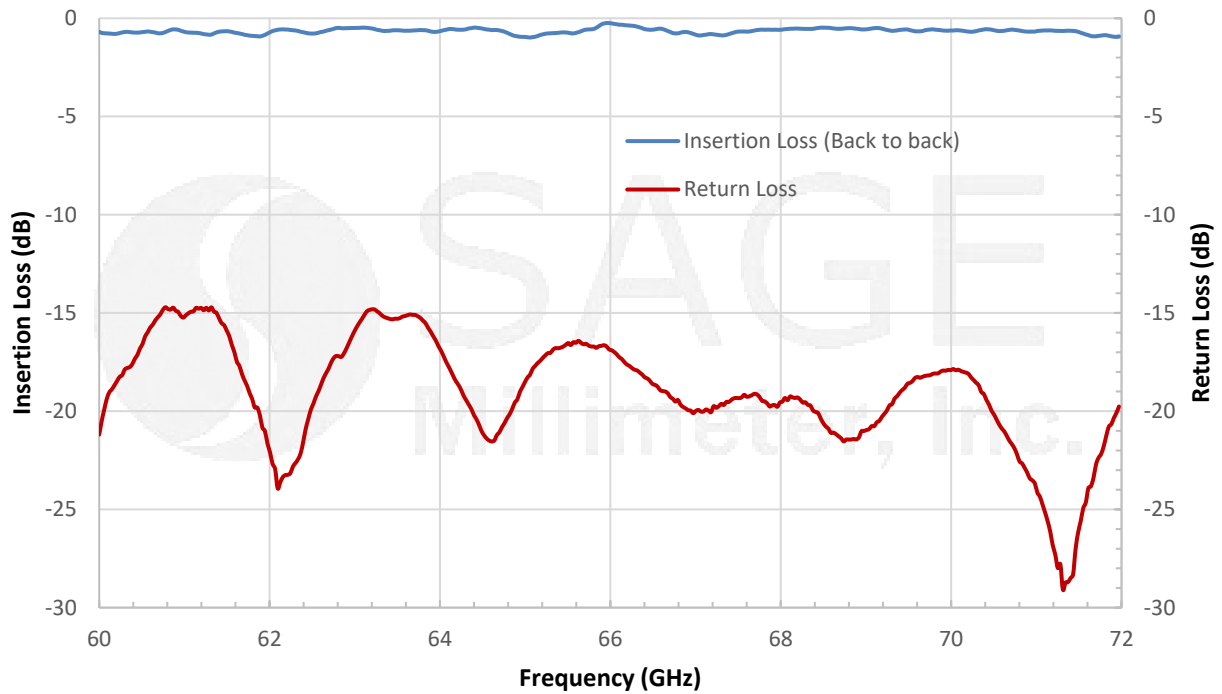
Item	Parameter
Waveguide	WR-12 with UG-387/U Flange
Coaxial	1.85 mm Female for Model Number: SWC-12VF-E1
Coaxial	1.85 mm Male Model Number: SWC-12VM-E1
Size	0.41" (L) x 0.75" (Ø)
Housing Material	Aluminum
Finish	Gold Plated
Weight	0.25 Oz
Outline	WC-EE



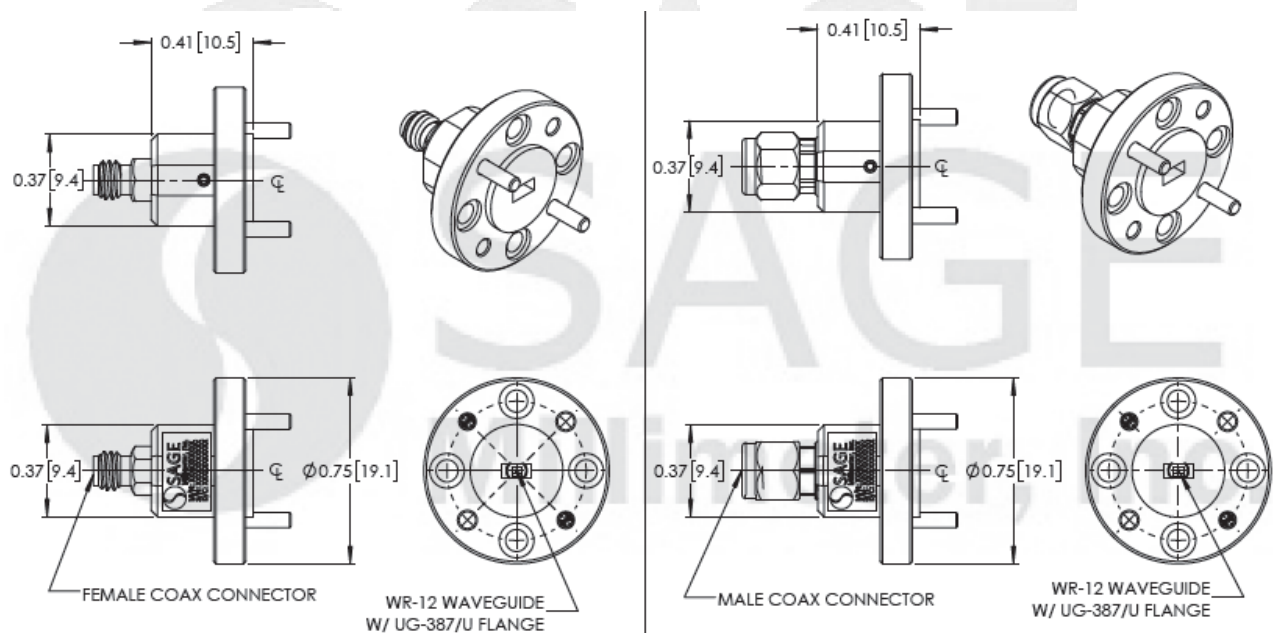


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Typical Performance vs. Frequency



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



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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 applied. **SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.**

