SWC-121F-E1 and SWC-121M-E1

Rev. 1.0

E-Band Waveguide to 1.0 mm Connector Adapter, End Launch

Description:

Models SWC-121F-E1 and SWC-121M-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 1.0 mm coax connector. The right angle (90°) versions are offered under model numbers SWC-121F-R1 and SWC-121M-R1.

Features:

- Full Waveguide Coverage
- Lower Insertion Loss and VSWR
- Instrumentation Grade
- DC Short Circuit

Applications:

- Test Lab
- Instrumentations
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	60 GHz		90 GHz
Insertion Loss		0.7 dB	
Return Loss	14 dB	16 dB	
Power Handling			10 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Parameter
Waveguide	WR-12 with UG387/U Flange
Coaxial	1.0 mm Female for Model Number: SWC-121F-E1
Coaxial	1.0 mm Male Model Number: SWC-121M-E1
Insertion Length	0.63” for SWC-121F-E1
Insertion Length	0.70” for SWC-121M-E1
Housing Material	Aluminum
Finish	Gold Plated
Weight	0.3 Oz
Outline	WC-EE

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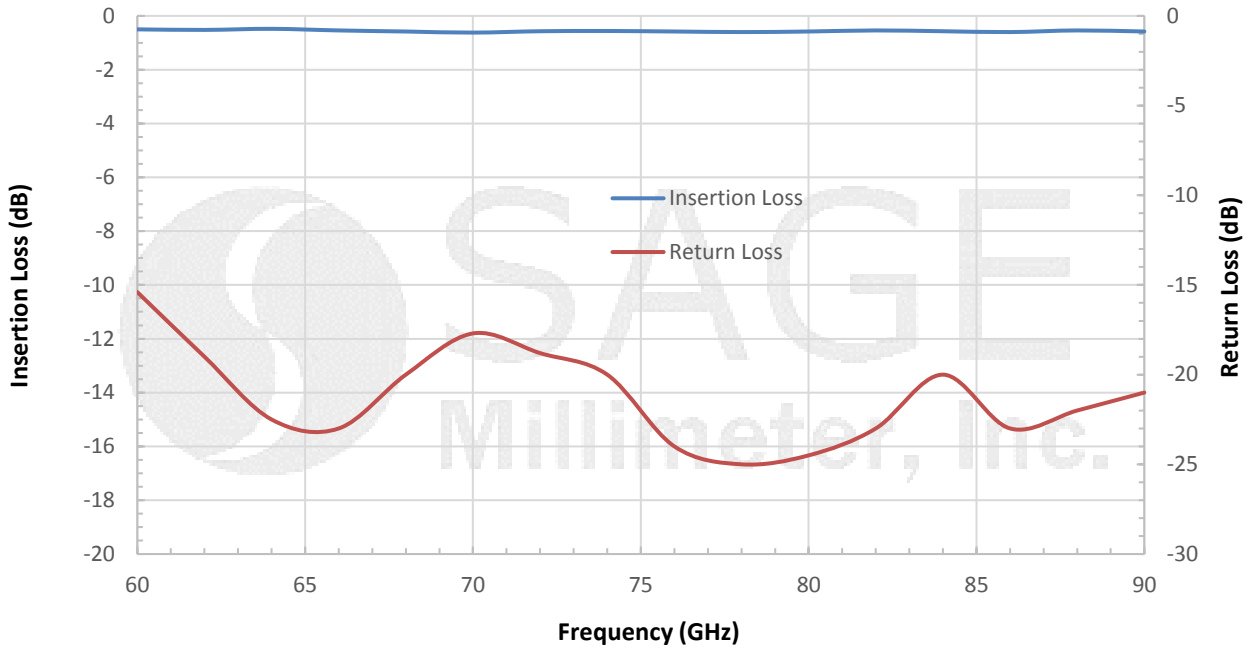
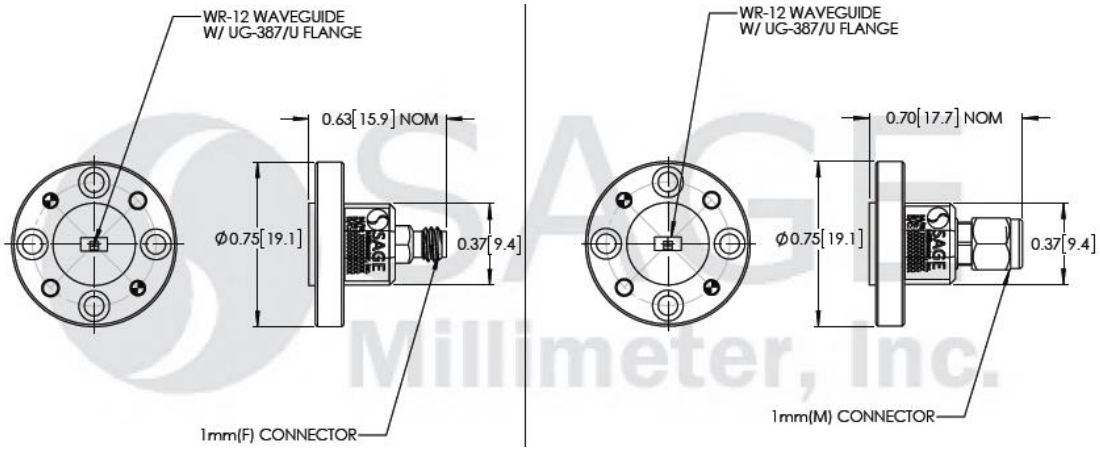
Typical Insertion Loss and Return Loss vs. Frequency (Back to Back)



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



Note:

- All data are presented using a limited 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, 4.0 ± 0.15 inch-pounds (0.45 ± 0.02 Nm), should be used. **SAGE Millimeter torque wrench, model SCH-06004-S1, is highly recommended.**

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