



## W-Band Waveguide to 1.0mm Connector Adapter, End Launch, Thermal Vacuum Safe

### Description:

Models SWC-101F-E1-V and SWC-101M-E1-V are end launch (180°) W-Band waveguide to coax adapters that cover the frequency range of 75 to 110 GHz. They are designed and manufactured for instrumentation grade quality and thermal vacuum compatibility, allowing for an efficient transition between the rectangular waveguide and 1.0 mm coax connector.



### Features:

- Thermal Vacuum Safe
- Broad Band Coverage
- Lower Insertion Loss
- Instrumentation Grade
- DC Short Circuit

### Applications:

- Thermal Vacuum Chamber
- Test Lab
- Instrumentation
- Sub-assemblies

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	75 GHz		110 GHz
Insertion Loss		0.8 dB	
Return Loss		16 dB	
Power Handling			10 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

### Mechanical Specifications:

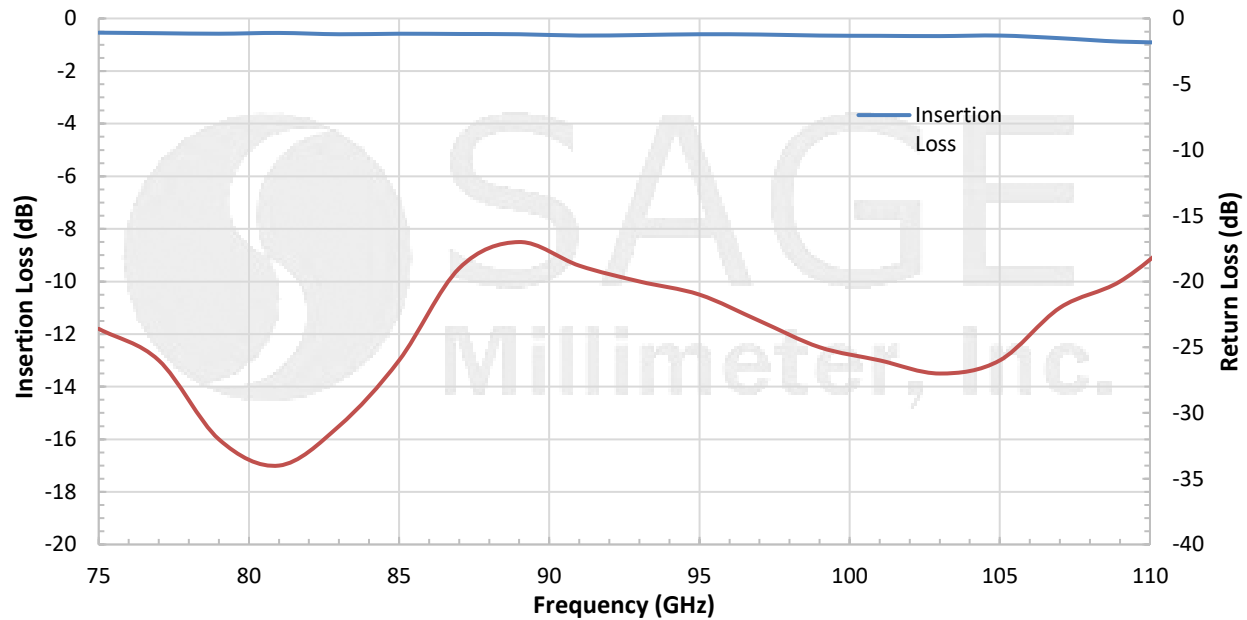
Item	Parameter
Waveguide	WR-10 with UG-387/U-M Flange
Coaxial	1.0 mm Female for Model Number: SWC-101F-E1-V
Coaxial	1.0 mm Male for Model Number: SWC-101M-E1-V
Insertion Length	0.59" for SWC-101F-E1-V
Insertion Length	0.66" for SWC-101M-E1-V
Housing Material	Aluminum
Finish	Gold Plated
Weight	0.3 Oz
Outline	WC-WE



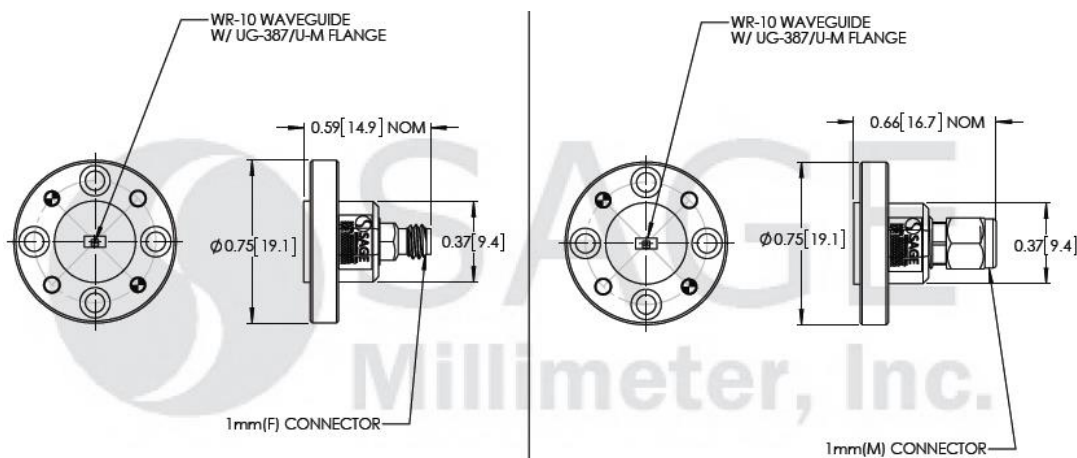


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### Typical Performance vs. Frequency (Back to Back)



### 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,  $4.0 \pm 0.15$  inch-pounds ( $0.45 \pm 0.02$  Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-06004-S1, is highly recommended.**

