

## W-Band Waveguide to Coax Panel Mount Adapter, End Launch

### Description:

**Models SWC-101F-E1-WR and SWC-101M-E1-WR** are end launch (180°) W-Band waveguide to coax panel mount adapters that cover the frequency range of 75 to 110 GHz. They are designed and manufactured for panel mount instrumentation applications and allow for an efficient transition between the rectangular waveguide and 1 mm coax connector. These adapters are also specially designed to be weather resistant.



### Features:

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

### Applications:

- Test Labs
- Instrumentations
- Communication Systems

### 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

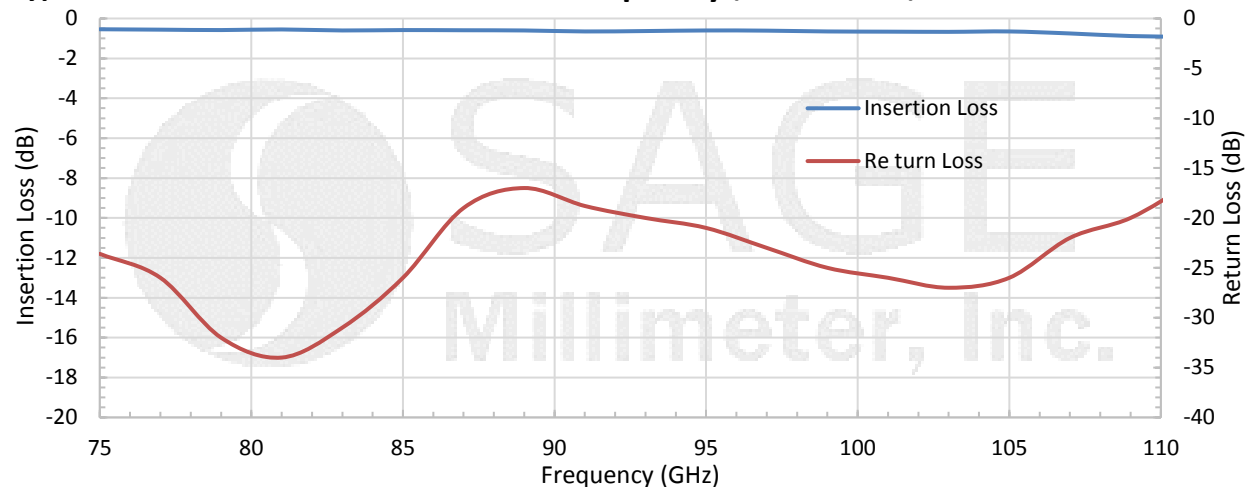
### Mechanical Specifications:

Item	Specification
Waveguide	WR-10 with UG-387/U-M Flange with O-Ring
Coaxial	1 mm Female for Model Number: SWC-101F-E1-WR
Coaxial	1 mm Male for Model Number: SWC-101M-E1-WR
Size	1.14" (L) x 1.33" (Ø) for Model Number: SWC-101F-E1-WR
Size	1.21" (L) x 1.33" (Ø) for Model Number: SWC-101M-E1-WR
Body Material	Aluminum
Flange Material	Brass
Finish	Gold Plated
Weight	2.0 Oz
Outline	WC-WE-WR

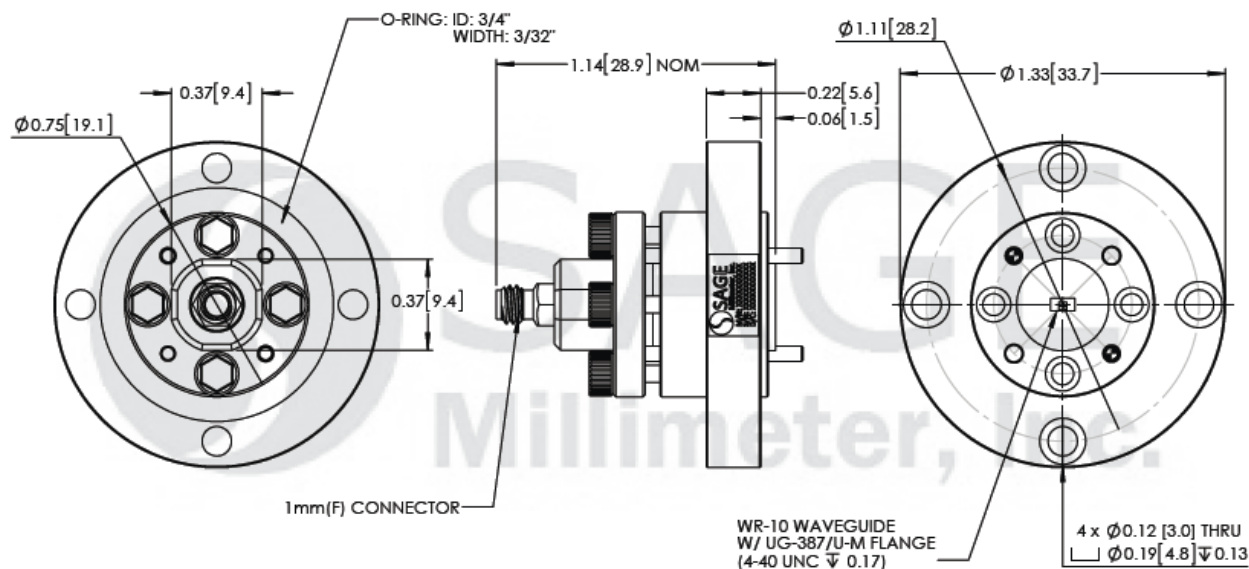


## W-Band Waveguide to Coax Panel Mount Adapter, End Launch

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



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



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

