



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. The right angle (90°) versions are offered under model numbers SWC-101F-R1 and SWC-101M-R1-WR.



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	75 GHz		110 GHz
Insertion Loss*		1.2 dB	1.5 dB
Return Loss	12 dB	15 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	Specification
Waveguide Port	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
Body Material	Aluminum
Flange Material	Brass
Finish	Gold Plated
Weight	2.0 Oz
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
Outline	WC-WE-WR

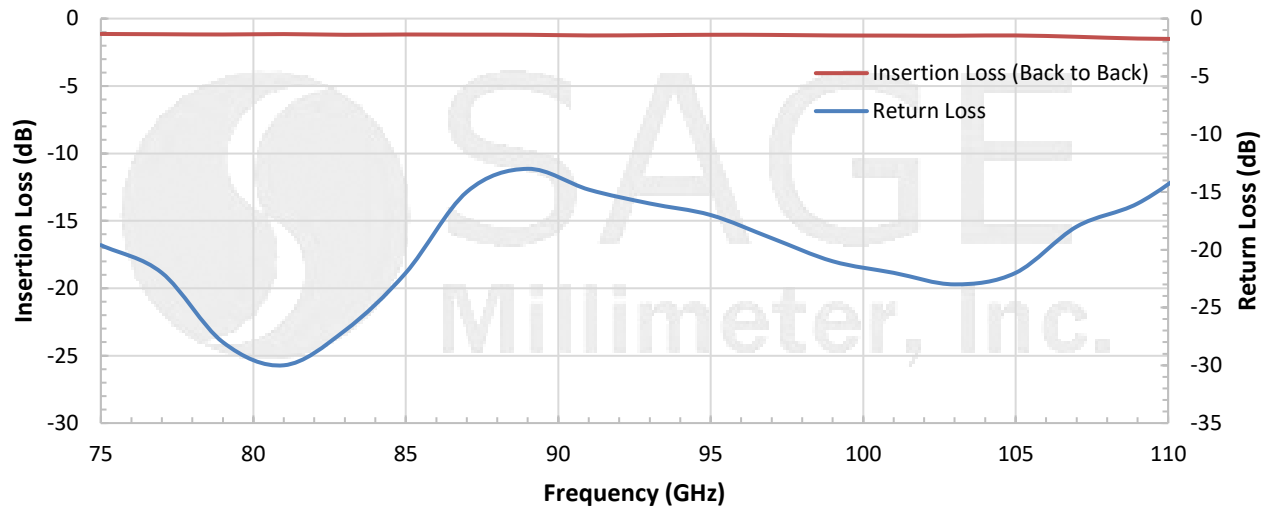


www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com

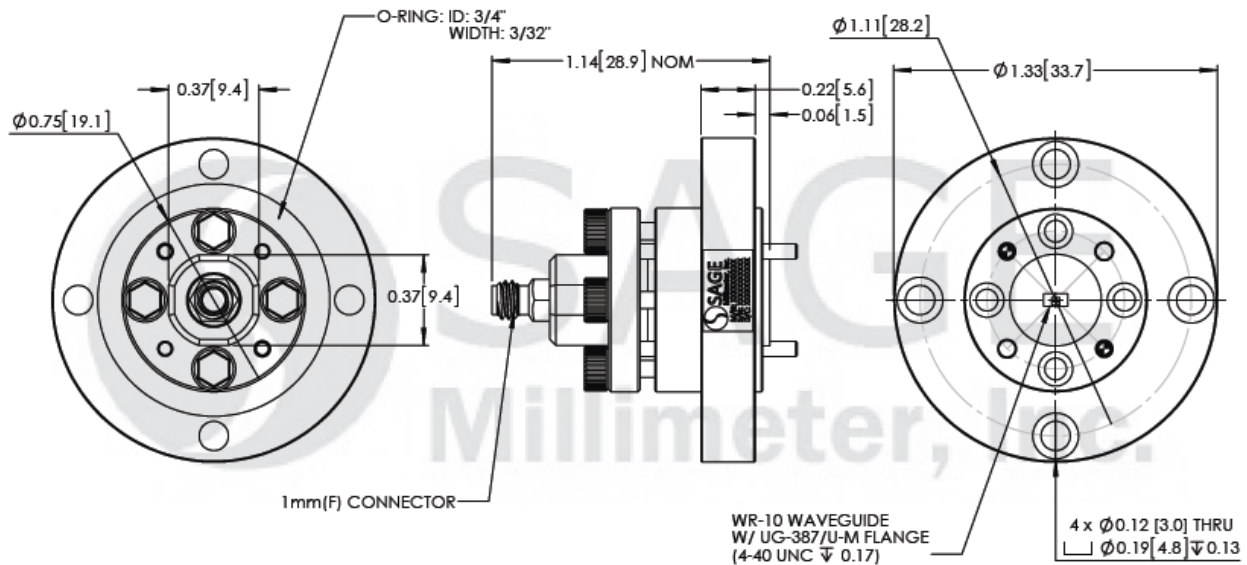


W-Band Waveguide to Coax Panel Mount Adapter, End Launch

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



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.
- All testing was performed under +25 °C case temperature.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.
- Other mechanical configurations are available under different model numbers.

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.**



www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com