

# W-Band Waveguide to 1.0 mm Connector Adapter, Right Angle

### **Description:**

Models SWC-101F-R1 and SWC-101M-R1 are right angle (90°) 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 but offered at a commercial grade price, allowing for an efficient transition between the rectangular waveguide and 1.0 mm coax connector. The end launch (180°) versions are offered under model numbers SWC-101F-E1 and SWC-101M-E1.



### **Features:**

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

## **Applications:**

- Test Lab
- Instrumentations
- Sub-assemblies

### **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Frequency Range	75 GHz		110 GHz
Insertion Loss		1.2 dB	
Return Loss	. //	14 dB	
Power Handling		A December 1	10 W (CW)

## **Mechanical Specifications:**

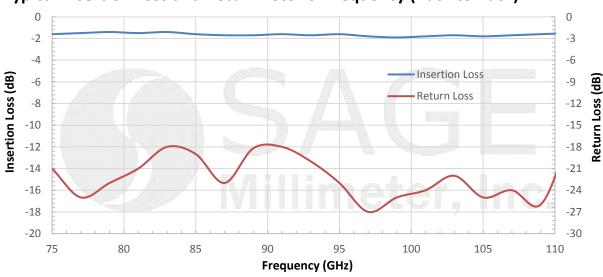
Item	Parameter	
Waveguide	WR-10 with UG387/U-M Flange	
Coaxial	1.0 mm Female for Model Number: SWC-101F-R1	
Coaxial	1.0 mm Male for Model Number: SWC-101M-R1	
Size	1.05" (L) x 0.75" (D)	
Housing Material	Aluminum	
Finish	Gold Plated	
Weight	0.4 Oz	
Outline	WC-WR	



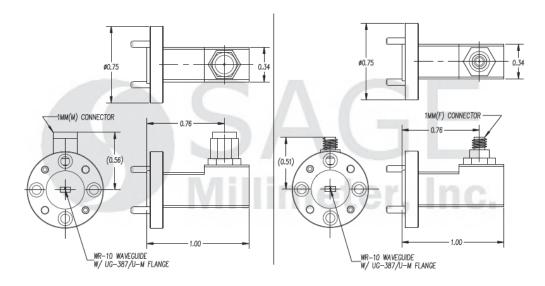
www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com



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



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