

## SWC-101F-E1-WP

### W-Band Waveguide to 1 mm Connector Adapter, End Launch

**SWC-101F-E1-WP** is an end launch (180°) W-Band waveguide to coax adapter that covers the frequency range of 75 to 110 GHz. The adapter is 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°) version is offered under model numbers **SWC-101F-R1**.



### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	75 GHz		110 GHz
Insertion Loss*		1.2 dB	1.5 dB
Return Loss		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 Waveguide with UG-387/U-M Anti-Cocking Flange
Coax Port	1.0 mm Female
Material	Aluminum
Finish	Gold Plated
Weight	0.3 Oz
Outline	WC-WE-A

### ECCN

EAR99

### FEATURES

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

### APPLICATIONS

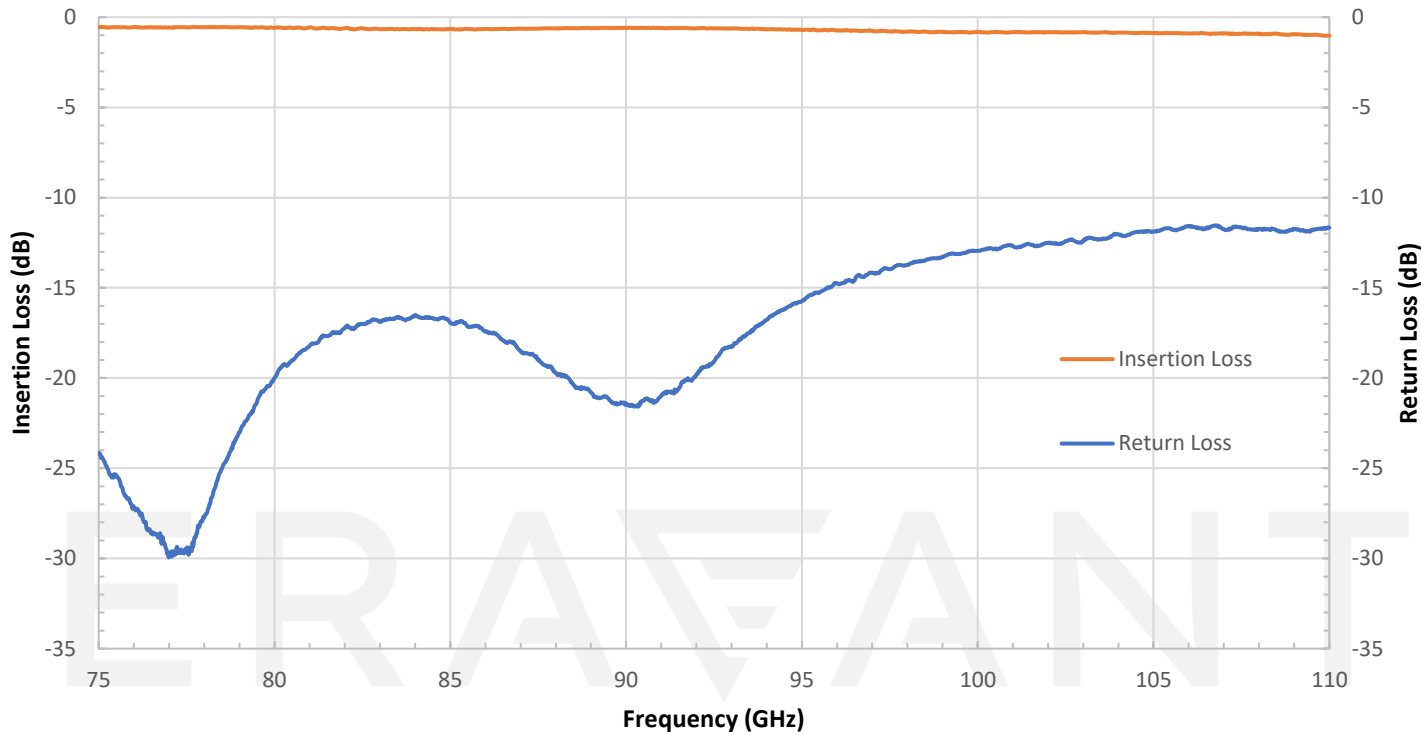
- Test Lab
- Instrumentations
- Sub-assemblies

### SUPPLEMENTAL DETAILS

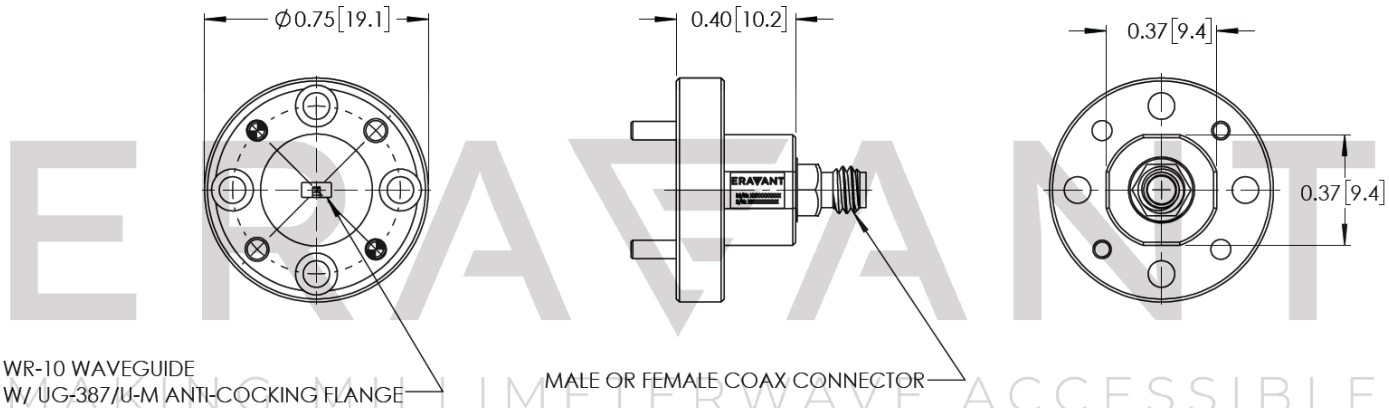


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Typical Return Loss and Back to Back Insertion Loss vs Frequency



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



**NOTE:**

- Data provided is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- Eravant reserves the right to change the information presented without notice.

**CAUTION:**

- Any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.
- For 1 mm connectors proper torque should be applied:  $4.0 \pm 0.15$  inch-pounds ( $0.45 \pm 0.02$  Nm). Torque wrench model SCH-06004-S1 is highly recommended.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied:  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm). Torque wrench model SCH-08008-S1 is highly recommended.

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