

## SWC-0608F-E1 and SWC-0608M-E1

### D-Band Waveguide to 0.8 mm Connector Adapter, End Launch

**SWC-0608F-E1 and SWC-0608M-E1** are end launch (180°) D-Band waveguide to coax adapters that cover the frequency range of 110 to 173 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 0.8 mm coax connector.



#### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	110 GHz		173* GHz
Insertion Loss*		1.5 dB	
Return Loss		14 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

\*Electrical specifications are based on Ideal Matched Condition with male and female adapters tested back-to-back. Theoretical cutoff frequency for 0.8 mm connectors is approximately 166 GHz.

Published industry standard operating range of 0.8 mm connectors is DC to 145 GHz.

\*Insertion loss is tested back-to-back with male and female adapter, the result is divided by 2.

#### Mechanical Specifications:

Item	Specification
Waveguide	WR-06 Waveguide with UG-387/U-M Anti-Cocking Flange
Coaxial Port	0.8 mm Female for Model Number: SWC-0608F-E1
Coaxial Port	0.8 mm Male for Model Number: SWC-0608M-E1
Material	Aluminum
Finish	Gold Plated
Weight	0.3 Oz
Outline	WC-DE-A

#### ECCN

EAR99

#### FEATURES

- Operating Frequency 110 to 173 GHz
- Lower Insertion Loss and VSWR
- Instrumentation Grade
- DC Short Circuit

#### APPLICATIONS

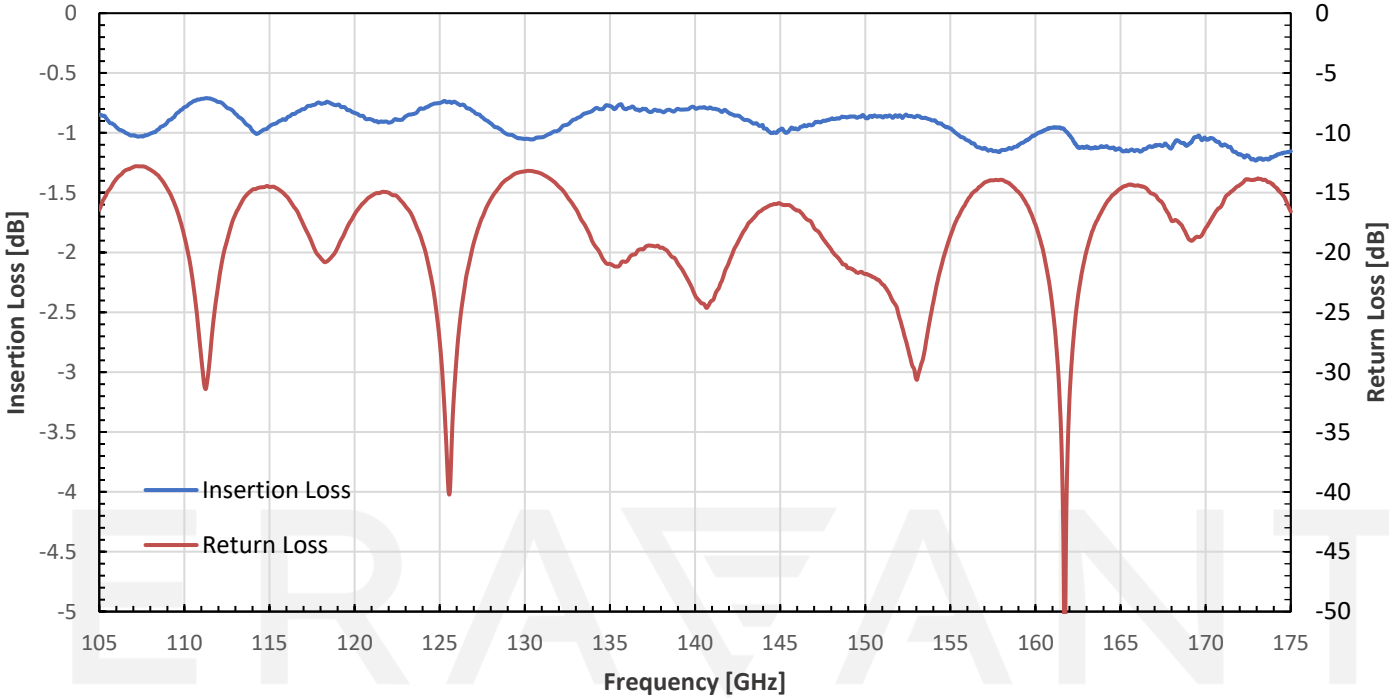
- Test Lab
- Instrumentations
- Sub-assemblies

#### SUPPLEMENTAL DETAILS

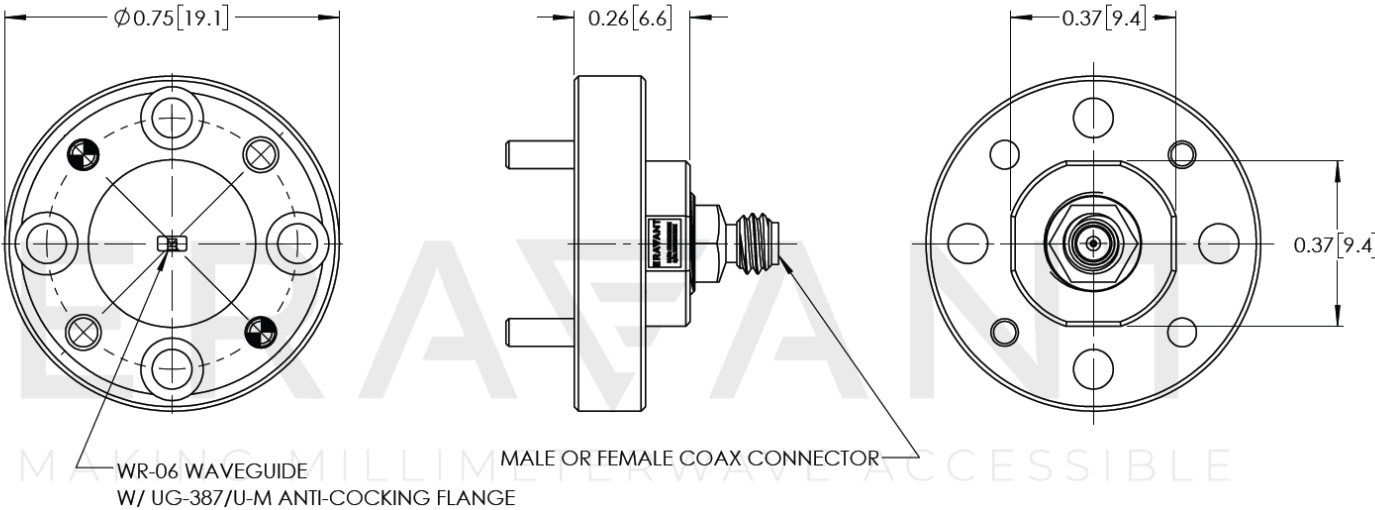


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Typical Performance vs. Frequency



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



## SWC-0608F-E1 and SWC-0608M-E1

**NOTE:**

- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- On condition that simulated test data is provided, actual measured data may slightly vary.
- 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.
- Proper torque should be applied to prevent damage to the unit:  $4.0 \pm 0.15$  inch-pounds ( $0.45 \pm 0.02$  Nm).

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