

# U-Band Waveguide to 1.00 mm Connector Adapter, End Launch

**SWC-191F-E1** and **SWC-191M-E1** are end launch (180°) U-Band waveguide to coax adapters that cover the frequency range of 40 to 60 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 mm coax connector.



# **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Frequency Range	40 GHz		60 GHz
Insertion Loss*		0.6 dB	0.9 dB
Return Loss	13 dB	15 dB	
Power Handling			40 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

<sup>\*</sup>Insertion loss is tested back-to-back with a male and female adapter; the result is divided by 2.

# **Mechanical Specifications:**

Item	Specification	
Waveguide	WR-19 with UG-383/U-M Anti-Cocking Flange	
Coaxial	1.00 mm Female for Model Number: SWC-191F-E1	
Coaxial	1.00 mm Male for Model Number: SWC-191M-E1	
Housing Material	Aluminum	
Finish	Gold Plated	
Weight	0.4 Oz	
Outline	WC-U1E-A-2	

#### **ECCN**

EAR99

### **FEATURES**

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

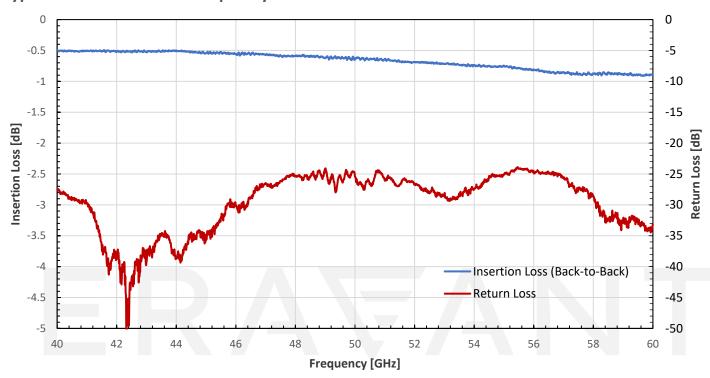
#### **APPLICATIONS**

- Test Lab
- Instrumentations
- Sub-assemblies

# **SUPPLEMENTAL DETAILS**

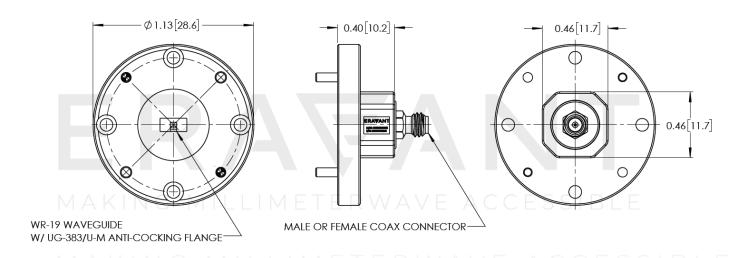


# **Typical Performance vs. Frequency**



# **Mechanical Outline:**

Unless otherwise specified, all dimensions are in inches [millimeters])



### 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 the adapter.
- Proper torque should be applied: 4.0 ± 0.15 inch-pounds (0.45 ± 0.02 Nm). Torque wrench model SCH-06004-S1 is highly recommended.

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