## **SWC-191F-E1-V and SWC-191M-E1-V**

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

**SWC-191F-E1-V** and **SWC-191M-E1-V** 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 and thermal vacuum compatibility, 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	
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-V	
Coaxial	1.00 mm Male for Model Number: SWC-191M-E1-V	
Housing Material	Aluminum	
Finish	Gold Plated	
Weight	0.4 Oz	
Outline	WC-U1E-A-2	

#### **ECCN**

EAR99

#### **FEATURES**

- Thermal Vacuum Safe
- Full Waveguide Band Coverage
- Lower Insertion Loss and VSWR
- Instrumentation Grade
- DC Short Circuit

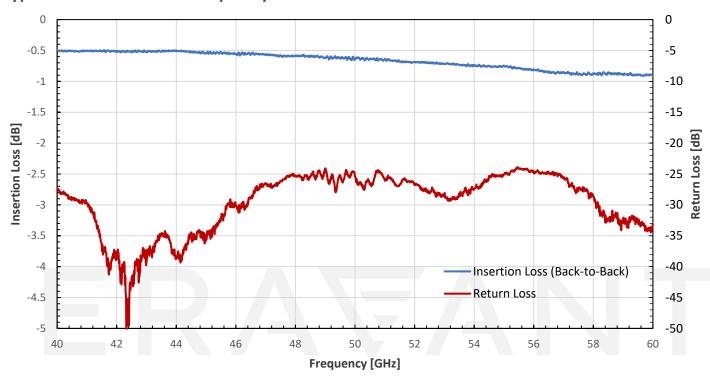
#### **APPLICATIONS**

- Test Lab
- Instrumentations
- Sub-assemblies

#### SUPPLEMENTAL DETAILS

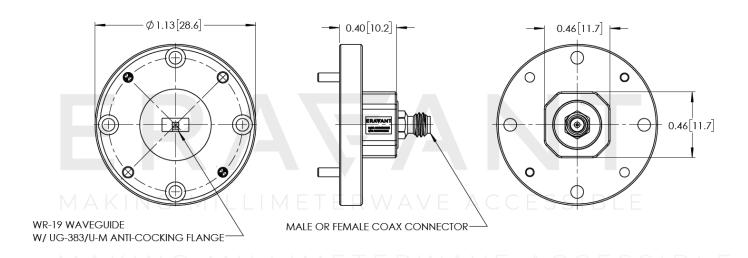


### **Typical Performance vs. Frequency**



#### **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:  $4.0 \pm 0.15$  inch-pounds (0.45  $\pm 0.02$  Nm). Torque wrench model SCH-06004-S1 is highly recommended.

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