

# U-Band Waveguide to 1.85mm Connector Adapter, Right Angle

**SWC-19VF-R1-WP** is a right angle (90°) U-Band waveguide to coax adapter that covers the frequency range of 40 to 60 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 1.85 mm (V) coax connector. The end launch (180°) versions are offered under model numbers **SWC-19VF-E1** and **SWC-19VM-E1**.



# **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Frequency Range	40 GHz		60 GHz
Insertion Loss		0.5 dB	0.8 dB
Return Loss	16 dB	18 dB	
Power Handling			40 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

# **Mechanical Specifications:**

Item	Specification
Waveguide Port	WR-19 with UG-383/U-M Flange
Coaxial Port	1.85 mm (V) Female
Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Outline	WC-UR

### **ECCN**

EAR99

## **FEATURES**

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

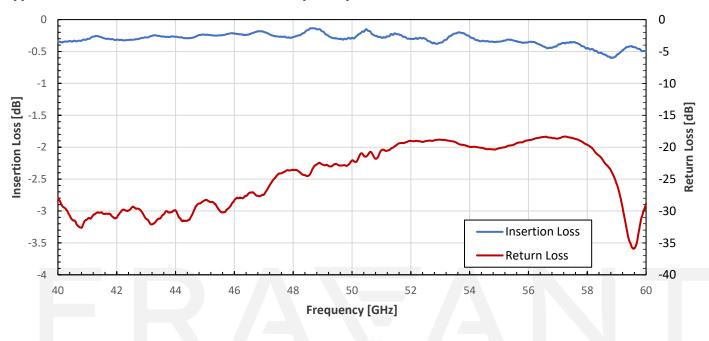
### **APPLICATIONS**

- Test Lab
- Instrumentations
- Sub-assemblies

#### **SUPPLEMENTAL DETAILS**

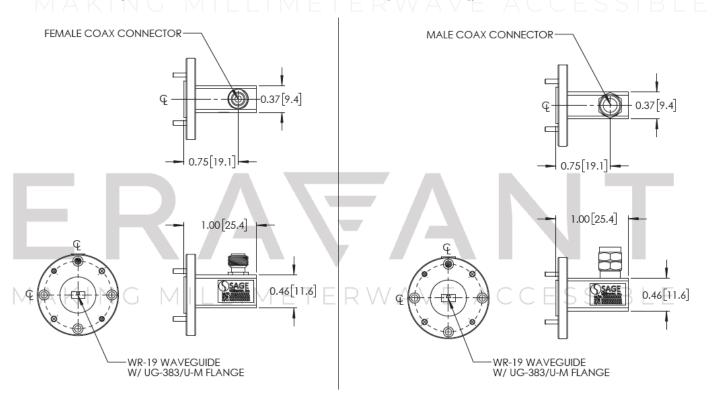


# **Typical Measured Performance vs. Frequency**



# **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 possible device damage.
- For 1 mm connectors proper torque should be applied: 4.0 ± 0.15 inch-pounds (0.45 ± 0.02 Nm). Torque wrench model <u>SCH-06004-S1</u> 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 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model <u>SCH-08008-S1</u> is highly recommended

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