# U-Band Waveguide to 1.85mm Connector Adapter, End Launch

### **Description:**

**Models SWC-19VF-E1-WPC and SWC-19VM-E1-WPC** 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 1.85 mm (V) coax connector.



### **Features:**

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

**Electrical Specifications:** 

## **Applications:**

- Test Lab
- Instrumentations
- Sub-assemblies

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	-45 °C		+85 °C

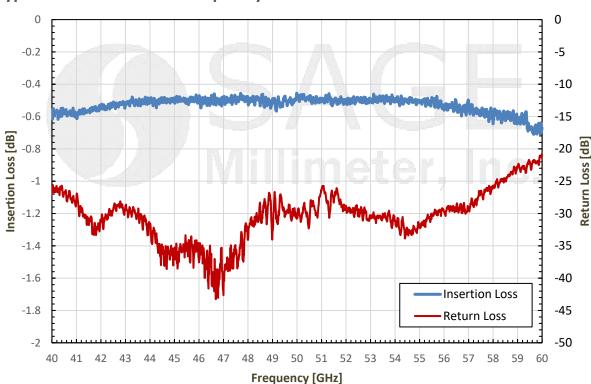
# Mechanical Specifications:

Item	Parameter	
Waveguide	WR-19 with UG383/U-M Flange	
Coaxial	1.85 mm (V) Female for Model Number: SWC-19VF-E1-WPC	
Coaxial	1.85 mm (V) Male for Model Number: SWC-19VM-E1-WPC	
Housing Material	Aluminum	
Finish	Gold Plated	
Weight	0.4 Oz	
Outline	WC-UE	



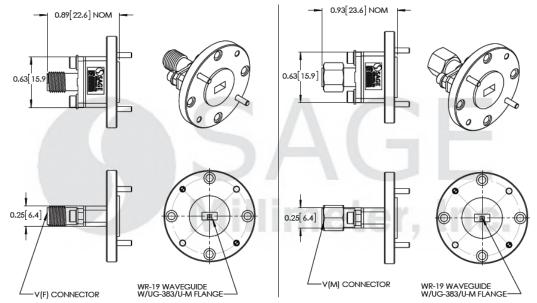
www.eravant.com | 501 Amapola Avenue, Torrance, CA 90501 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: support@eravant.com

## U-Band Waveguide to 1.85mm Connector Adapter, End Launch



Typical Performance vs. Frequency

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



www.eravant.com | 501 Amapola Avenue, Torrance, CA 90501 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: support@eravant.com Rev. 1.0

### U-Band Waveguide to 1.85mm Connector Adapter, End Launch

### Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit, slightly.
- All testing was performed under +25 °C case temperature.
- SAGE Millimeter, Inc. 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, 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm), should be applied. SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.





www.eravant.com | 501 Amapola Avenue, Torrance, CA 90501 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: support@eravant.com