

## SWC-19VF-E1-V and SWC-19VM-E1-V

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

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



## 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	
Specification Temperature		+25°C	
Operating Temperature	-45°C		+85°C

## Mechanical Specifications:

Item	Specification
Waveguide	WR-19 with UG-383/U-M Anti-Cocking Flange
Coaxial	1.85 mm (V) Female for M/N: SWC-19VF-E1-V
Coaxial	1.85 mm (V) Male for M/N: SWC-19VM-E1-V
Housing Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Outline	WC-UE-A-2

## ECCN

EAR99

## FEATURES

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

## APPLICATIONS

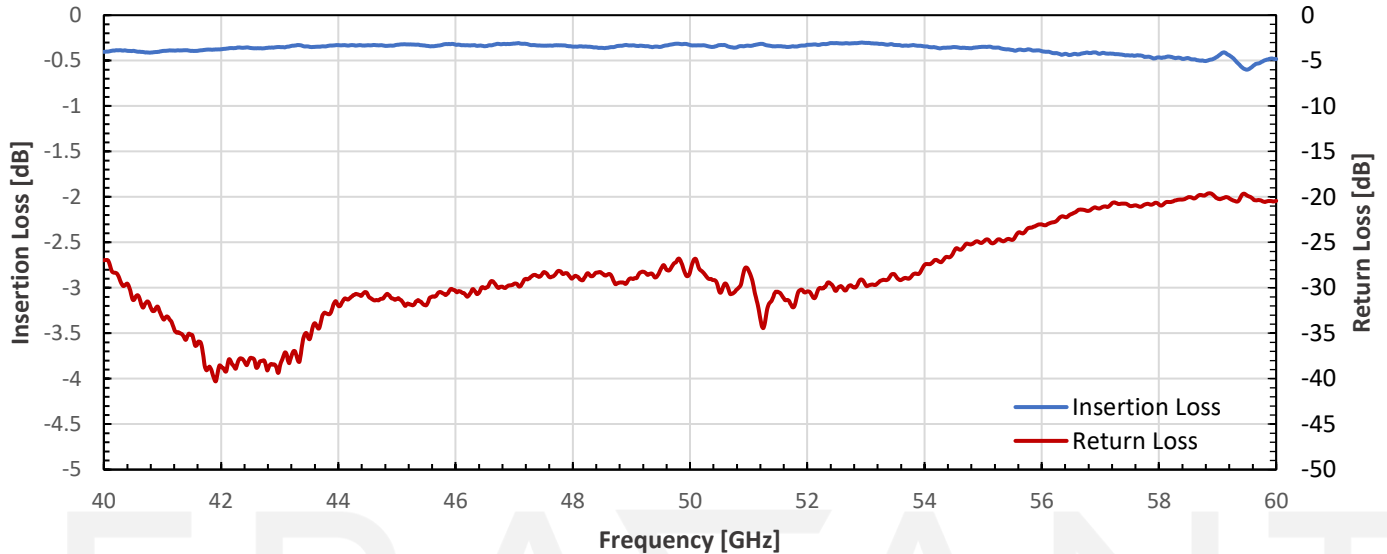
- Thermal Vacuum Chamber
- Test Lab
- Instrumentations
- Sub-assemblies

## SUPPLEMENTAL DETAILS



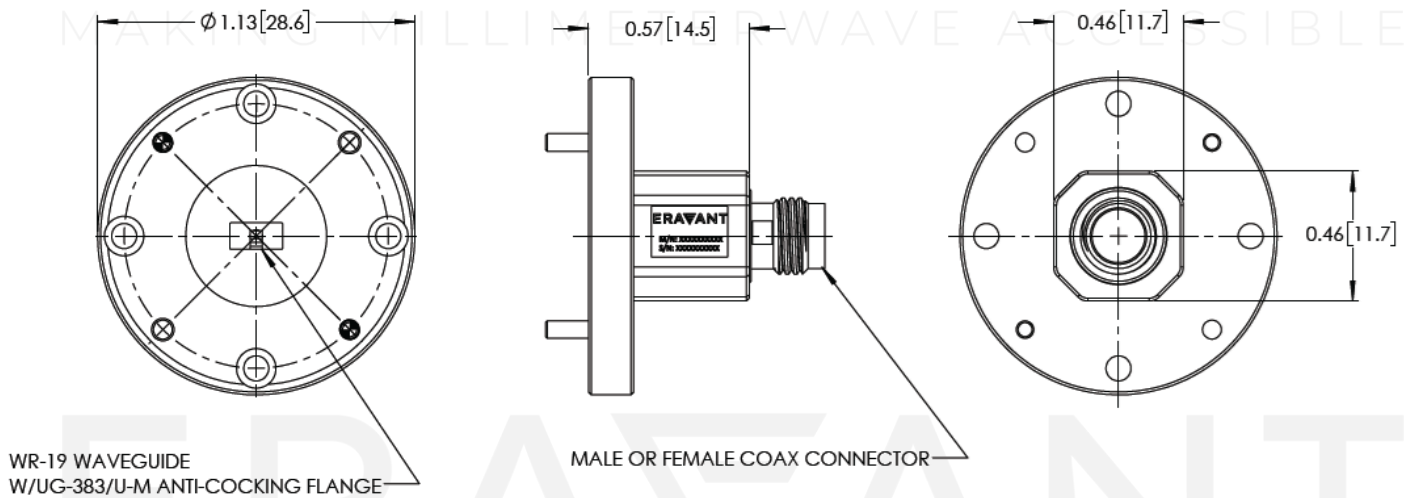
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### Typical Performance vs. Frequency



### Mechanical Outline:

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



### 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.
- 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,  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm), should be applied. Eravant torque wrench, model SCH-08008-S1, is highly recommended.