

## SWC-19VF-E1-599 and SWC-19VM-E1-599

## U-Band Waveguide to 1.85 mm Connector Adapter, End Launch, UG-599/U Flange

**SWC-19VF-E1-599 and SWC-19VM-E1-599** 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. The adapters offer 18 dB typical return loss. The right angle (90°) versions are offered under model numbers SWC-19VF-R1-599 and SWC-19VM-R1-599.



## 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	-45°C		+85°C

## Mechanical Specifications:

Item	Specification
Waveguide	WR-19 with UG-599/U Flange
Coaxial	1.85 mm (V) Female for M/N: SWC-19VF-E1-599
Coaxial	1.85 mm (V) Male for M/N: SWC-19VM-E1-599
Housing Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Outline	WC-UE-599-2

## ECCN

EAR99

## FEATURES

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

## APPLICATIONS

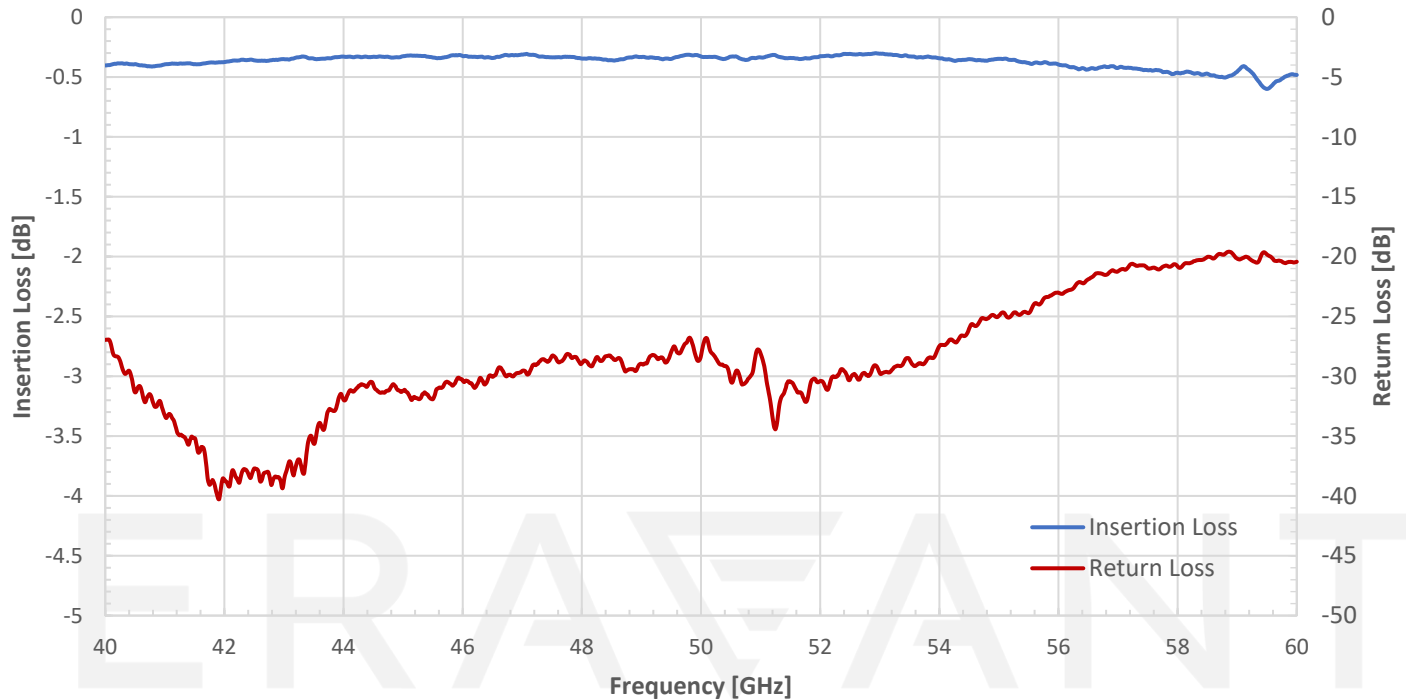
- Test Lab
- Instrumentations
- Sub-assemblies

## SUPPLEMENTAL DETAILS



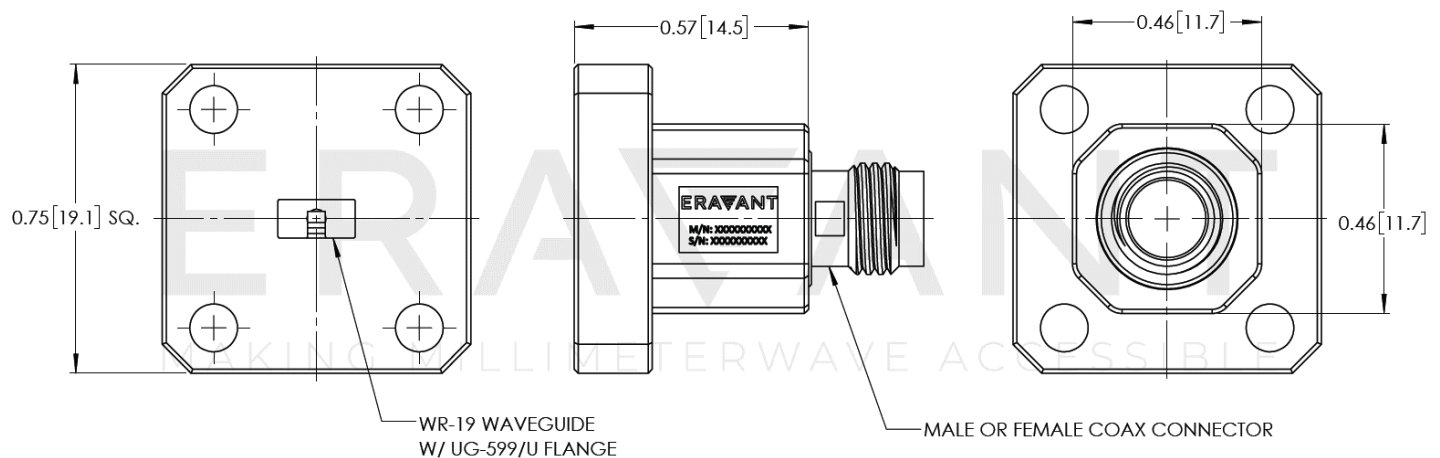
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### Typical Performance vs. Frequency



### Mechanical Outline:

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



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**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.

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