ERAVANT

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

SWC-19VF-E1 and SWC-19VM-E1 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 right angle (90°) versions are offered under model numbers SWC-19VF-R1 and SWC-19VM-R1.

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 UG383/U-M Anti-Cocking Flange
Coaxial	1.85 mm (V) Female for Model Number: SWC-19VF-E1
Coaxial	1.85 mm (V) Male for Model Number: SWC-19VM-E1
Housing Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Outline	WC-UE-A-2

ECCN

EAR99

FEATURES

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

APPLICATIONS
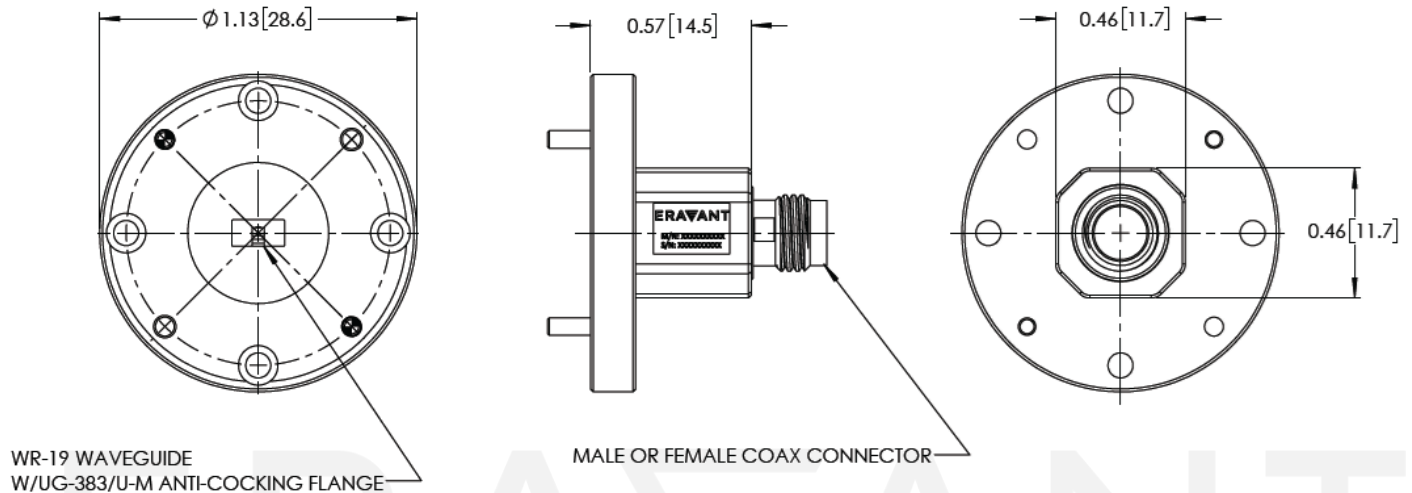
- Test Lab
- Instrumentations
- Sub-assemblies

SUPPLEMENTAL DETAILS

RoHS

Mechanical Outline:

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

WR-19 WAVEGUIDE
W/UG-383/U-M ANTI-COCKING FLANGE
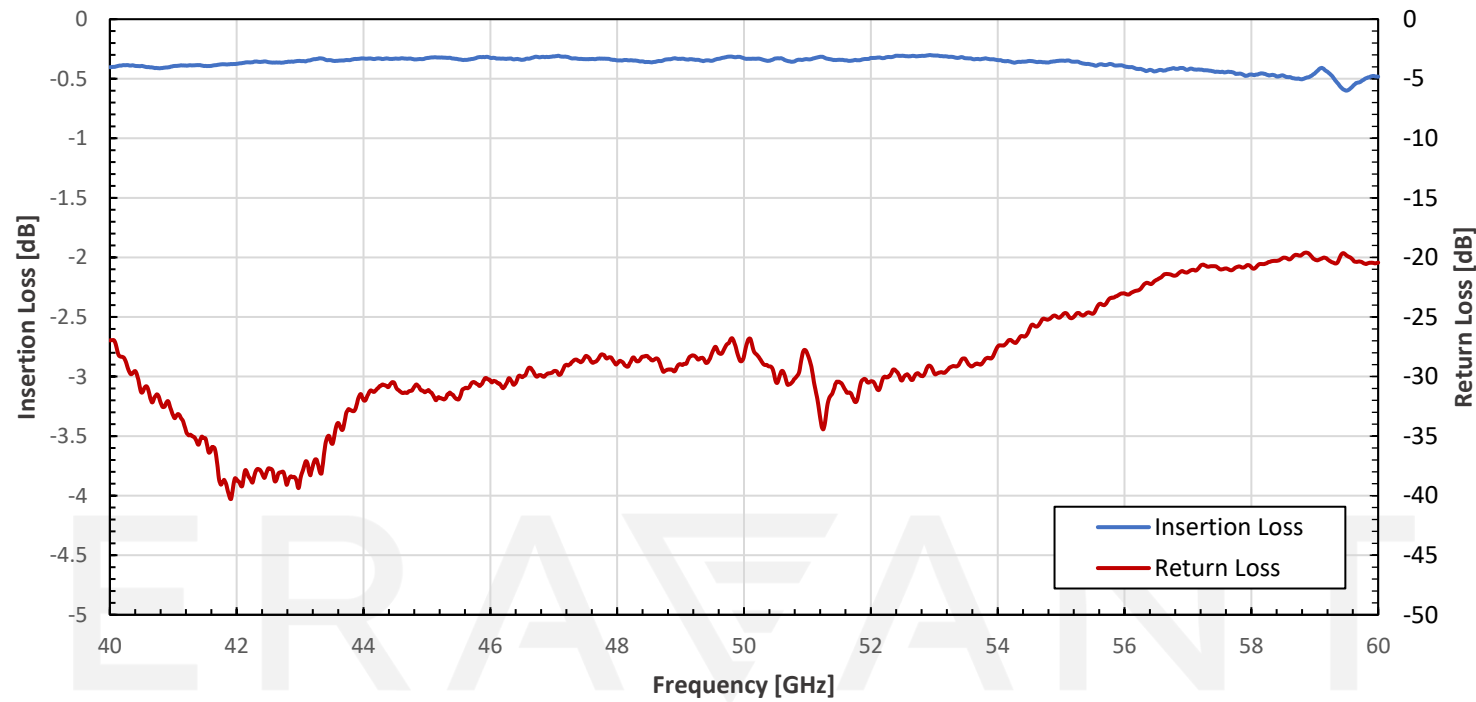
MALE OR FEMALE COAX CONNECTOR

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

Typical Performance vs. Frequency