

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

**SWC-15VF-E1-WP** are end launch (180°) V-Band waveguide to coax adapters that cover the frequency range of 50 to 70 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-15VF-R1 and SWC-15VM-R1.



### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	50 GHz		70 GHz*
Insertion Loss*		1 dB	
Return Loss		13 dB	
Power Handling			40 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

\*The adapter can cover up to 75 GHz with slight performance degradation due to the frequency limitations of the 1.85 mm (V) coaxial connector.

\*Insertion Loss is tested back-to-back with a male and female adapter; the result is divided by 2.

### Mechanical Specifications:

Item	Specification
Waveguide	WR-15 with UG-385/U Flange
Coaxial	1.85 mm (V) Female
Insertion Length	0.66"
Housing Material	Aluminum
Finish	Gold Plated
Weight	0.2 Oz
Outline	WC-VE

### ECCN

EAR99

### FEATURES

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

### APPLICATIONS

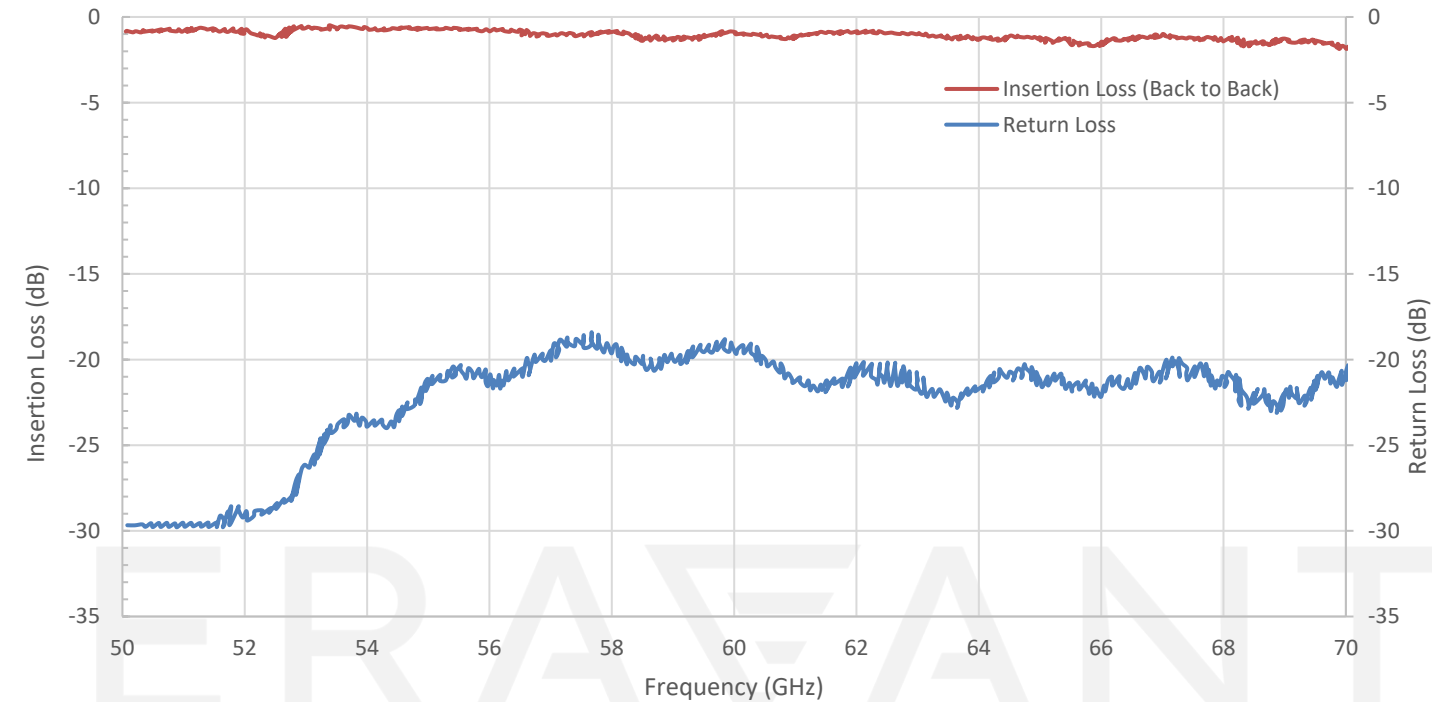
- Test Lab
- Instrumentations
- Sub-assemblies

### SUPPLEMENTAL DETAILS

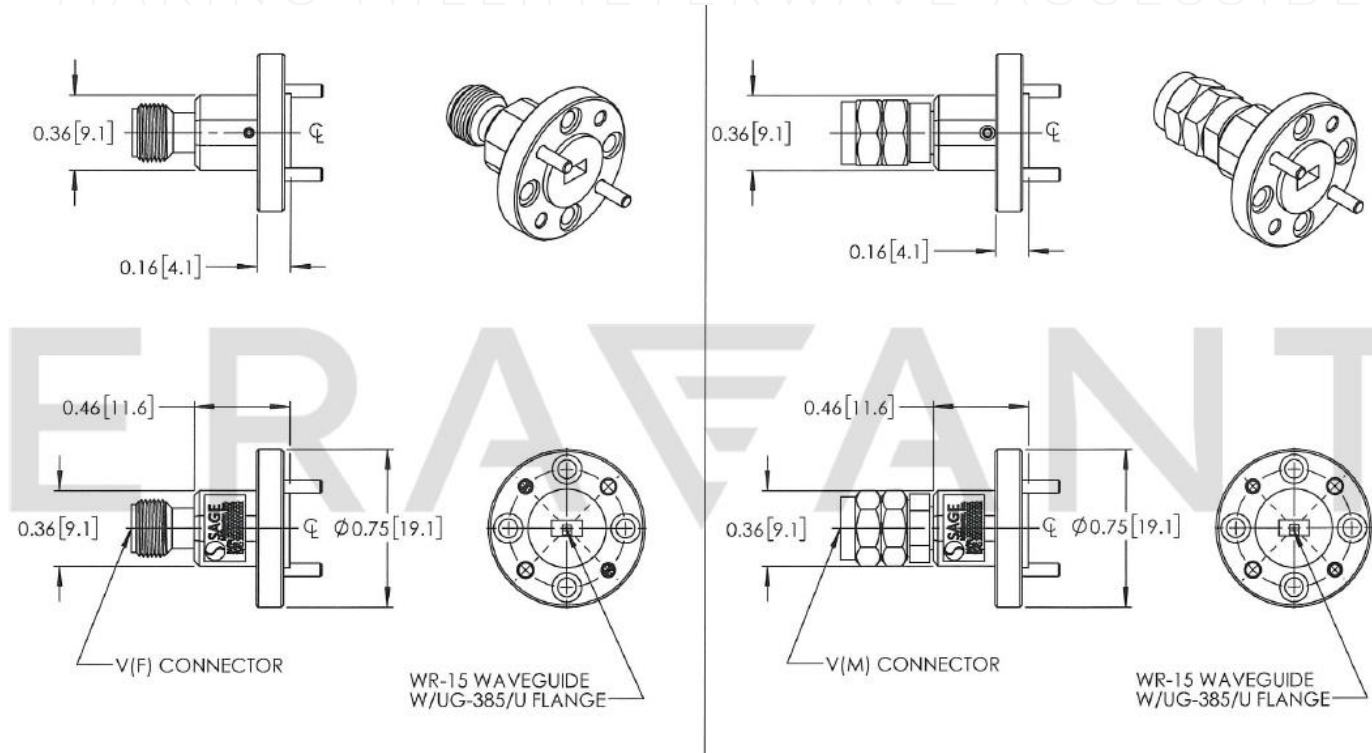


## SWC-15VF-E1-WP

Typical Return Loss and Back to Back Insertion Loss 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.
- Eravant reserves the right to change the information presented without notice.

**CAUTION:**

- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied:  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm). Torque wrench model SCH-08008-S1 is highly recommended

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