



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

Description:

Models **SWC-15VF-E1** and **SWC-15VM-E1** 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.



Features:

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

Applications:

- Test Lab
- Instrumentations
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	50 GHz		70 GHz*
Insertion Loss		0.4 dB	
Return Loss		16 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.

Mechanical Specifications:

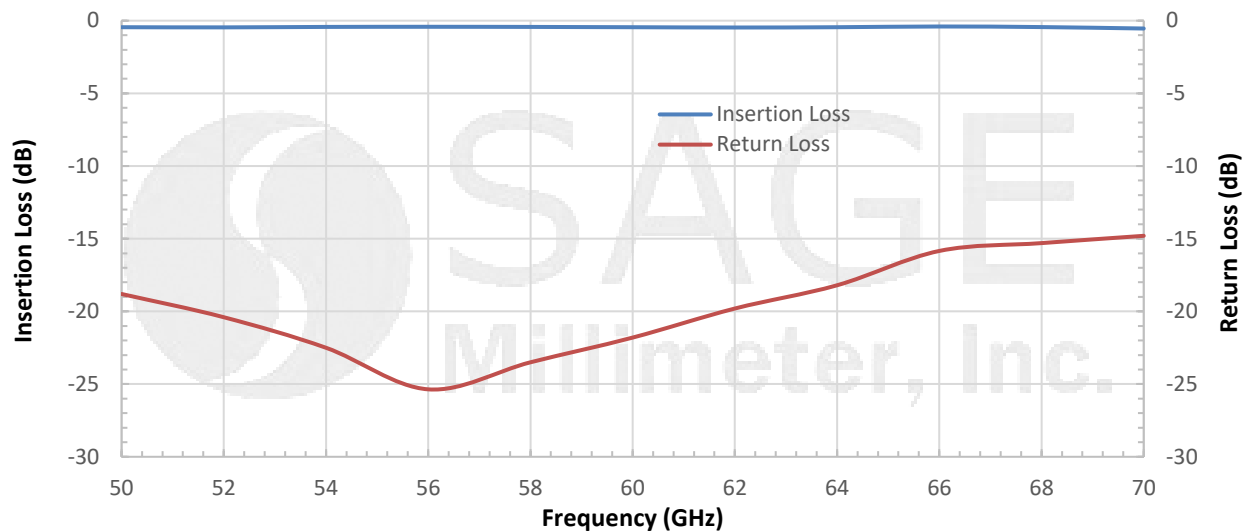
Item	Parameter
Waveguide	WR-15 with UG385/U Flange
Coaxial	1.85 mm (V) Female for Model Number: SWC-15VF-E1
Coaxial	1.85 mm (V) Male for Model Number: SWC-15VM-E1
Insertion Length	0.66" for SWC-15VF-E1
Insertion Length	0.81" for SWC-15VM-E1
Housing Material	Aluminum
Finish	Gold Plated
Weight	0.2 Oz
Outline	WC-VE



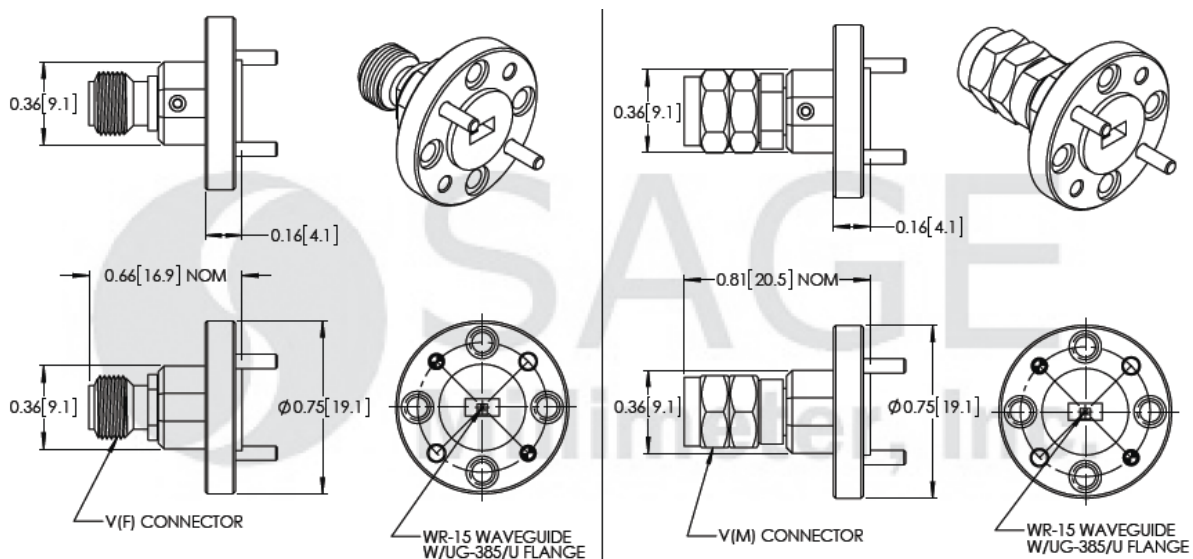
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Typical Insertion Loss and Return Loss vs. Frequency (Back to Back)



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



Note:

- All data are presented using a limited sample lot, actual data may vary unit to unit.
- 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-U3, is highly recommended.**



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