



V-Band Waveguide to 1.0 mm Connector Adapter, Right Angle

Description:

Models **SWC-151F-R1** and **SWC-151M-R1** are right angle (90°) V-Band waveguide to coax adapters that cover the frequency range of 50 to 75 GHz. The adapters 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 1.0 mm coax connector. The end launch (180°) versions are offered under model numbers SWC-151F-E1 and SWC-151M-E1.



Features:

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

Applications:

- Test Lab
- Instrumentations
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	50 GHz		75 GHz
Insertion Loss*		0.7 dB	1 dB
Return Loss	12 dB	15 dB	
Power Handling			10 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

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

Mechanical Specifications:

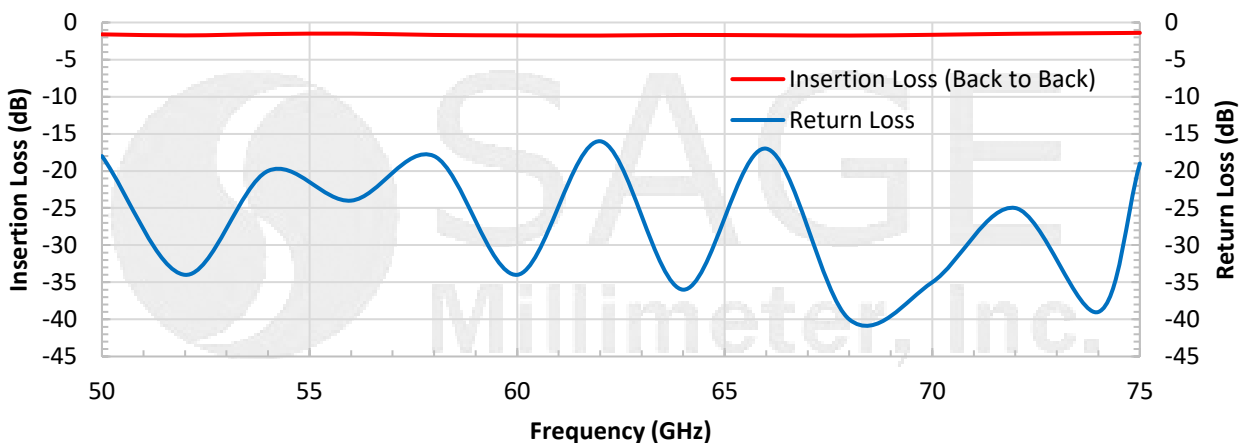
Item	Specification
Waveguide Port	WR-15 with UG385/U Flange
Coaxial	1.0 mm Female for Model Number: SWC-151F-R1
Coaxial	1.0 mm Male for Model Number: SWC-151M-R1
Housing Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Size	1.05" (L) x 0.75" (Ø)
Outline	WC-VR



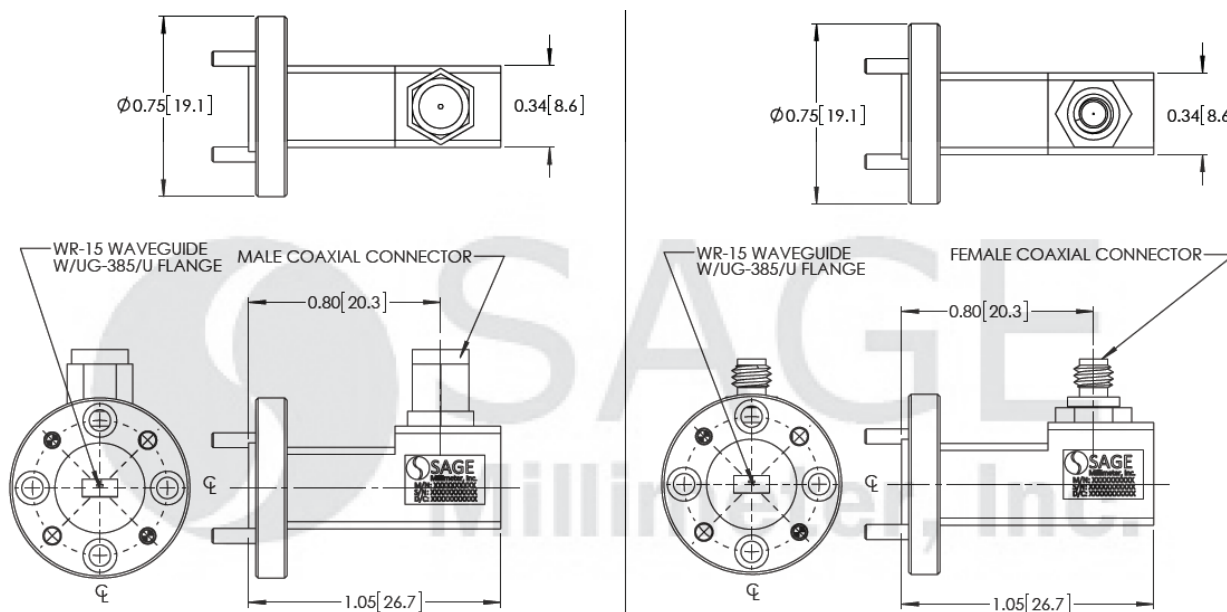


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Typical Return Loss and Back to Back Insertion Loss vs. Frequency



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.
- All testing was performed under 25°C case temperature.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.
- Other mechanical configurations are available under different model numbers.

Caution:

- Any foreign objects in the waveguide will cause performance degradation and may damage the adapter.
- Proper torque, 4.0 ± 0.15 inch-pounds (0.45 ± 0.02 Nm), should be used. **SAGE Millimeter torque wrench, model SCH-06004-S1, is highly recommended.**



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