

## WR-51 Band Waveguide to 2.92 mm Connector Adapter, Right Angle

### Description:

**SWC-51KM-R1-WP** is a right angle (90°) WR-51-Band waveguide to coax adapter that cover the frequency range of 15 to 22 GHz. The adapter is designed and manufactured for instrumentation grade quality but offered at a commercial grade price, allowing for an efficient transition between the rectangular waveguide and 2.92 mm coax connector. The female version is available under the model number SWC-51KF-R1 and the end launch (180°) versions are offered under model numbers SWC-51KF-E1 and SWC-51KM-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	15 GHz		22 GHz
Insertion Loss		0.16 dB	
Return Loss		22 dB	
Power Handling			10 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

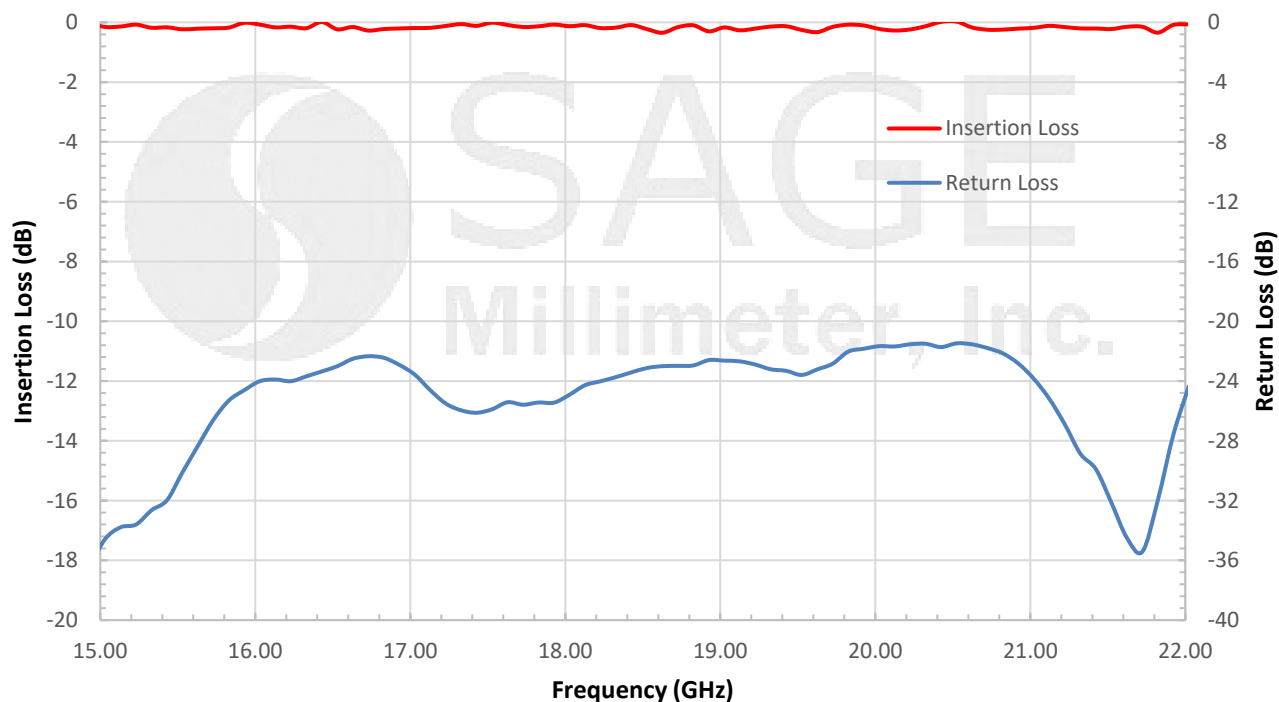
### Mechanical Specifications:

Item	Specification
Waveguide Port	WR-51 with Standard Flange
Coaxial	2.92 mm Male
Housing Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Size	1.31" (W) x 1.31" (H) x 1.00" (L)
Outline	WC-5R

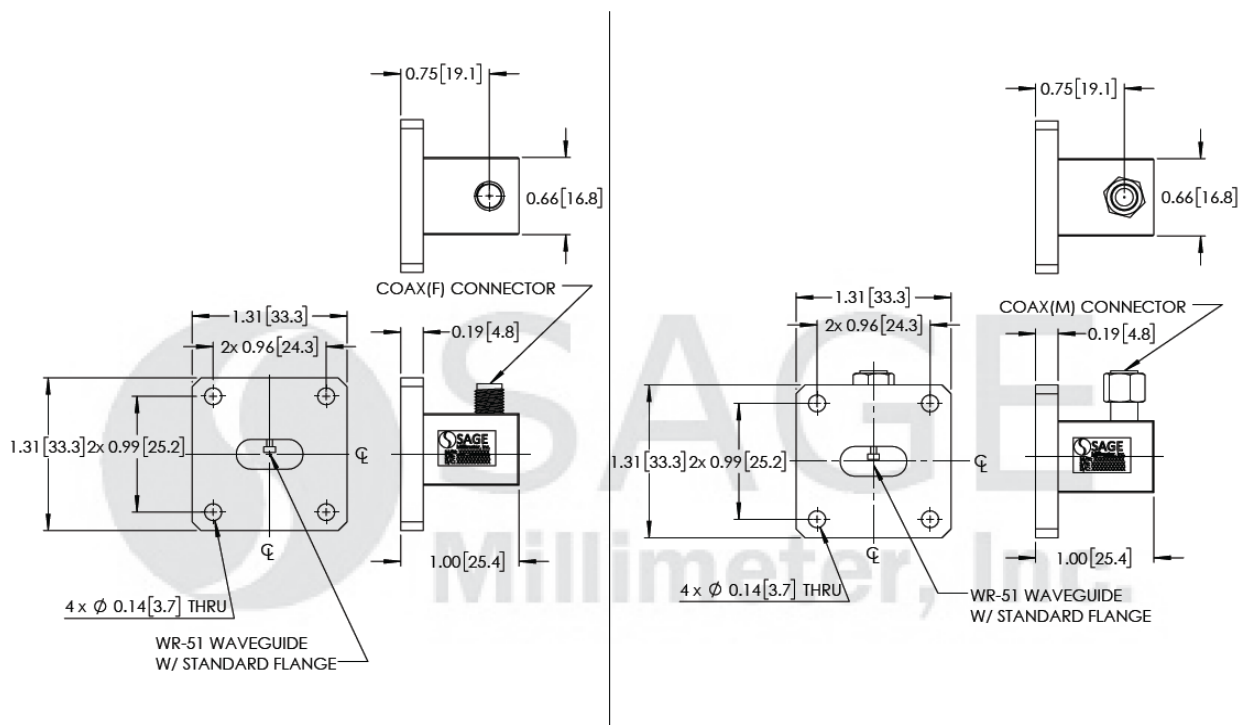


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### Typical Insertion Loss and Return Loss vs. Frequency



**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.
- 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,  $4.0 \pm 0.15$  inch-pounds ( $0.45 \pm 0.02$  Nm), should be used. **SAGE Millimeter torque wrench, model SCH-06004-S1, is highly recommended.**

