



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

### Description:

Models SWC-28VF-E1 and SWC-28VM-E1 are end launch (180°) Ka-Band waveguide to 1.85 mm (V) coax adapters that cover the frequency range of 26.5 to 40 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 coax connector. The right angle (90°) versions are offered under model numbers SWC-28VF-R1 and SWC-28VM-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	26.5 GHz		40.0 GHz
Insertion Loss*		0.35 dB	0.50 dB
Return Loss	17 dB	20 dB	
Power Handling			15 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	WR-28 with UG-599/U Flange
Coaxial	1.85 mm (V) Female for Model Number: SWC-28VF-E1
Coaxial	1.85 mm (V) Male for Model Number: SWC-28VM-E1
Size	0.93" (L) x 0.75" (S) for Model Number: SWC-28VF-E1
Size	0.99" (L) x 0.75" (S) for Model Number: SWC-28VM-E1
Housing Material	Aluminum
Finish	Gold Plated
Weight	0.2 Oz
Outline	WC-AE

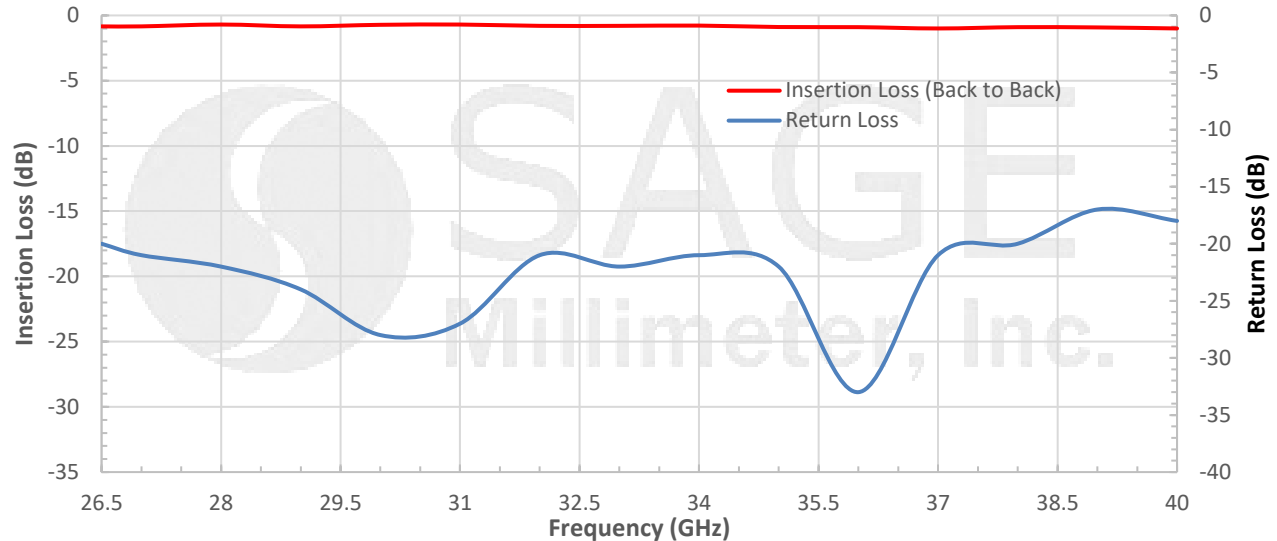


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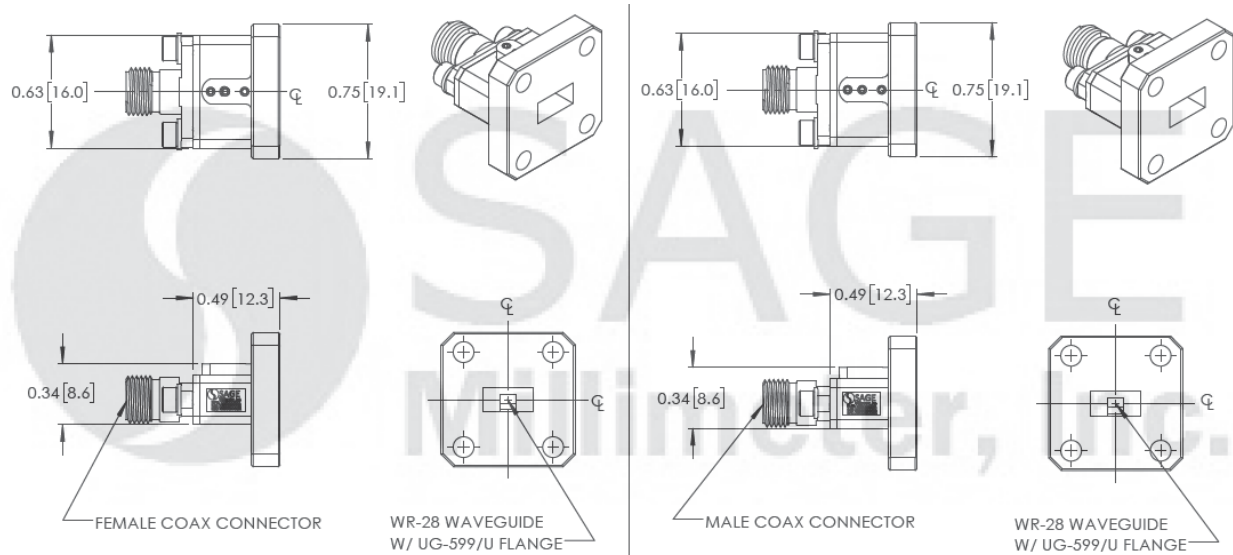


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Typical Return Loss & Back to Back Insertion Loss vs. Frequency



**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, slightly.
- 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-S1, is highly recommended.**



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