



## Q-Band Waveguide to 2.92 mm Connector Adapter, End Launch

### Description:

Models **SWC-22KF-E1** and **SWC-22KM-E1** are end launch (180°) Q-Band waveguide to coax adapters that cover the frequency range of 33 to 43 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 2.92 mm (K) coax connector. The right angle (90°) versions are offered under model numbers SWC-22KF-R1 and SWC-22KM-R1.



### Features:

- 33 to 43 GHz 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	33 GHz		43 GHz*
Insertion Loss		0.3 dB	
Return Loss		18 dB	
Power Handling			50 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Note: The operating Frequency is limited by the 2.92 mm connector.

### Mechanical Specifications:

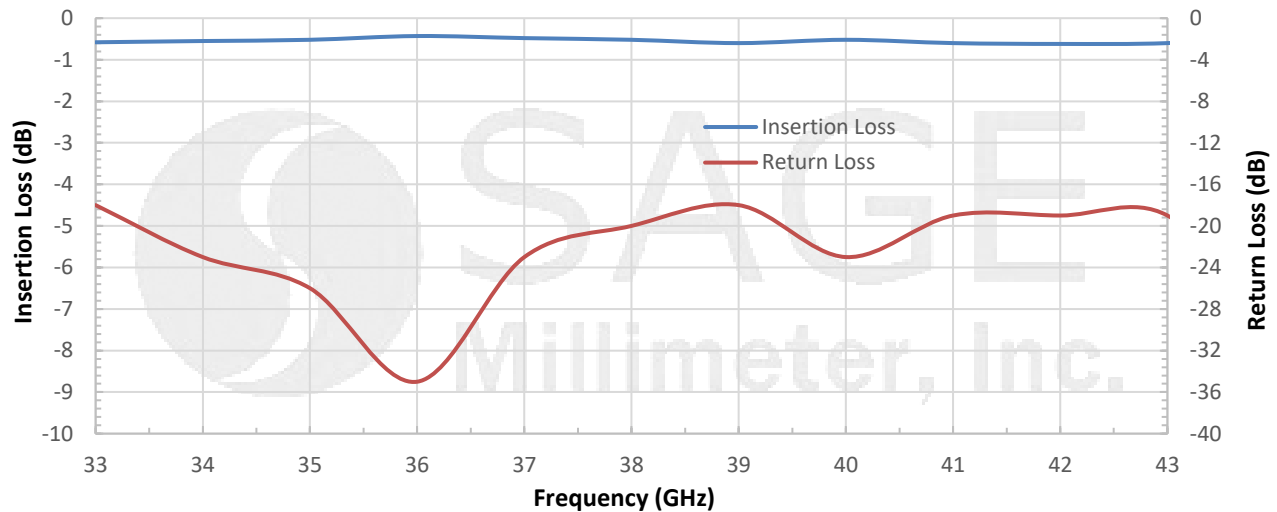
Item	Parameter
Waveguide	WR-22 with UG383/U Flange
Coaxial	2.92 mm (K) Female for Model Number: SWC-22KF-E1
Coaxial	2.92 mm (K) Male for Model Number: SWC-22KM-E1
Size	0.87" (L) x 1.13" (Ø) for Model Number: SWC-22KF-E1
Size	1.04" (L) x 1.13" (Ø) for Model Number: SWC-22KM-E1
Housing Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Outline	WC-QE



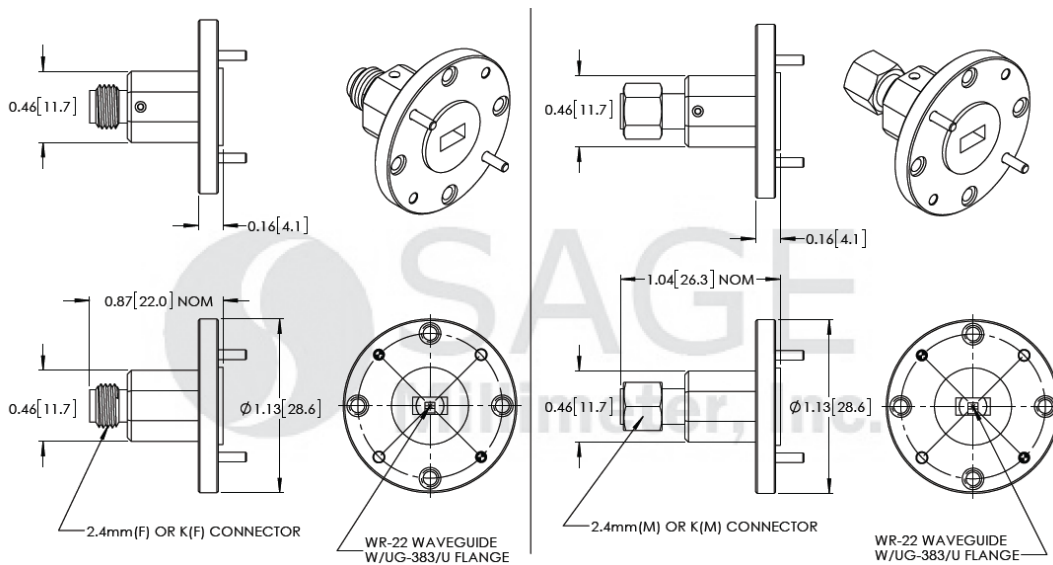


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### Typical Insertion Loss and Return Loss vs. Frequency (Back to Back)



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



#### Note:

- All data 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-U3, is highly recommended.**

