

## K-Band Waveguide to K Connector Adapter, End Launch

### Description:

**Models SWC-42KF-E1 and SWC-42KM-E1** are end launch (180°) K-Band waveguide to coax adapters that cover the frequency range of 18 to 26.5 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 2.92 mm (K) coax connector. The right angle (90°) versions are offered under model numbers SWC-42KF-R1 and SWC-42KM-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	18 GHz		26.5 GHz
Insertion Loss		0.2 dB	
Return Loss		20 dB	
Power Handling			50 Watts
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

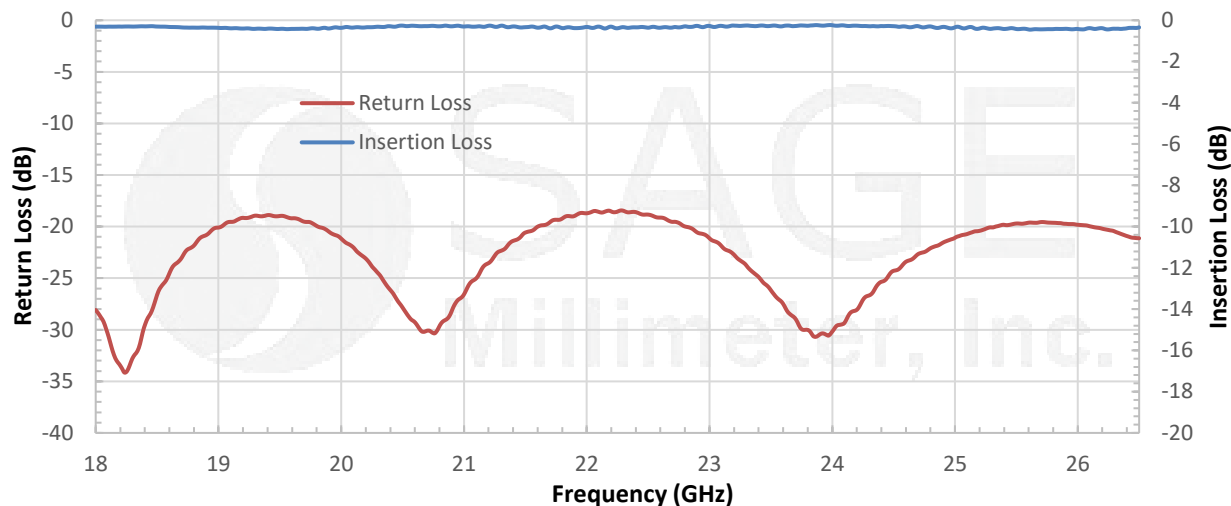
### Mechanical Specifications:

Item	Specification
Waveguide Port	WR-42 Waveguide with UG-595/U Flange
Coaxial Port	2.92 mm (K) Female for Model Number: SWC-42KF-E1
Coaxial Port	2.92 mm (K) Male for Model Number: SWC-42KM-E1
Size	0.97" (L) x 0.88" (S) for Model Number: SWC-42KF-E1
Size	1.10" (L) x 0.88" (S) for Model Number: SWC-42KM-E1
Housing Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Outline	WC-KE

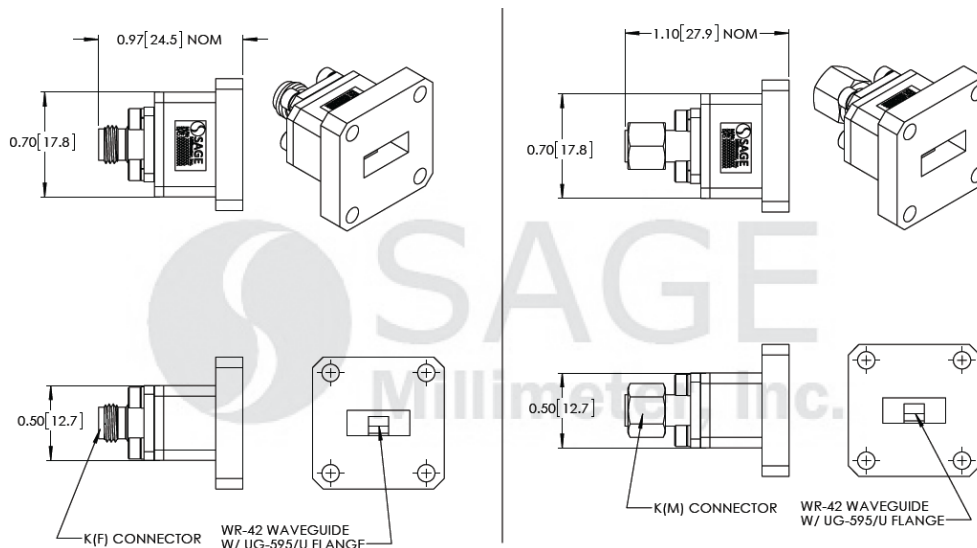


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### Typical Insertion Loss and Return Loss vs. Frequency (Back to Back)



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



#### Note:

- All data is 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,  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-U3, is highly recommended.**

