

## K-Band Waveguide to K Connector Adapter, Right Angle

### Description:

Models **SWC-42KF-R1** and **SWC-42KM-R1** are right angle (90°) 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 end launch (180°) versions are offered under model numbers SWC-42KF-E1 and SWC-42KM-E1.



### Features:

- Broad Band Coverage
- Lower Insertion Loss and VSWR
- Instrumentation Grade
- DC Open Circuit

### Applications:

- Test Lab
- Instrumentations
- Sub-assemblies

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	18 GHz		26.5 GHz
Insertion Loss		0.2 dB	
Return Loss		20 dB	
Power Handling			50 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

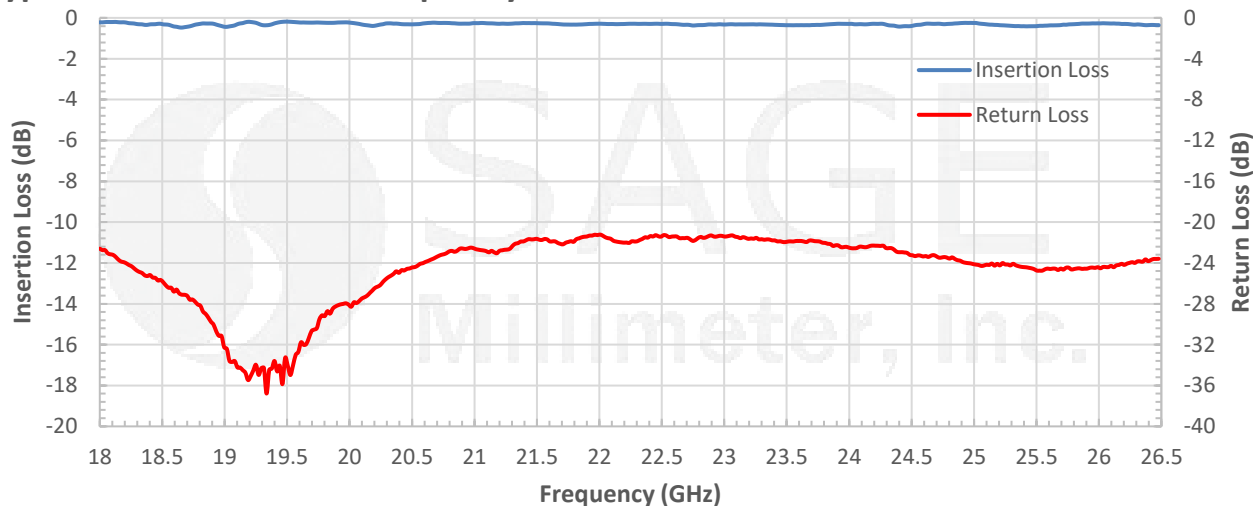
### Mechanical Specifications:

Item	Specification
Waveguide Port	WR-42 Waveguide with UG-595/U Flange
Coaxial Port	2.92 mm (K) Female for Model Number: SWC-42KF-R1
Coaxial Port	2.92 mm (K) Male for Model Number: SWC-42KM-R1
Housing Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Size	0.85" (L) x 0.88" (S)
Outline	WC-KR

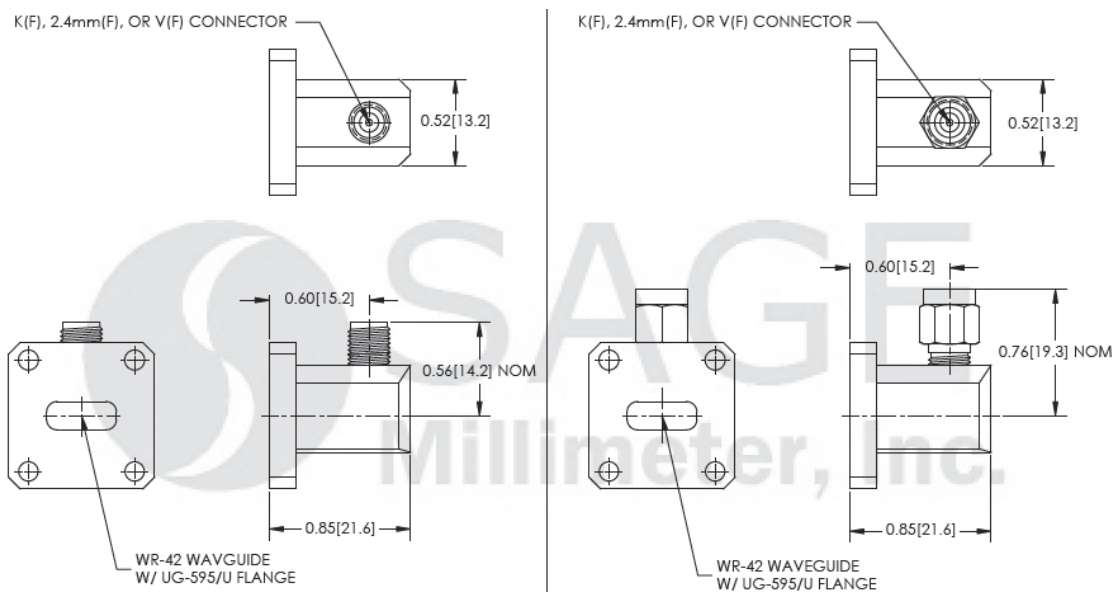


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### Typical Performance vs. Frequency



### 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.

#### 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.**

