



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

### Description:

Models **SWC-42SF-R1** and **SWC-42SM-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 SMA coax connector. The end launch (180°) versions are offered under model numbers SWC-42SF-E1 and SWC-42SM-E1.



### Features:

- Broad Band Coverage
- Lower Insertion Loss
- Higher Return Loss
- 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		17 dB	
Power Handling			50 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

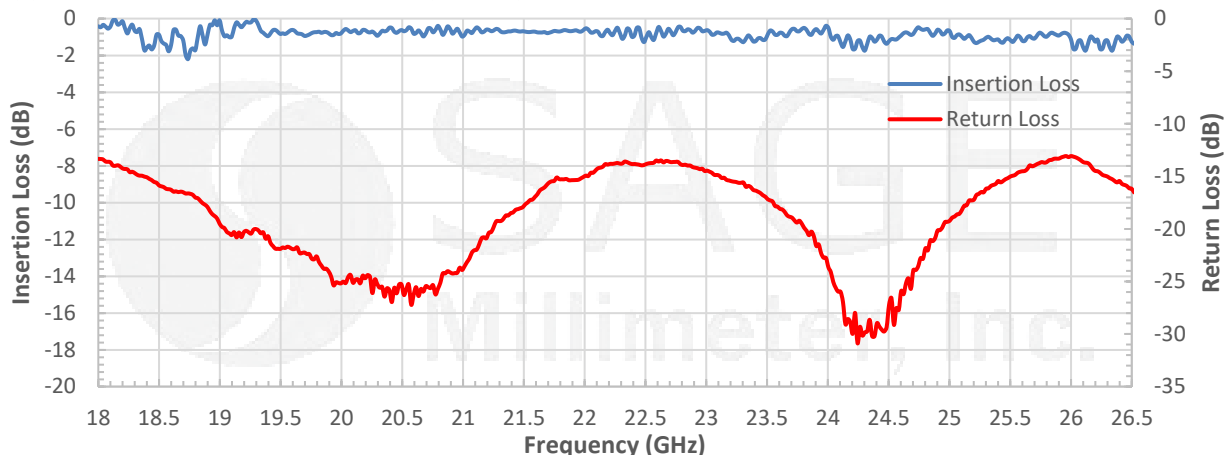
### Mechanical Specifications:

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

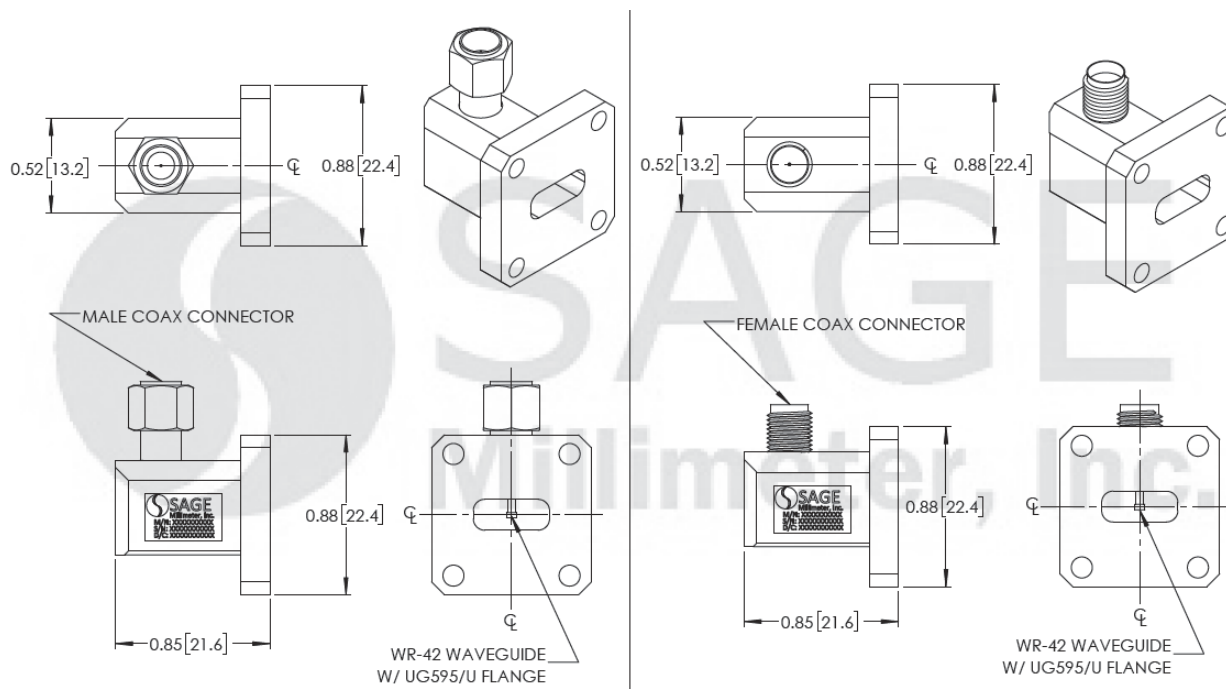


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### Typical Performance vs. Frequency (Back to Back)



**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 ± 0.15 inch-pounds (0.90 ± 0.02 Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-U3, is highly recommended.**



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