



K-Band Waveguide to SMA Connector Adapter, End Launch

Description:

Models **SWC-42SF-E1** and **SWC-42SM-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 SMA coax connector. The right angle (90°) versions are offered under model numbers SWC-42SF-R1 and SWC-42SM-R1.



Features:

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

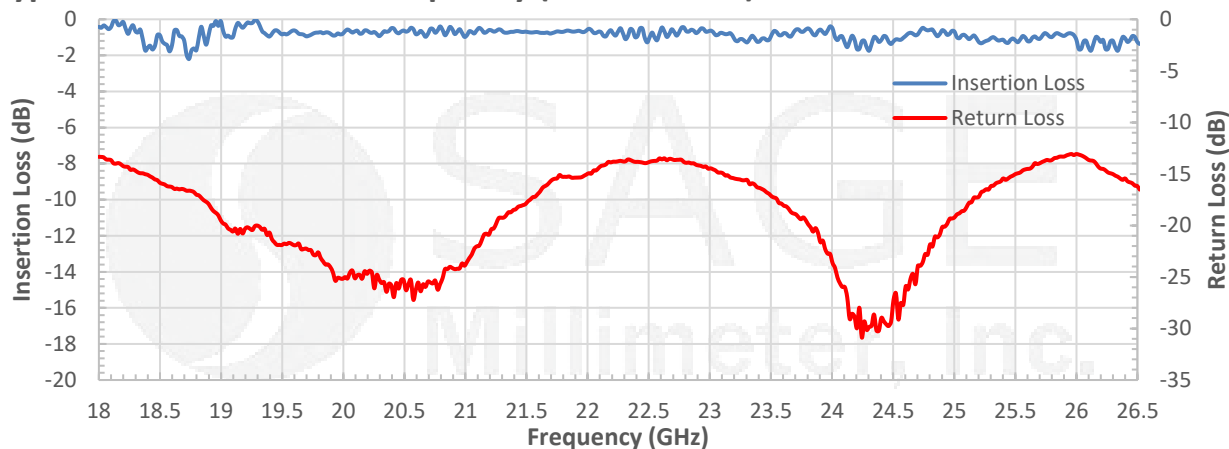
Mechanical Specifications:

Item	Specification
Waveguide Port	WR-42 Waveguide with UG-595/U Flange
Coaxial Port	SMA Female for Model Number: SWC-42SF-E1
Coaxial Port	SMA Male for Model Number: SWC-42SM-E1
Housing Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Size	0.59" (L) x 0.88" (S)
Outline	WC-KE

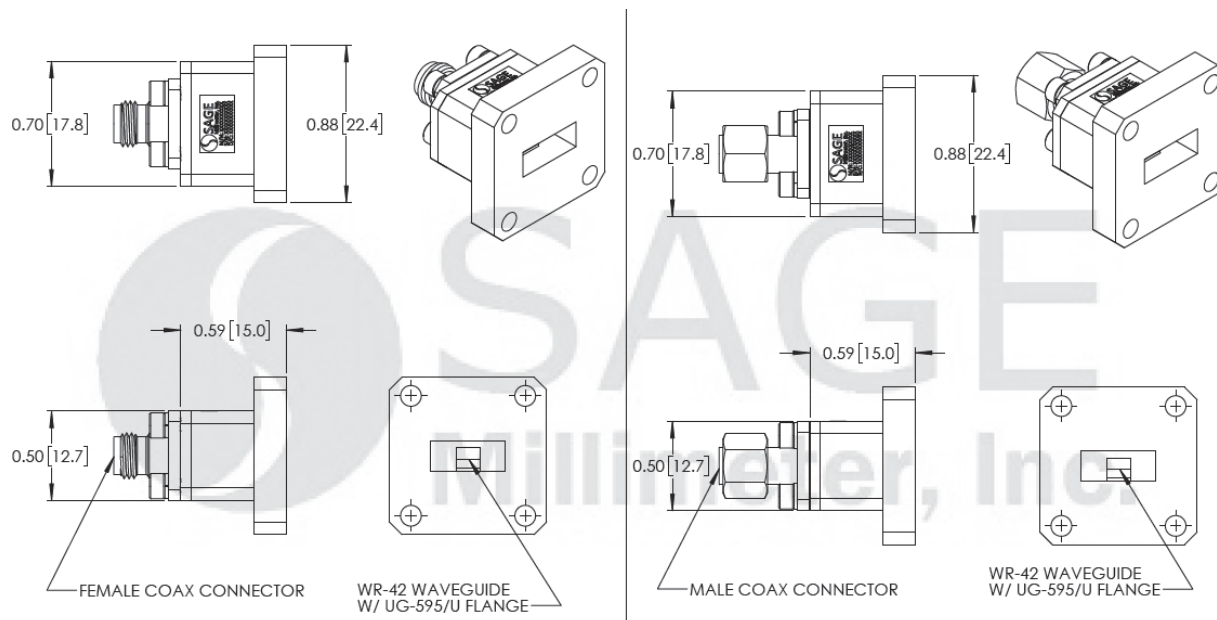


K-Band Waveguide to SMA Connector Adapter, End Launch

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, 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.**

