



K-Band Waveguide to K Connector Adapter, Non-Standard UBR220 Flange, End Launch

Description:

Models **SWC-42KF-E1-U220** and **SWC-42KM-E1-U220** are end launch (180°) K-Band waveguide to coax adapters with a UBR220 flange 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.



Features:

- Full Waveguide Band Coverage
- Lower Insertion Loss and High Return Loss
- Instrumentation Grade
- DC Short Circuit

Applications:

- Test Lab
- Instrumentations
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	18 GHz		26.5 GHz
Insertion Loss*		0.3 dB	0.4 dB
Return Loss	17 dB	20 dB	
Power Handling			50 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

*Insertion loss is tested back-to-back with a male and female adapter, and the result is divided by 2

Mechanical Specifications:

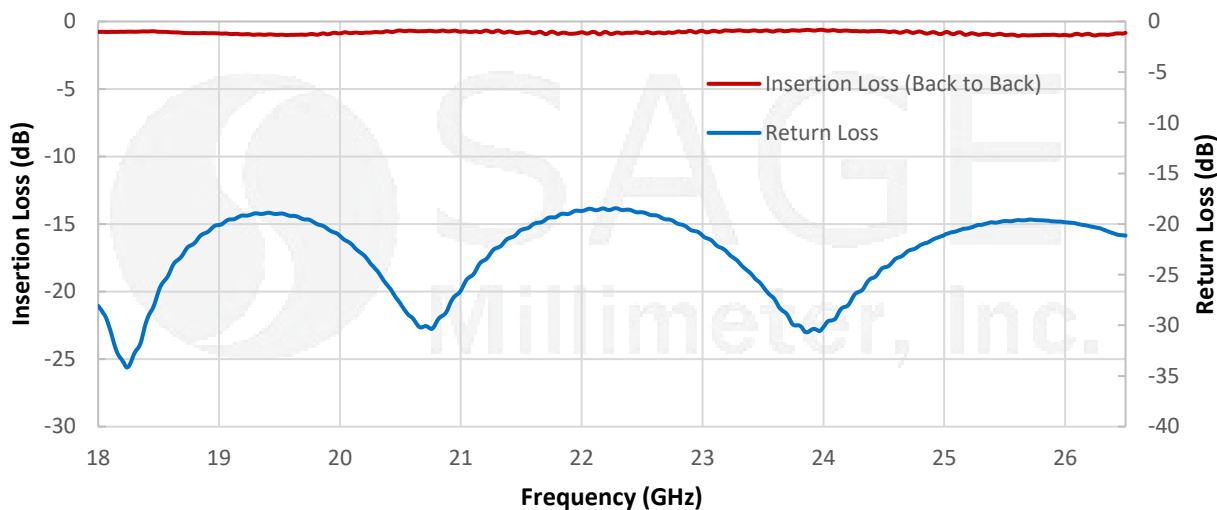
Item	Specification
Waveguide Port	WR-42 Waveguide with Non-Standard UBR220 Flange
Coaxial Port	2.92 mm (K) Female for Model Number: SWC-42KF-E1-U220
Coaxial Port	2.92 mm (K) Male for Model Number: SWC-42KM-E1-U220
Housing Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Size	0.97" (L) x 0.88" (S) for Model Number: SWC-42KF-E1-U220
Size	1.10" (L) x 0.88" (S) for Model Number: SWC-42KM-E1-U220
Outline	WC-KE-U220



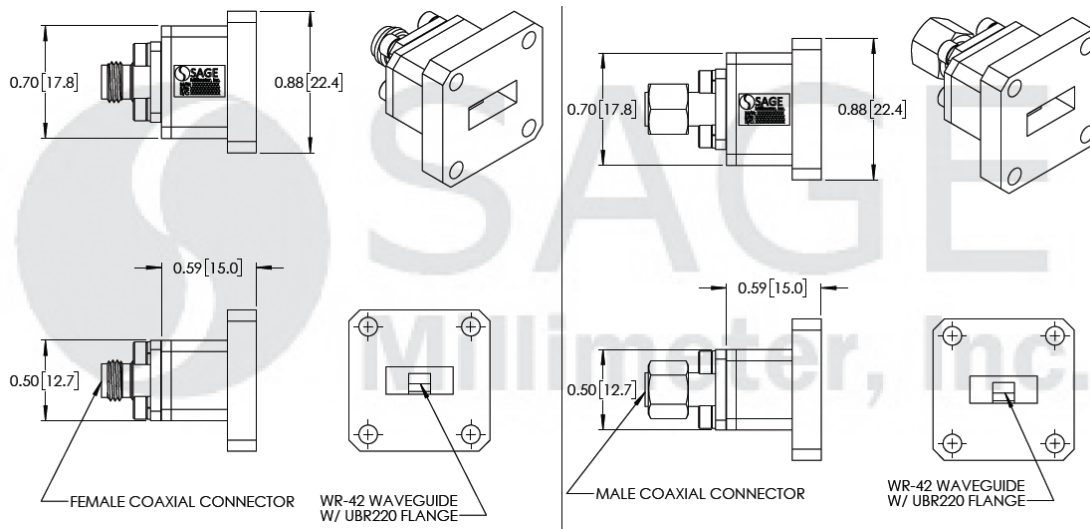


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Typical Insertion Loss & Return Loss vs. Frequency (Back to Back)



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-S1, is highly recommended.**

