

Q-Band Waveguide to 2.4 mm Connector Adapter, End Launch, Non-Standard Return Loss

Description:

Models SWC-222F-E1-RL22 and SWC-222M-E1-RL22 are end launch (180°) Q-Band waveguide to coax adapters that cover the frequency range of 33 to 50 GHz. The adapters 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 2.4 mm coax connector. The adapter has non-standard 22 dB return loss. The right angle (90°) versions are offered under model numbers SWC-222F-R1-RL22 and SWC-222M-R1-RL22.



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	33 GHz		50 GHz
Insertion Loss		0.3 dB	
Return Loss	20 dB	22 dB	
Power Handling			40 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

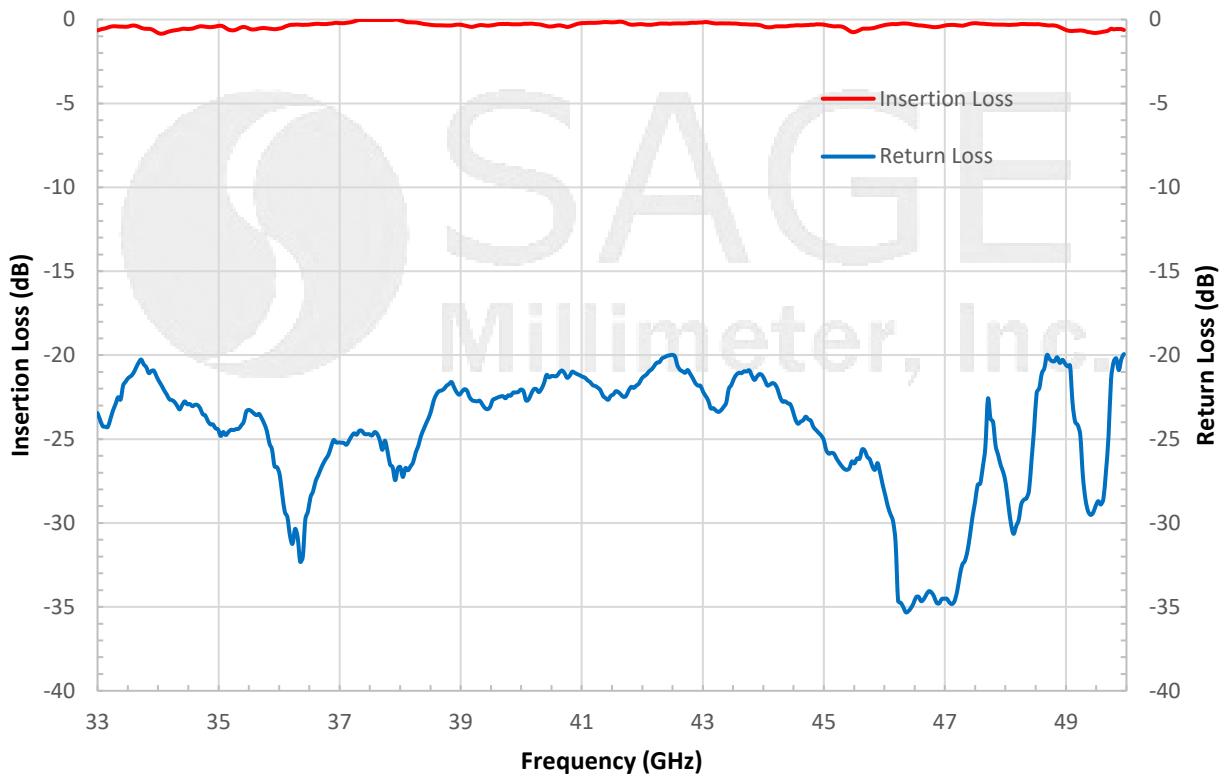
Mechanical Specifications:

Item	Parameter
Waveguide	WR-22 with UG383/U Flange
Coaxial	2.4 mm (K) Female for Model Number: SWC-222F-E1-RL22
Coaxial	2.4 mm (K) Male for Model Number: SWC-222M-E1-RL22
Housing Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Size	0.64" (L) x 1.13" (Ø)
Outline	WC-QE

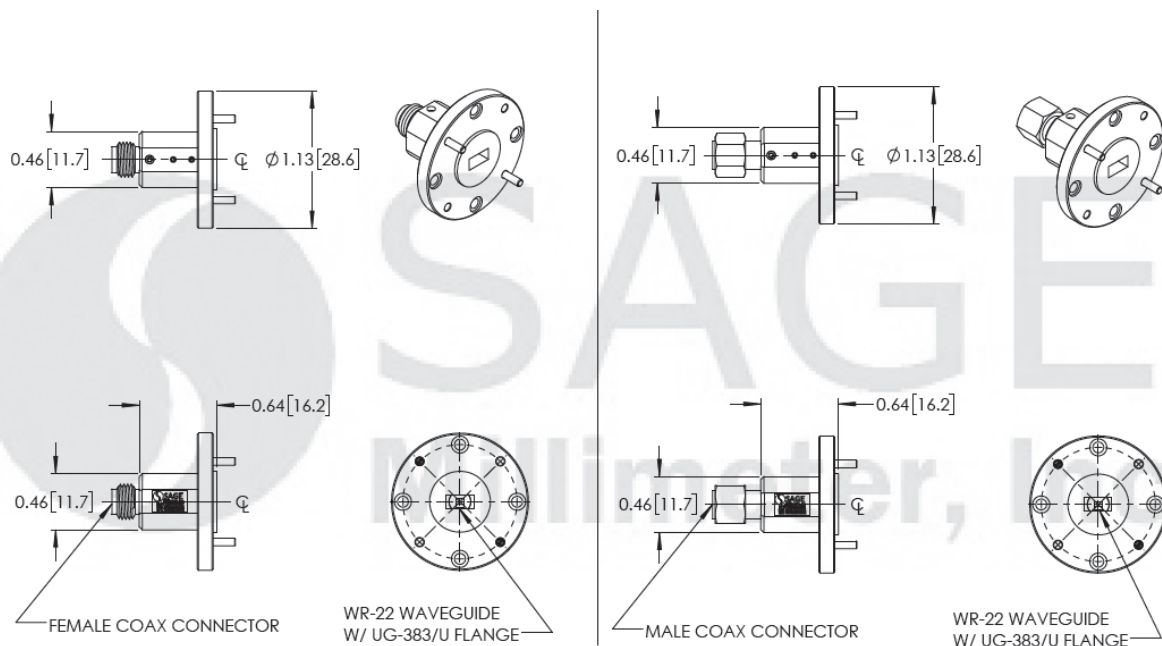


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Typical Insertion Loss and Return Loss vs. Frequency



Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



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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.**

