



Q-Band Waveguide to 2.4 mm Connector Adapter, End Launch, UG-599/U Flange

Description:

Models **SWC-222F-E1-599** and **SWC-222M-E1-599** are end launch (180°) Q-Band waveguide to coax adapters with a UG-599/U style square flange that cover the frequency range of 33 to 50 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 2.4 mm coax connector. The right angle (90°) versions are offered under model numbers **SWC-222F-R1-599** and **SWC-222M-R1-599**.



Features:

- Broad Band Coverage
- Low 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*		0.4 dB	0.7 dB
Return Loss	16 dB	18 dB	
Power Handling			40 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; the result is divided by 2.

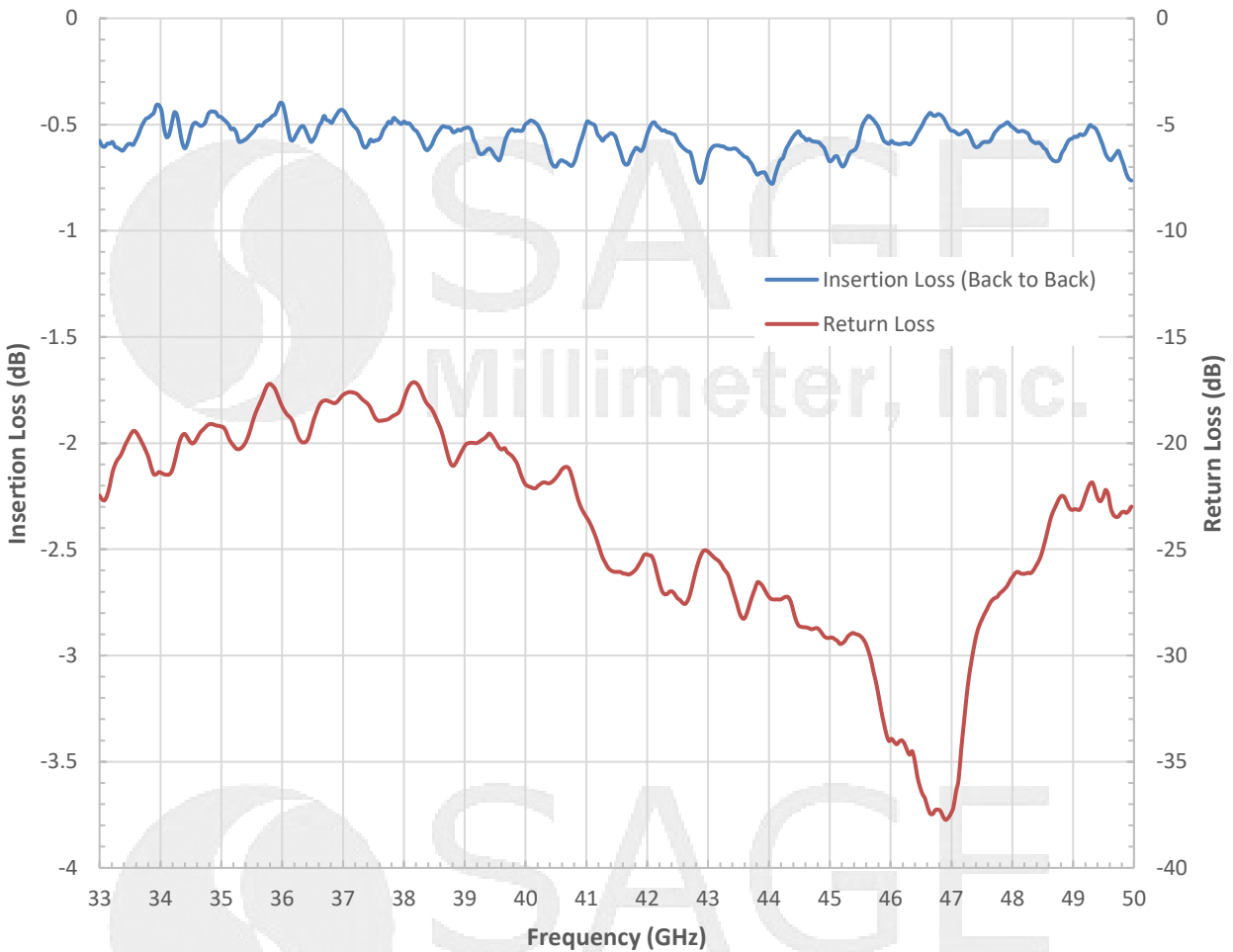
Mechanical Specifications:

Item	Parameter
Waveguide Port	WR-22 Waveguide with UG-599/U Flange
Coaxial Port	2.4 mm Female for Model Number: SWC-222F-E1-599
	2.4 mm Male for Model Number: SWC-222M-E1-599
Material	Aluminum
Finish	Gold Plated
Weight	0.3 Oz
Outline	WC-QE-599

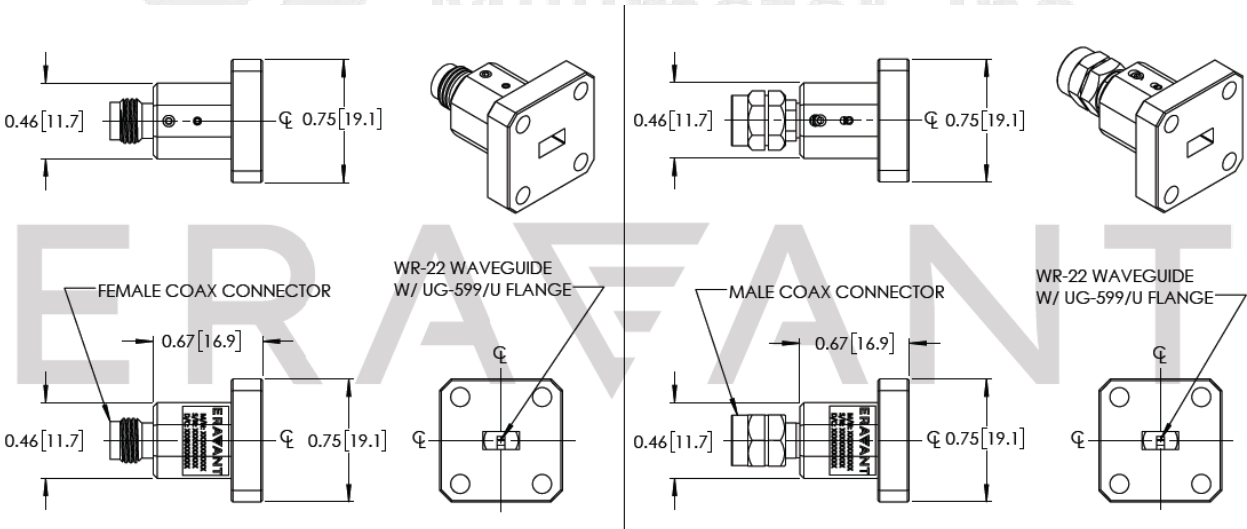


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Typical Insertion Loss and Return Loss vs Frequency



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-S1, is highly recommended.**

