



X-Band Waveguide to SMA Connector Adapter, End Launch

Description:

Models **SWC-90SF-E5** and **SWC-90SM-E5** are end launch (180°) X-Band waveguide to SMA coax adapters that cover the frequency range of 8.2 to 12.4 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-90SF-R5** and **SWC-90SM-R5**.



Features:

- Full Waveguide Band Coverage
- Low Insertion Loss
- Instrumentation Grade
- DC Short Circuit

Applications:

- Test Lab
- Instrumentation
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	8.2 GHz		12.4 GHz
Insertion Loss		0.3 dB	
Return Loss		20 dB	
Power Handling			150 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

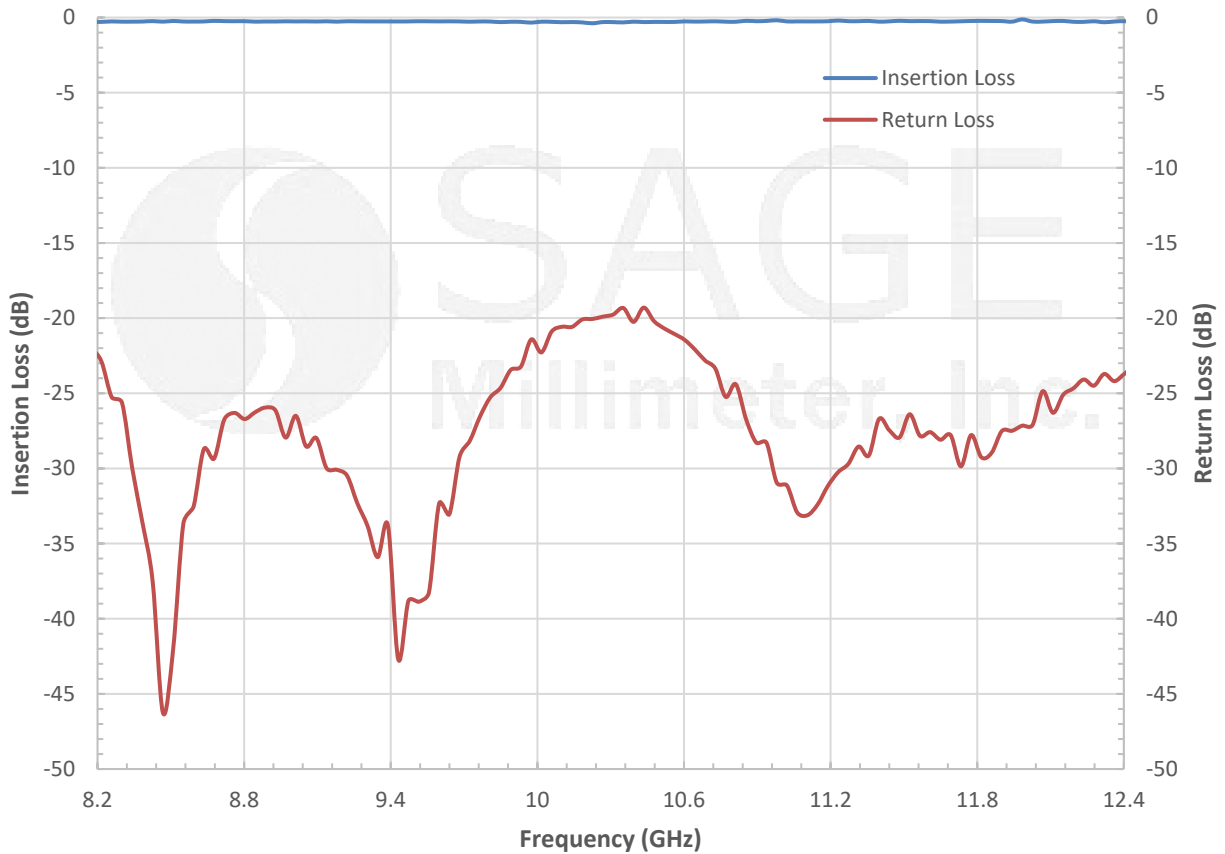
Item	Specification
Waveguide Port	WR-90 Waveguide with UG-39/U Flange
Coaxial Port	SMA (F) for Model Number: SWC-90SF-E5
	SMA (M) for Model Number: SWC-90SM-E5
Material	Aluminum
Inner Finish	Silver Plated
Outer Finish	Black Paint
Weight	2.0 oz.
Outline	WC-XE-BX1



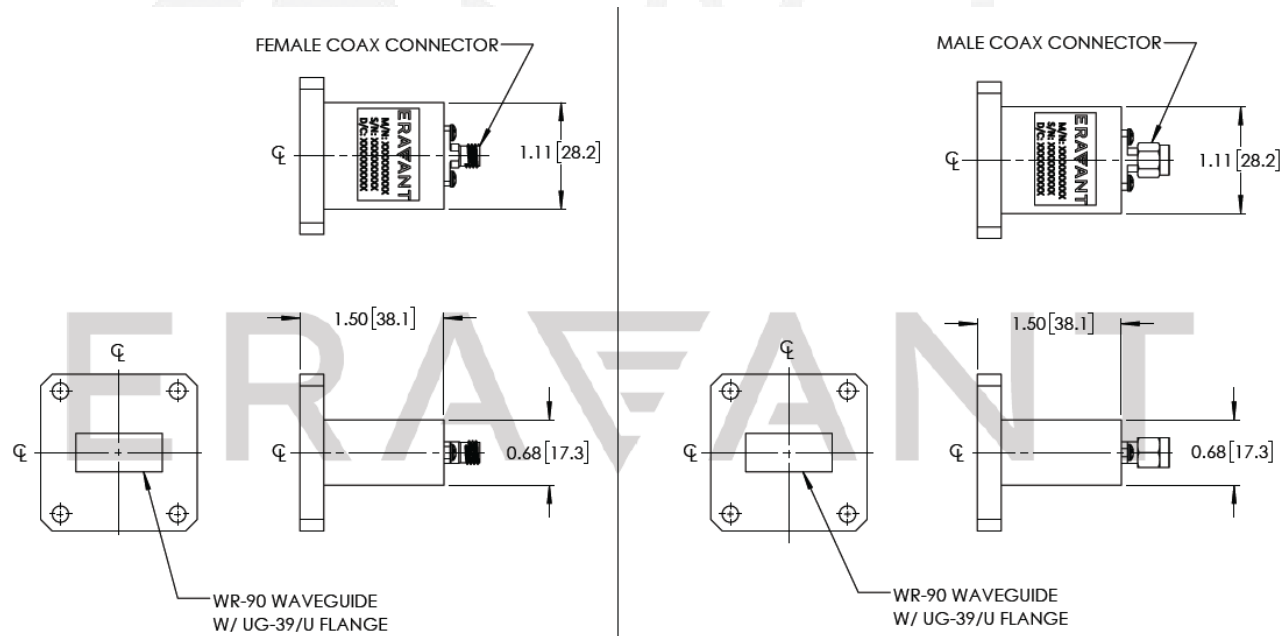


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Typical Insertion Loss and Return Loss vs Frequency



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, 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 possible device damage.
- 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.**

