

Q-Band Waveguide to 2.4 mm Connector Adapter, Weather Resistant, Right Angle

SWC-222F-R1-WR is a right angle (90°) Q-band waveguide to coax adapter that covers the frequency range of 33 to 50 GHz. It is 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. This adapter is also specially designed to be weather resistant.

**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			50 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
RF Ports	WR-22 Waveguide with UG-383/U Grooved Anti-Cocking Flange
Coaxial	2.4 mm Female
Housing Material	Aluminum
Finish	Chem Film
Outline	WC-QR-A-WR

ECCN

EAR99

FEATURES

- Weather Resistant
- 33 to 50 GHz Coverage
- Lower Insertion Loss and Return Loss
- Instrumentation Grade
- DC Open Circuit

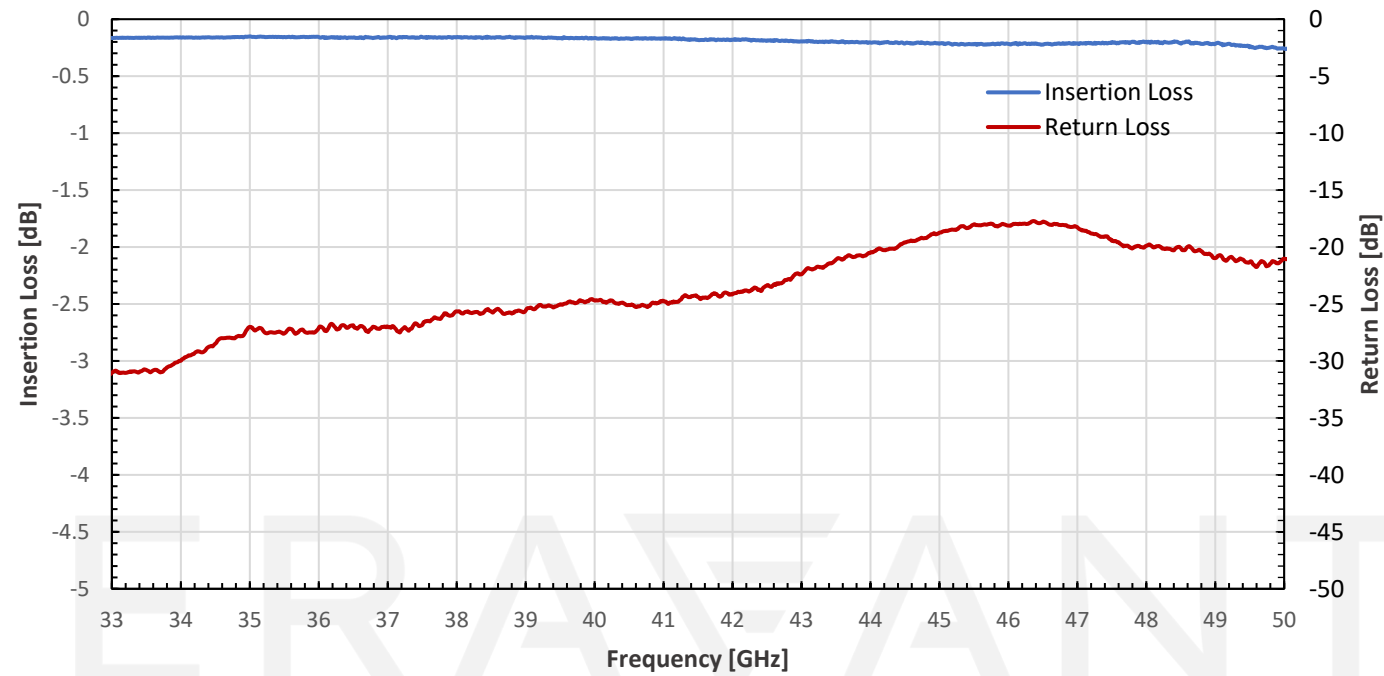
APPLICATIONS

- Test Lab
- Instrumentations
- Sub-assemblies

SUPPLEMENTAL DETAILS

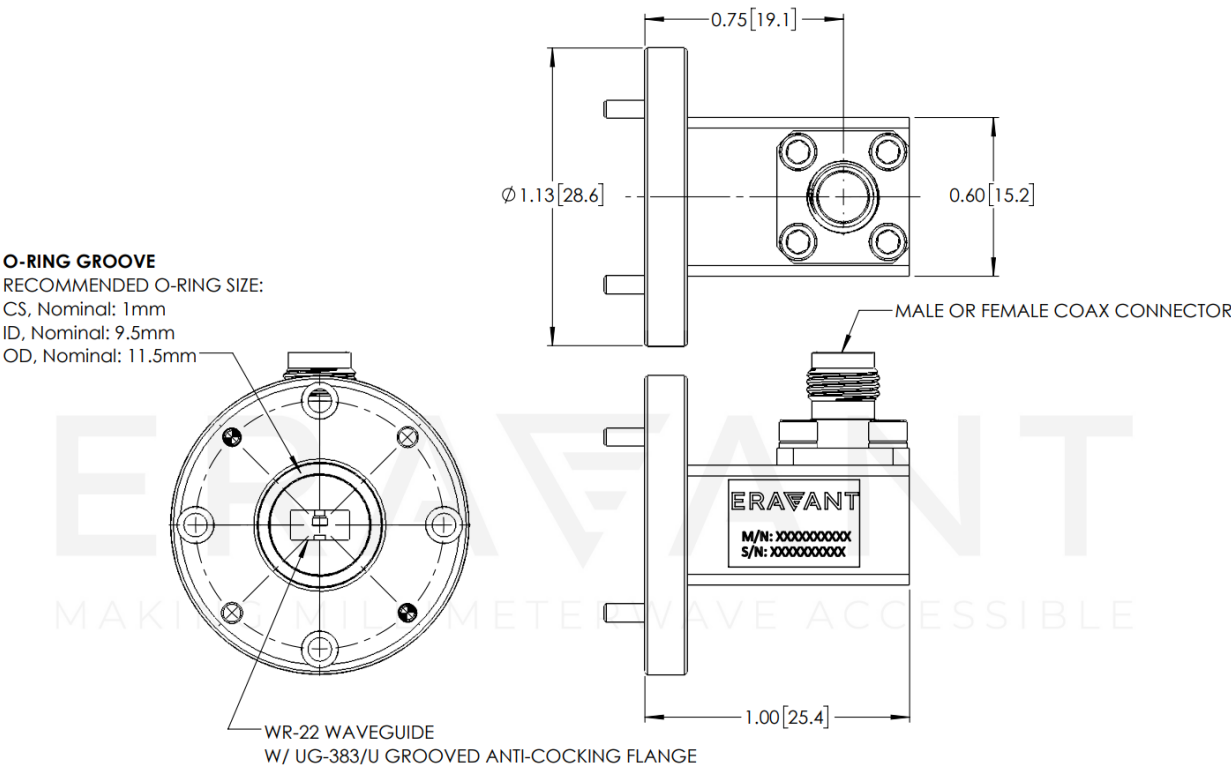
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Typical Performance vs. Frequency



Mechanical Outline:

Unless otherwise specified, all dimensions are in inches [millimeters]



NOTE:

- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- On condition that simulated test data is provided, actual measured data may slightly vary.

CAUTION:

- Any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.
- For 1 mm connectors proper torque should be applied: 4.0 ± 0.15 inch-pounds (0.45 ± 0.02 Nm). Torque wrench model SCH-06004-S1 is highly recommended.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended

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