

Q-Band Waveguide to 1.85 mm Connector Adapter, End Launch, Thermal Vacuum Safe

SWC-22VF-E1-V-WPis an end launch (180°) Q-Band waveguide to coax adapter that covers the frequency range of 33 to 50 GHz. The adapter is designed and manufactured for instrumentation grade quality and thermal compatibility, allowing for an efficient transition between the rectangular waveguide and 1.85 mm (V) coax connector. The right angle (90°) version are offered under model numbers SWC-22VF-R1-V.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	33 GHz		50 GHz
Insertion Loss		0.4 dB	0.7 dB
Return Loss	14 dB	18 dB	
Power Handling			40 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-45°C		+85°C

Mechanical Specifications:

Item	Specification	
Waveguide	WR-22 Waveguide with UG-383/U Flange	
Coax Port	1.85 mm (V) Female	
Housing Material	Aluminum	
Finish	Gold Plated	
Weight	0.4 Oz	
Outline	WC-QE	

ECCN

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FEATURES

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

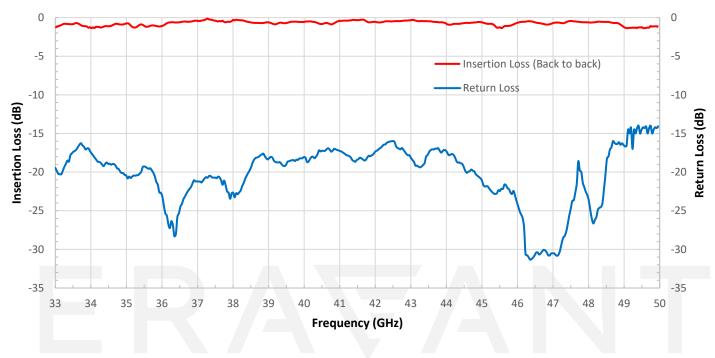
APPLICATIONS

- Test Lab
- Instrumentations
- Sub-assemblies

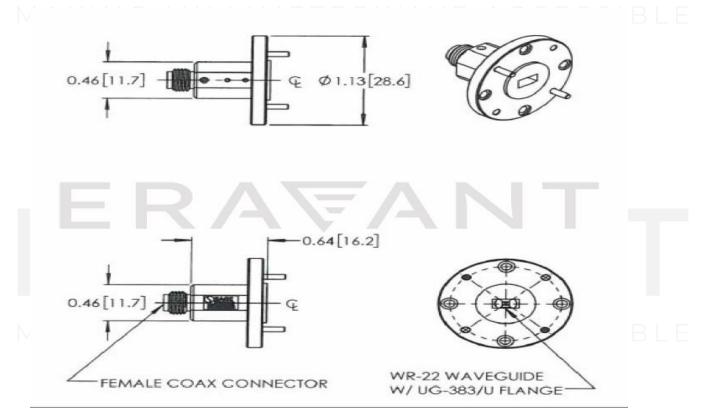
SUPPLEMENTAL DETAILS



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



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 slightly from unit to unit. All testing is performed under +25 °C room temperature.
- Eravant reserves the right to change the information presented without notice.

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 <u>SCH-06004-S1</u> 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 <u>SCH-08008-S1</u> is highly recommended.

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