

## SWC-22KF-E1-599-WP

Q-Band Waveguide to 2.92 mm Coax Adapter,  
End Launch

**SWC-22KF-E1-599-WP** is an end launch (180°) Q-Band waveguide to coax adapter with a square flange (UG-599/U-M) that covers the frequency range of 33 to 43 GHz. The adapter is designed and manufactured for panel mount instrumentation applications and allows for an efficient transition between the rectangular waveguide and 2.92 mm (K) coax connector. The right angle (90°) version is offered under model number SWC-22KF-R1-599.



## Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	33 GHz		43 GHz*
Insertion Loss**		1 dB	
Return Loss		12 dB	
Power Handling			40 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

\*Operating Frequency is limited by the 2.92 mm connector.

\*\*Insertion loss is tested back-to-back with a male and female adapter. The result is divided by 2.

## Mechanical Specifications:

Item	Specification
Waveguide Port	WR-22 Waveguide with UG-599/U-M Square Flange
Coax Port	2.92 mm (K) Female
Housing Material	Aluminum
Finish	Gold Plated
Weight	0.3 Oz
Outline	WC-QR-599

## ECCN

EAR99

## FEATURES

- 33 to 43 GHz Coverage
- Low Insertion Loss and VSWR
- Instrumentation Grade
- DC Open Circuit

## APPLICATIONS

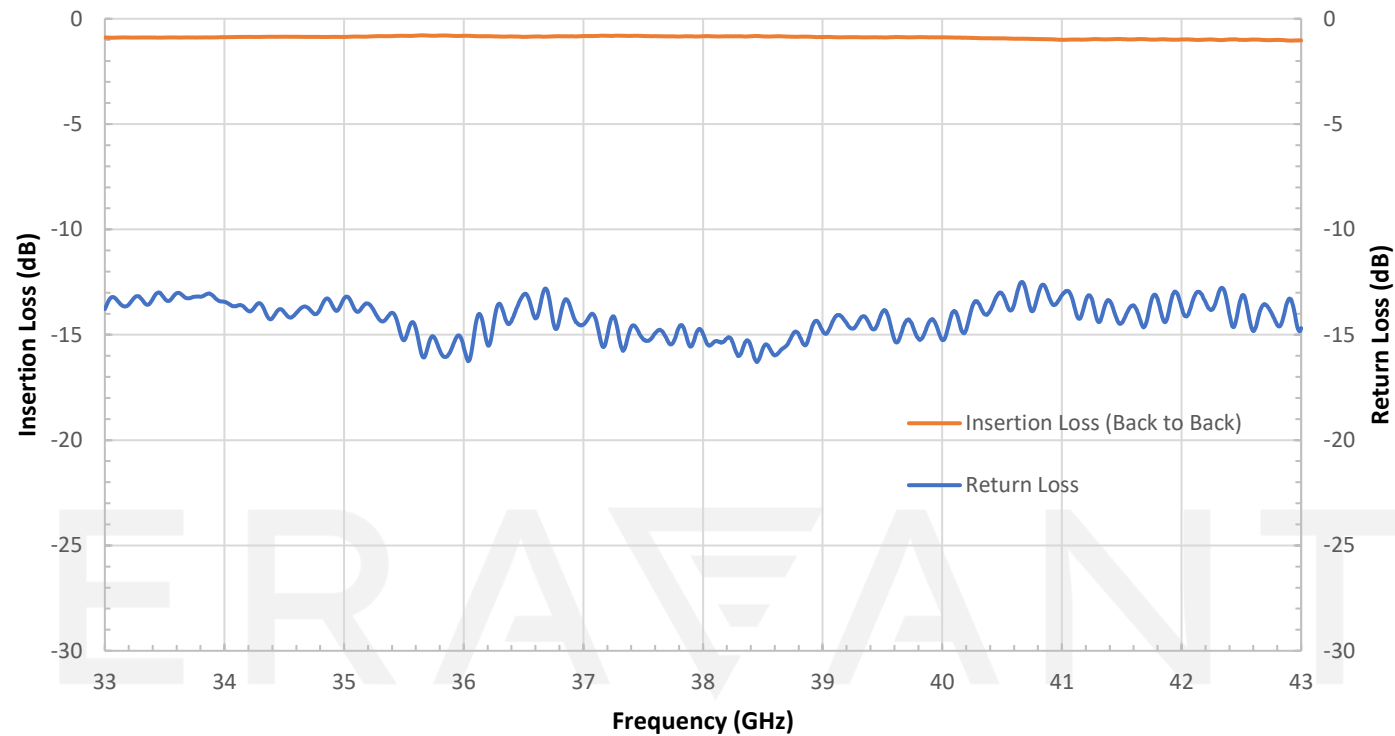
- Test Lab
- Instrumentations
- Sub-assemblies

## SUPPLEMENTAL DETAILS

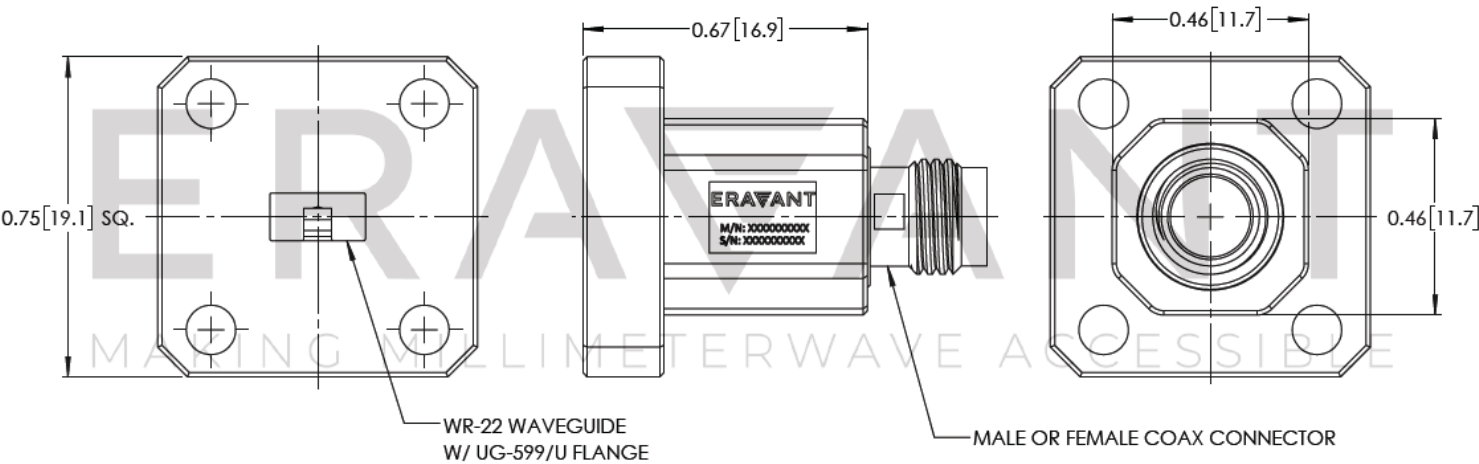


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Typical Return Loss & Back to Back Insertion Loss vs Frequency



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



**NOTE:**

- Data provided 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:  $4.0 \pm 0.15$  inch-pounds ( $0.45 \pm 0.02$  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:  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm). Torque wrench model SCH-08008-S1 is highly recommended.

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