

## SWC-22KF-R1

### Q-Band Waveguide to 2.92 mm Connector Adapter, Right Angle

**SWC-22KF-R1** is a right angle (90°) Q-band waveguide to coax adapter that covers the frequency range of 33 to 43 GHz. It is 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 2.92 mm (K) coax connector. The end launch (180°) versions are offered under model numbers [SWC-22KF-E1](#) and [SWC-22KM-E1](#).



#### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	33 GHz		43 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

\* 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
RF Ports	WR-22 Waveguide with UG-383/U-M Anti-Cocking Flange
Coaxial	2.92 mm (K) Female
Housing Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Size	1.00" (L) x 1.13" (Ø)
Outline	WC-QR-A

#### ECCN

EAR99

#### FEATURES

- 33 to 43 GHz Coverage
- Lower Insertion Loss and Return Loss
- Instrumentation Grade
- DC Open Circuit

#### APPLICATIONS

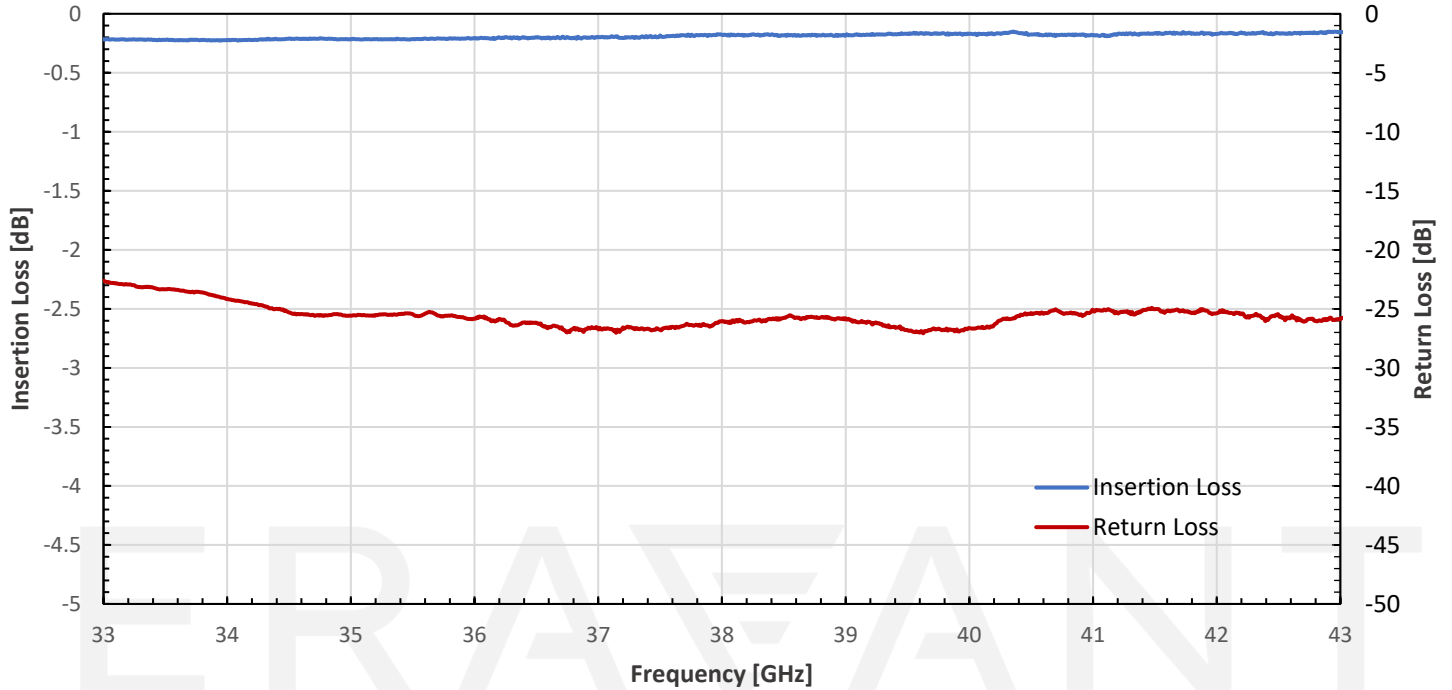
- Test Lab
- Instrumentations
- Sub-assemblies

#### SUPPLEMENTAL DETAILS



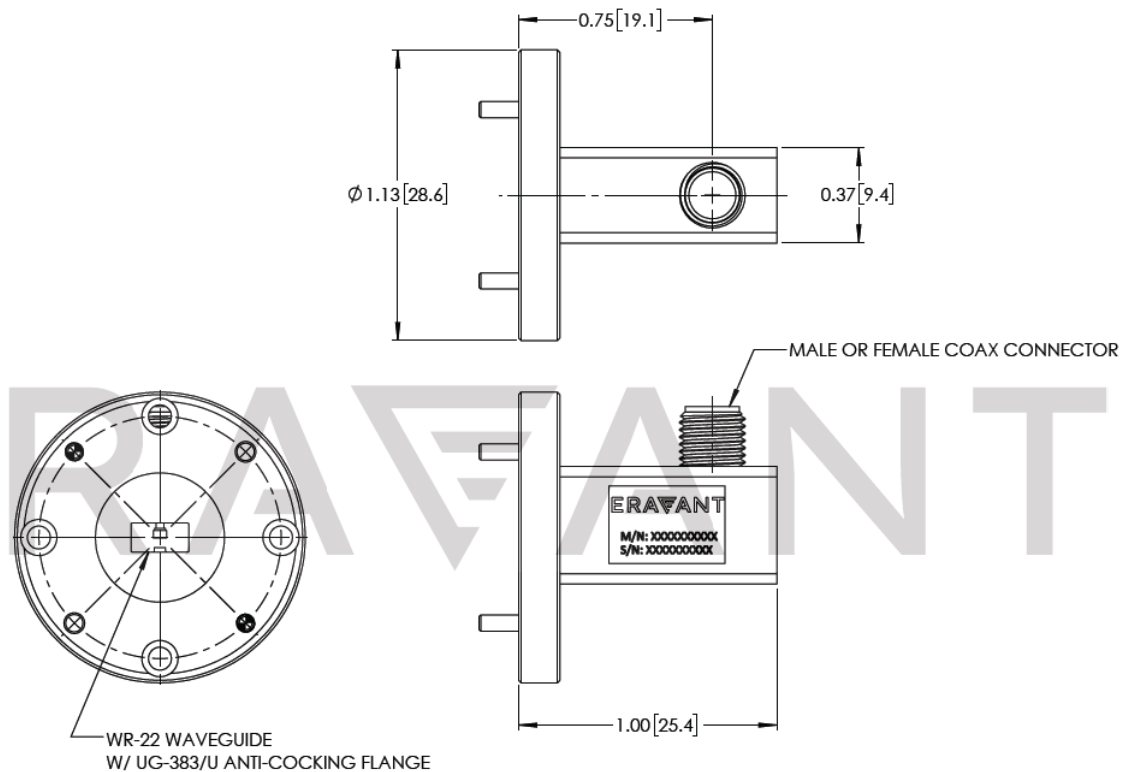
## SWC-22KF-R1

### 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:  $4.0 \pm 0.15$  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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