### K-Band Waveguide to 2.92mm Connector Adapter, Right Angle, Thermal Vacuum Safe

**Models SWC-42KF-R1-V and SWC-42KM-R1-V** are right angle (90°) K-band waveguide to coax adapters that cover the frequency range of 18 to 26.5 GHz. They are designed and manufactured for instrumentation grade quality and thermal vacuum compaibility, allowing for an efficient transition between the rectangular waveguide and 2.92 mm (K) coax connector.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	18 GHz		26.5 GHz
Insertion Loss		0.3 dB	0.4 dB
Return Loss	17 dB	20 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

### **Mechanical Specifications:**

Item	Specification		
Waveguide	WR-42 Waveguide with UG-595/U Flange		
Coaxial Port	2.92 mm (K) Female for Model Number: SWC-42KF-R1-V		
Coaxial Port	2.92 mm (K) Male for Model Number: SWC-42KM-R1-V		
Material	Aluminum		
Finish	Gold Plated		
Weight	0.4 Oz		
Outline	WC-KR		

#### **ECCN**

EAR99

#### **FEATURES**

- Thermal Vacuum Safe
- · Full Band Coverage
- Lower Insertion Loss and VSWR
- Instrumentation Grade
- DC Open Circuit

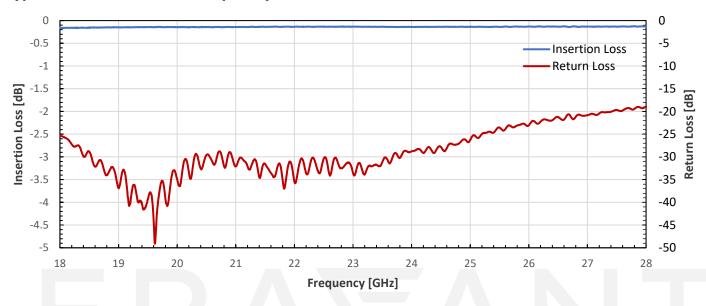
#### **APPLICATIONS**

- Thermal Vacuum Chamber
- Test Lab
- Instrumentations
- Sub-assemblies

#### SUPPLEMENTAL DETAILS

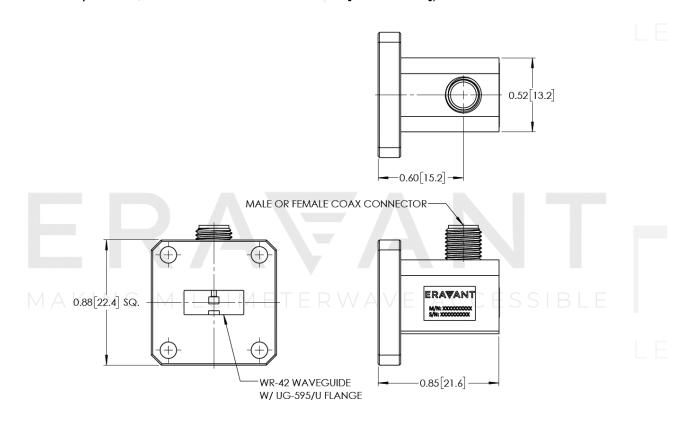


## **Typical Performance vs. Frequency**



#### **Mechanical Outline:**

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



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#### 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.
- 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 1.35 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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