

# Ka-Band Waveguide to K Connector Adapter, Right Angle

### **Description:**

Models SWC-28KF-R1 and SWC-28KM-R1 are right angle (90°) Ka-Band waveguide to coax adapters that cover the frequency range of 26.5 to 40 GHz. They 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-28KF-E1 and SWC-28KM-E1.



### **Features:**

- Broad Band Coverage
- Lower Insertion Loss and VSWR
- Instrumentation Grade
- DC Open Circuit

# **Applications:**

- Test Lab
- Instrumentations
- Sub-assemblies

### **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Frequency Range	26.5 GHz		40.0 GHz
Insertion Loss		0.25 dB	
Return Loss		20 dB	
Power Handling			20 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

# **Mechanical Specifications:**

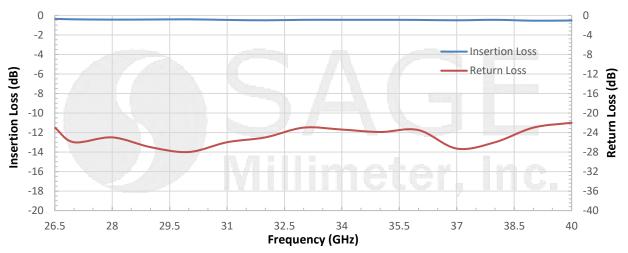
Item	Specification	
Waveguide	WR-28 with UG599/U Flange	
Coaxial	2.92 mm (K) Female for Model Number: SWC-28KF-R1	
Coaxial	2.92 mm (K) Male for Model Number: SWC-28KM-R1	
Size	1.00" (L) x 0.75" (S)	
Housing Material	Aluminum	
Finish	Gold Plated	
Weight	0.4 Oz	
Outline	WC-AR	



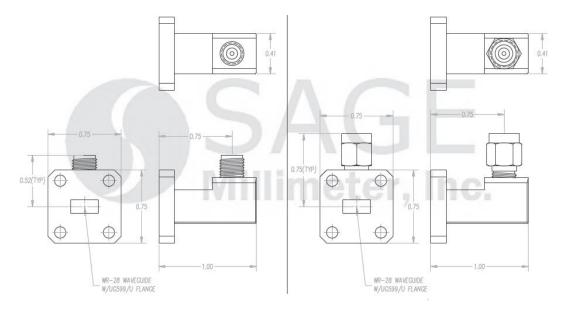
www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com



# Typical Insertion Loss and Return Loss vs. Frequency (Back to Back)



## Mechanical Outline: (Unless otherwise specified, all dimensions are in inches)



### Note:

- All data are presented using a limited sample lot, actual data may vary unit to unit.
- All testing was performed under 25°C case temperature.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

#### **Caution:**

- Any foreign objects in the waveguide will cause performance degradation and may damage the adapter.
- Proper torque,  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm), should be applied. **SAGE Millimeter** torque wrench, model SCH-08008-U3, is highly recommended.



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