

# Ka-Band Waveguide to 2.4 mm Connector Adapter, End Launch

### **Description:**

Models SWC-282F-E1 and SWC-282M-E1 are end launch (180°) Ka-Band waveguide to 2.4 mm 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 2.4 mm coax connector. The right angle (90°) versions are offered under model numbers SWC-282F-R1 and SWC-282M-R1.



#### **Features:**

- Broad Band Coverage
- Lower Insertion Loss and VSWR
- Instrumentation Grade
- DC Short 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	A A	20 dB	
Power Handling	( ' // N	//	50 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

# **Mechanical Specifications:**

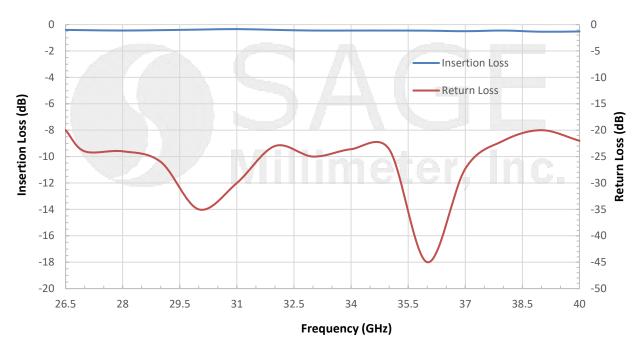
Item	Specification	
Waveguide	WR-28 with UG599/U Flange	
Coaxial	2.4 mm Female for Model Number: SWC-282F-E1	
Coaxial	2.4 mm Male for Model Number: SWC-282M-E1	
Size	0.91" (L) x 0.75" (S) for Model Number: SWC-282F-E1	
Size	0.99" (L) x 0.75" (S) for Model Number: SWC-282M-E1	
Housing Material	Aluminum	
Finish	Gold Plated	
Weight	0.2 Oz	
Outline	WC-AE	



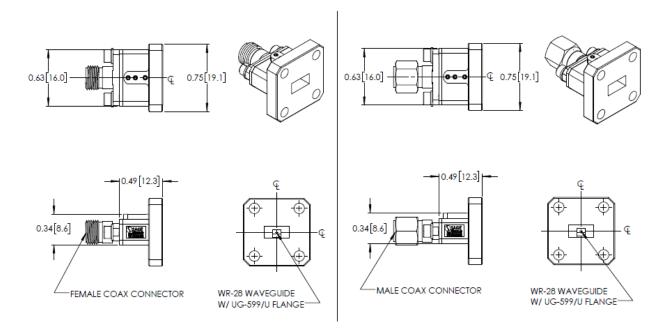
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# Typical Insertion Loss and Return Loss vs. Frequency (Back to Back)



### 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 unit to unit.
- All testing was performed under +25°C case temperature.



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#### Caution:

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





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