

# SWC-28KF-E1-ML and SWC-28KM-E1-ML

## Ka-Band Waveguide to Coax Adapter, End Launch

**SWC-28KF-E1-ML and SWC-28KM-E1-ML** is a military grade end launch (180°) Ka-Band waveguide to coax adapter that cover the frequency range of 26.5 to 40 GHz. It is designed and manufactured for military 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.



### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	26.5 GHz		40 GHz
Insertion Loss		0.35 dB	0.50 dB
Return Loss	17 dB	20 dB	
Power Handling			50 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-55°C		+85°C
Non-Condensing Relative Humidity	85% to 95%		

### Mechanical Specifications:

Item	Specification
Waveguide	WR-28 with UG-599/U Flange
Coaxial Connector	2.92 mm (K) Female for Model Number: SWC-28KF-E1-ML
	2.92 mm (M) Male for Model Number: SWC-28KM-E1-ML
Size (Excluding Coax Connector)	0.49" (L) x 0.75" (S)
Material	Aluminum
Finish	Chem Film with Gray Paint
Weight	0.3 Oz
Outline	WC-AE-ML

### ECCN

EAR99

### FEATURES

- Full Waveguide Band Coverage
- Lower Insertion and VSWR
- Military Grade
- DC Short Circuit

### APPLICATIONS

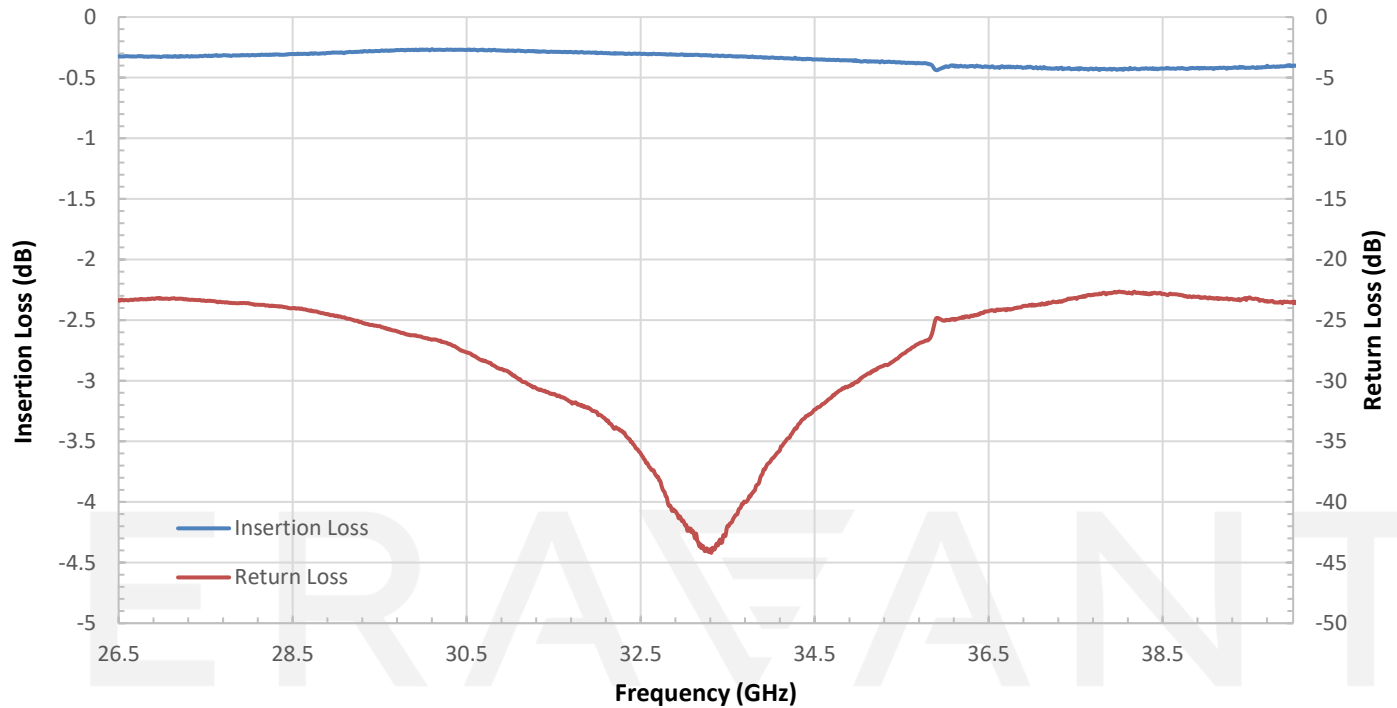
- Test Labs
- Instrumentations
- Communication Systems

### SUPPLEMENTAL DETAILS

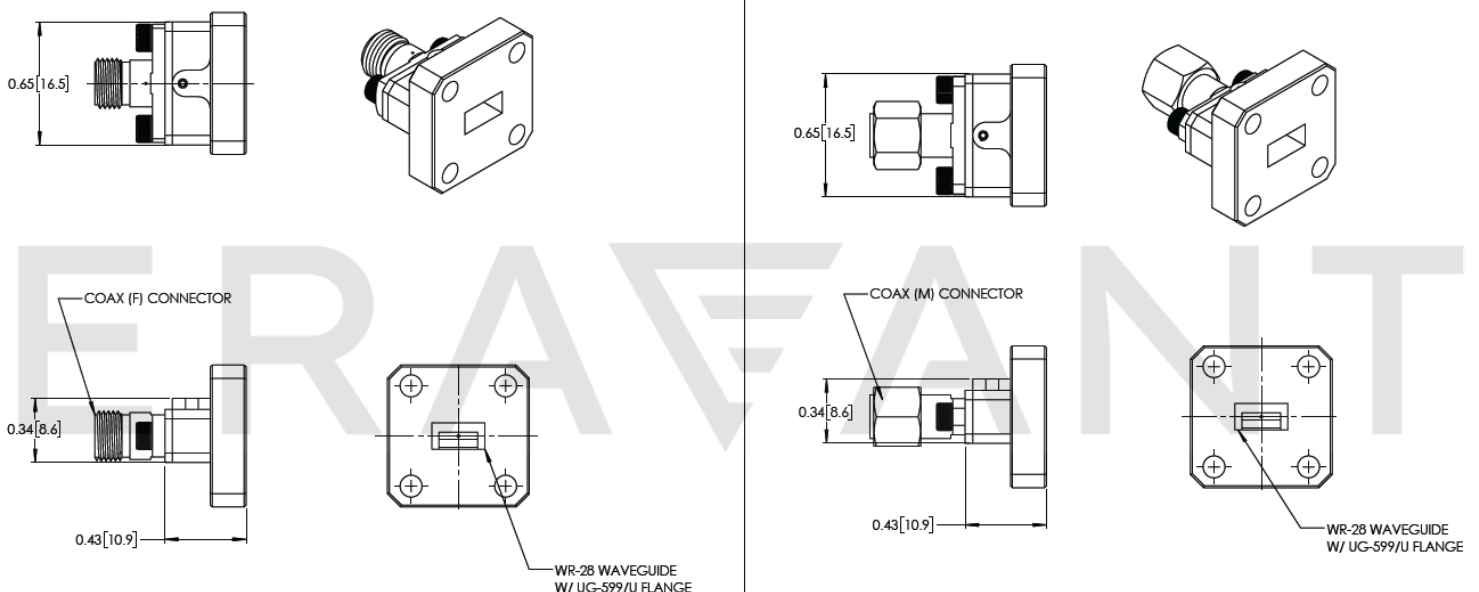


## SWC-28KF-E1-ML and SWC-28KM-E1-ML

### Typical Performance vs. Frequency



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



## SWC-28KF-E1-ML and SWC-28KM-E1-ML

**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:**

- If a waveguide is present, 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:  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm). Torque wrench model [SCH-08008-S1](#) is highly recommended.

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