SWC-42KF-E1-WR and SWC-42KM-E1-WR

K-Band Waveguide to Coax Panel Mount Adapter, End Launch

SWC-42KF-E1-WR and **SWC-42KM-E1-WR** are end launch (180°) K-Band waveguide to coax panel mount adapters that cover the frequency range of 18 to 26.5 GHz. They are designed and manufactured for panel mount instrumentation applications and allow for an efficient transition between the rectangular waveguide and 2.92 mm (K) coax connector. These adapters are also specially designed to be weather resistant.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	18.0 GHz		26.5 GHz
Insertion Loss		0.3 dB	0.4 dB
Return Loss	17 dB	20 dB	
Power Handling			50 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

^{*}Insertion loss is tested back-to-back with a male and female adapter, and the result is divided by 2

Mechanical Specifications:

Specification		
WR-42 with UG595/U Flange with O-Ring		
2.92 mm (K) Female for Model Number: SWC-42KF-E1-WR		
2.92 mm (K) Male for Model Number: SWC-42KM-E1-WR		
1.47" (L) x 1.46" (Ø) for Model Number: SWC-42KF-E1-WR		
1.60" (L) x 1.46" (Ø) for Model Number: SWC-42KM-E1-WR		
Aluminum		
Brass		
Gold Plated		
3.2 Oz		
WC-KE-WR		

ECCN

EAR99

FEATURES

- Full Waveguide Band Coverage
- Lower Insertion Loss and VSWR
- Instrumentation Grade
- DC Short Circuit
- · Weather Resistant

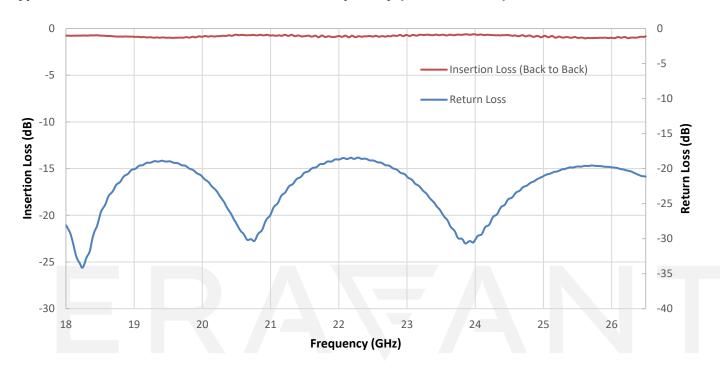
APPLICATIONS

- Test Labs
- Instrumentations
- Communication Systems

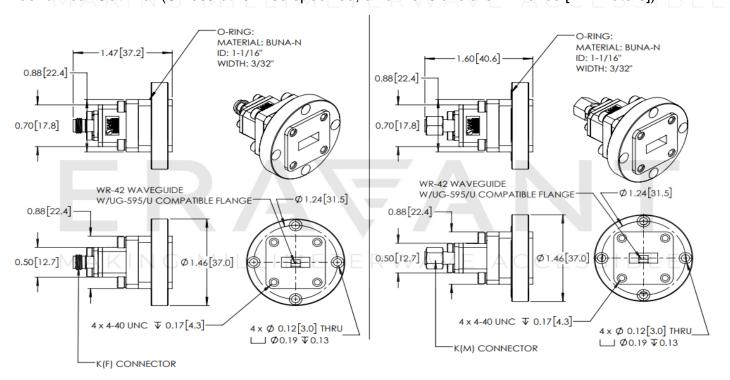
SUPPLEMENTAL DETAILS



Typical Insertion Loss & Return Loss vs. Frequency (Back to Back)



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:

- 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 ± 0.15 inch-pounds (0.90 \pm 0.02 Nm). Torque wrench model <u>SCH-08008-S1</u> is highly recommended.

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