

Ka-Band Waveguide to K Connector Adapter, Right Angle, Non-Standard Flange

SWC-28KM-R1-1530 is a right angle (90°) Ka-Band waveguide to coax adapters that cover the frequency range of 26.5 to 40 GHz. The waveguide port is WR-28 waveguide with a non-standard UG-1530/U square flange. It's designed and manufactured for instrumentation grade quality but offered at a commercial grade price, allowing for an efficient transition between the rectangular waveguide and male 2.92 mm (K) coax connector. The end launch (180°) versions is offered under model numbers SWC-28KM-E1-1530.



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	-40°C		+85°C

 $^{^{\}star}\text{Insertion}$ loss is tested back-to-back with a male and female adapter, the result is divided by 2.

Mechanical Specifications:

Item	Specification	
Waveguide Port	WR-28 Waveguide with a Non-Standard UG-1530/U Flange	
Coaxial	2.92 mm (k) Male Connector	
Housing Material	Aluminum	
Finish	Gold Plated	
Weight	0.4 Oz	
Size	1.00" (L) x 0.75" (S)	
Outline	WC-AR-1530	

ECCN

EAR99

FEATURES

- Broad Band Coverage
- Lower Insertion Loss High Return Loss
- Instrumentation Grade
- DC Open Circuit

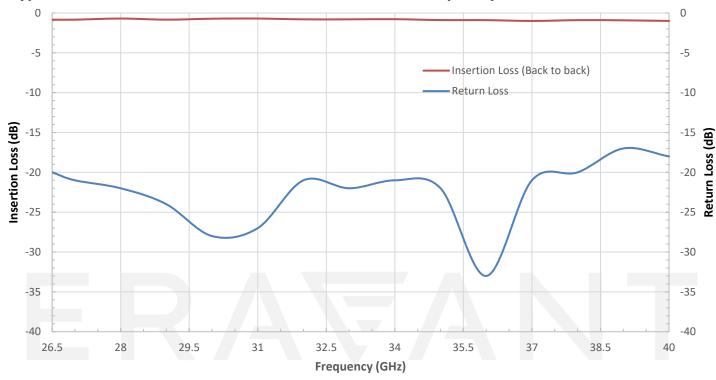
APPLICATIONS

- Test Lab
- Instrumentations
- Sub-assemblies

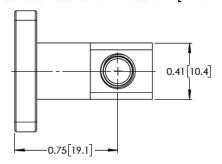
SUPPLEMENTAL DETAILS

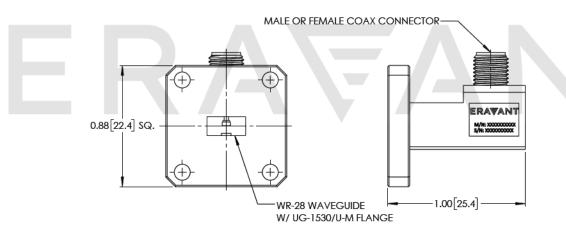


Typical Return Loss & Back to Back Insertion Loss vs. Frequency



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







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 ± 0.02 Nm). Torque wrench model <u>SCH-08008-S1</u> is highly recommended.

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