

## WR-28 Waveguide to 1.85 mm Connector Adapter, Right Angle, 24 to 43.5 GHz

**SWC-2434431505-28VM-R1** is a right angle (90°) WR-28 waveguide to coax adapter that covers the frequency range of 24 to 43.5 GHz. They are designed and manufactured for instrumentation grade quality but offered at a commercial grade price, allowing for an efficient transition between the WR-28 waveguide and male 1.85 mm (V) coax connector. The female connector version is offered under model number **SWC-2434431505-28VF-R1**. End launch (180°) versions are offered under model numbers **SWC-2434431505-28VF-E1** and **SWC-2434431505-28VM-E1**. Other connector configurations, such as 2.4 mm connectors, are available under different model numbers.



## **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Frequency Range	24.0 GHz		43.5 GHz
Insertion Loss		0.5 dB	
Return Loss		15 dB	
Power Handling			30 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

## **Mechanical Specifications:**

Item	Specification		
Waveguide Port	WR-28 Waveguide with UG-599/U Flange		
Coaxial Port	1.85 mm (M) Male Connector		
Material	Aluminum		
Finish	Gold Plated		
Weight	0.4 Oz		
Outline	WC-AR		

### **ECCN**

EAR99

## **FEATURES**

- Broadband Coverage from 24 to 43.5 GHz
- Low Insertion Loss and VSWR
- Instrumentation Grade
- DC Open Circuit

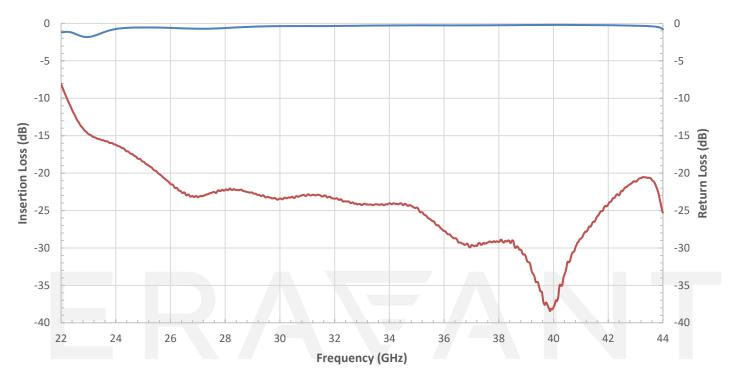
#### **APPLICATIONS**

- 5G Systems and IoT
- Test Lab
- Instrumentations
- Sub-assemblies

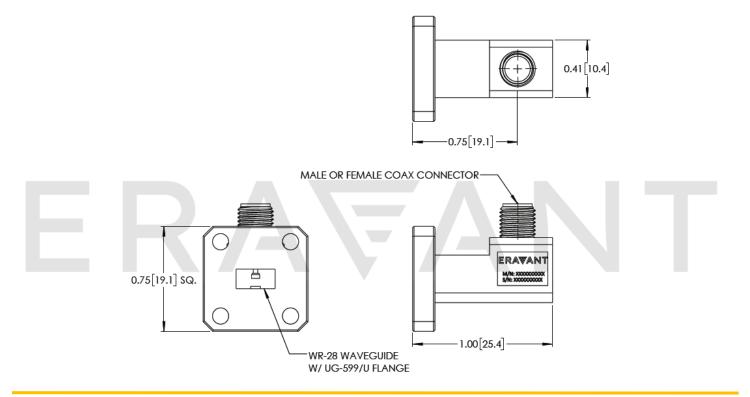
#### SUPPLEMENTAL DETAILS



## Typical Insertion and Return Loss vs Frequency, SWC-28VM-R1



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

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