

## WRD-180 Waveguide to K Connector Adapter, Right Angle

**SWC-180KF-R1-WRD** is a right angle (90°) WRD-180 double ridged waveguide to coax adapter that cover the frequency range of 18 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 double ridged waveguide and 2.92 mm (K) coax connector. The end launch (180°) versions are offered under models SWC-180KF-E1-WRD and SWC-180KM-E1-WRD.



### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	18 GHz		40 GHz
Insertion Loss		0.5 dB	
Return Loss		15 dB	
Power Handling			20 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

\*Insertion loss and return loss is tested back-to-back.

### Mechanical Specifications:

Item	Specification
Waveguide Port	WRD-180 Double Ridged Waveguide with FPWRD180C24 Flange
Coaxial Port	2.92 mm (K) Female Connector
Material	Aluminum
Finish	Gold Plated
Weight	0.7 Oz
Outline	WC-180KR-WRD-2

### ECCN

EAR99

### FEATURES

- Broad Band Coverage
- Low Insertion Loss and VSWR
- Instrumentation Grade
- DC Short Circuit

### APPLICATIONS

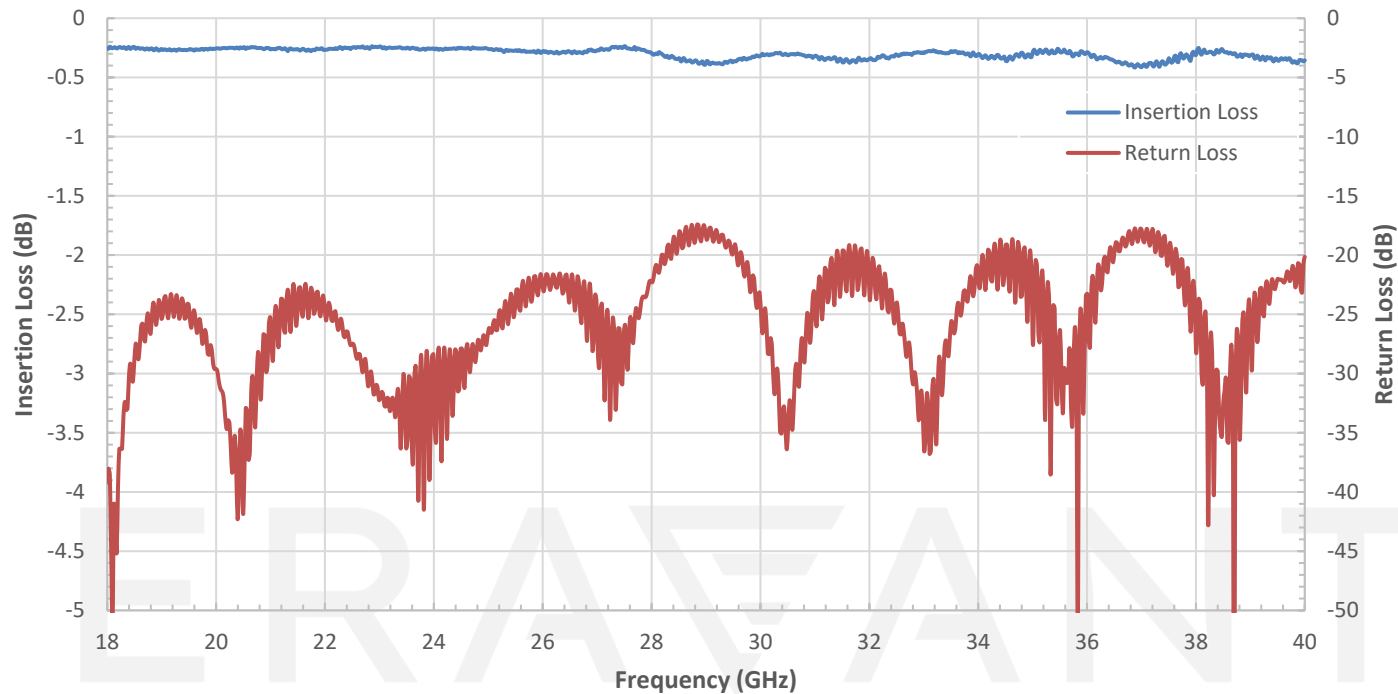
- Test Lab
- Instrumentations
- Sub-assemblies

### SUPPLEMENTAL DETAILS



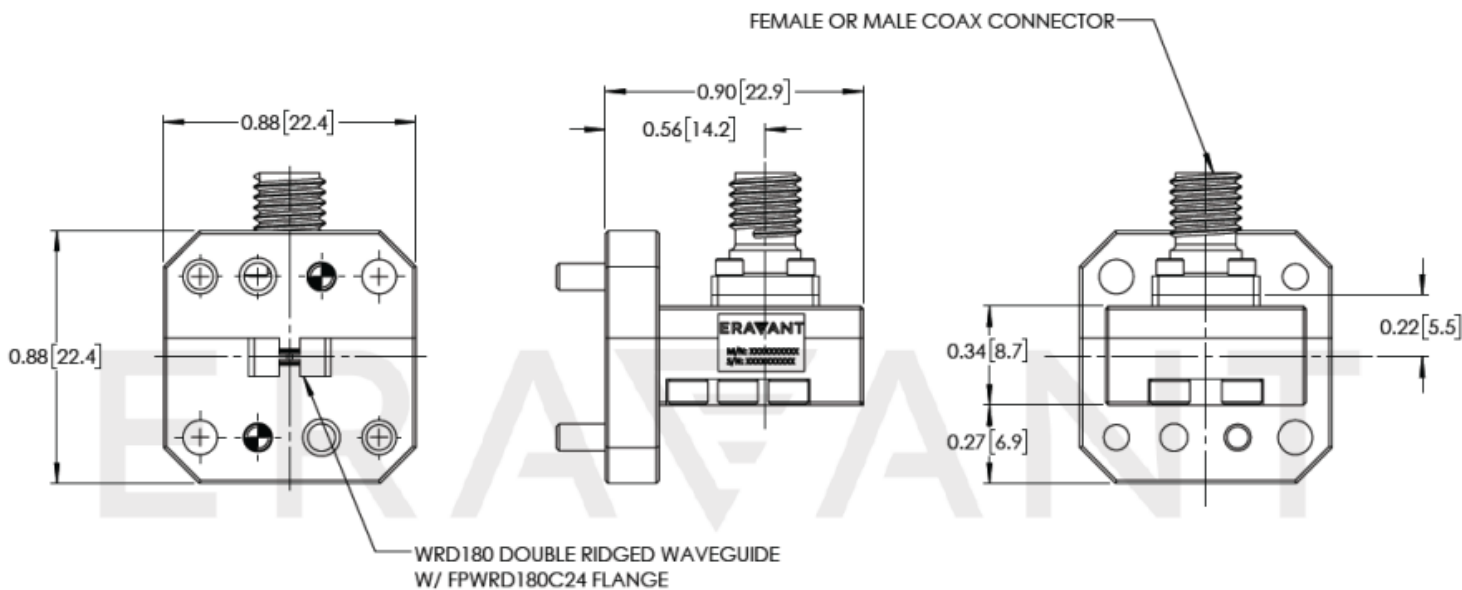
## SWC-180KF-R1-WRD

### Typical Measured Performance vs Frequency



MAKING MILLIMETERWAVE ACCESSIBLE

**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:  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm). Torque wrench model SCH-08008-S1 is highly recommended.

ERAVANT  
MAKING MILLIMETERWAVE ACCESSIBLE

ERAVANT  
MAKING MILLIMETERWAVE ACCESSIBLE