

SWC-42SF-R1 and SWC-42SM-R1

K-Band Waveguide to SMA Connector Adapter, Right Angle

Models **SWC-42SF-R1** and **SWC-42SM-R1** are right angle (90°) K-band waveguide to coax adapters that cover the frequency range of 18 to 26.5 GHz. They are designed and manufactured for instrumentation grade quality but offered at a commercial grade price, allowing for an efficient transition between the rectangular waveguide and SMA coax connector. The end launch (180°) versions are offered under model numbers SWC-42SF-E1 and SWC-42SM-E1.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	18 GHz		26.5 GHz
Insertion Loss		0.3 dB	0.4 dB
Return Loss	15 dB	17 dB	
Power Handling			50 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Waveguide	WR-42 Waveguide with UG-595/U Flange
Coaxial Port	SMA Female for Model Number: SWC-42SF-R1
Coaxial Port	SMA Male for Model Number: SWC-42SM-R1
Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Outline	WC-KR

ECCN

EAR99

FEATURES

- Broad Band Coverage
- Lower Insertion Loss and VSWR
- Instrumentation Grade
- DC Open Circuit

APPLICATIONS

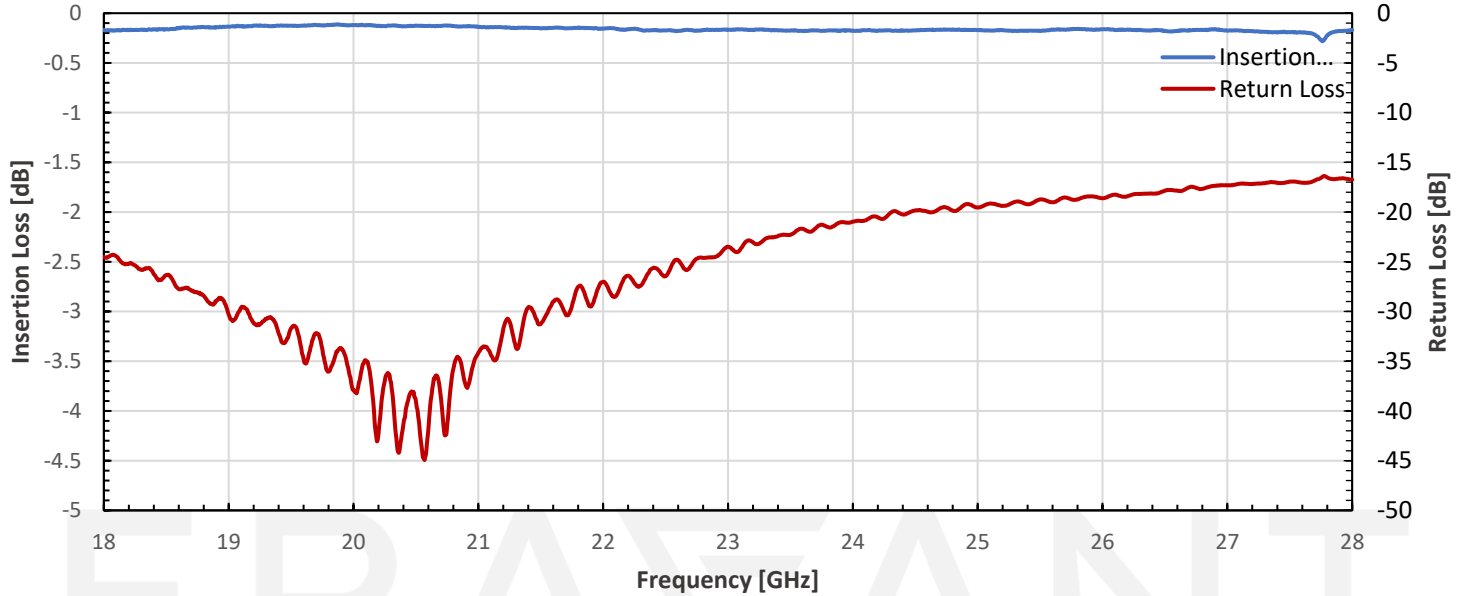
- Test Lab
- Instrumentations
- Sub-assemblies

SUPPLEMENTAL DETAILS



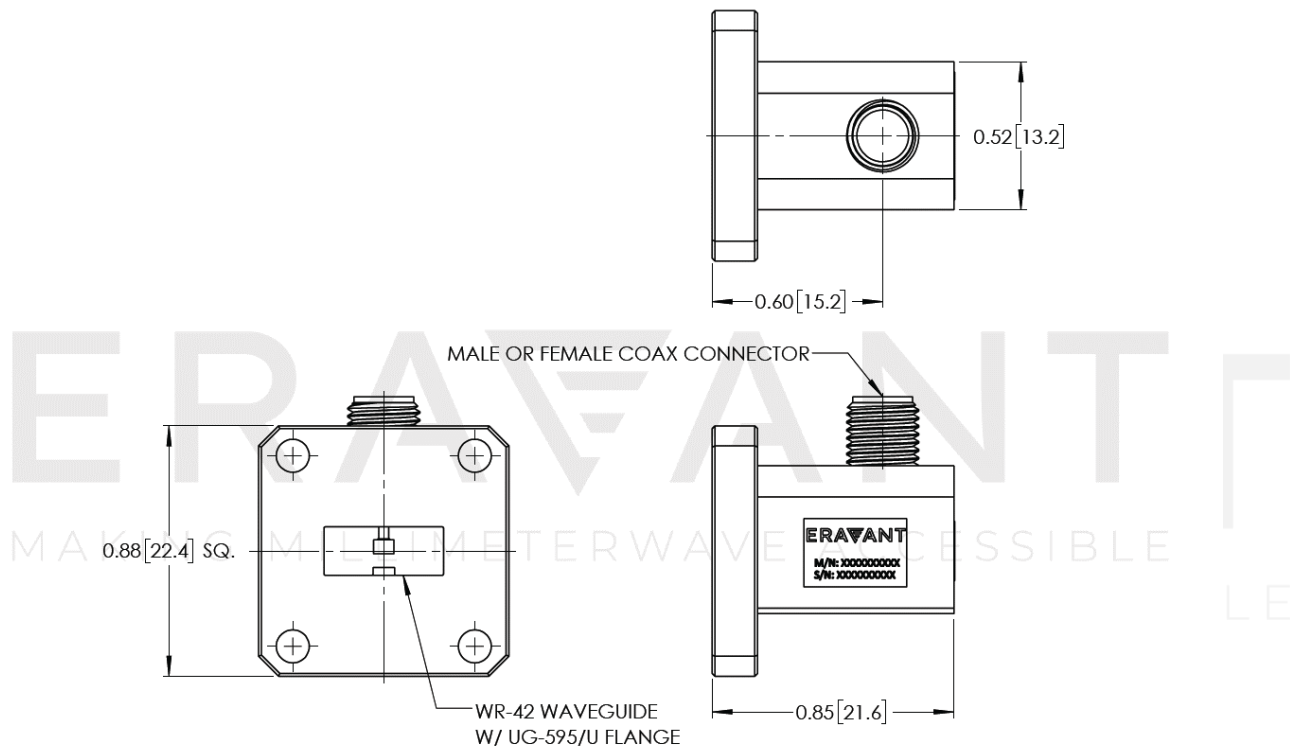
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Typical Performance vs. Frequency



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:

- 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 [SCH-08008-S1](#) is highly recommended

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