K-Band Fixed Attenuator, High Precision, 50 dB

STA-50-42-F1 is a 50 dB fixed attenuator that is used in millimeterwave systems and operates from 18 to 26.5 GHz. The attenuator has a fixed attenuation value of 50 dB at center frequency, 22.25 GHz. The attenuator's waveguides are manufactured with precision wire EDM to ensure high accuracy and a quality internal surface finish. The design features a sandblasted surface treatment to provide a durable finish. While the attenuator is designed for full waveguide band applications, the attenuation value does show a minor slope within the band due to its distinct mechanical configuration. Other attenuation values are available under different model numbers as STA-XX-42-F1, where XX is the desired attenuation value.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	18 GHz		26.5 GHz
Attenuation Range @ 22.25 GHz		50 dB	
Return Loss		20 dB	
Power Handling		750 mW	1000 mW (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

	Item	Specification
Waveguide Ports		WR-42 Waveguide with UG-595/U Flange
	Attenuation Setting	Fixed
Insertion Length Material Finish		4.00"
		Brass
		Gold Plated
	Weight	6.0 Oz
	Outline	TA-FK

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ECCN	
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EAR99	

FEATURES

- Full Band Coverage
- Low Cost
- Accurate Attenuation Value at Center Frequency

APPLICATIONS

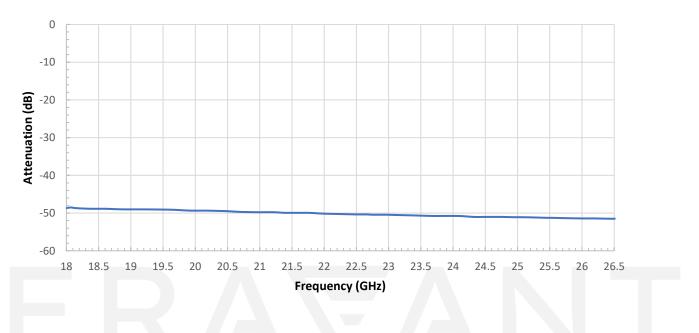
- Test Lab •
- Instrumentations
- System Integration

SUPPLEMENTAL DETAILS



Rev 1.0

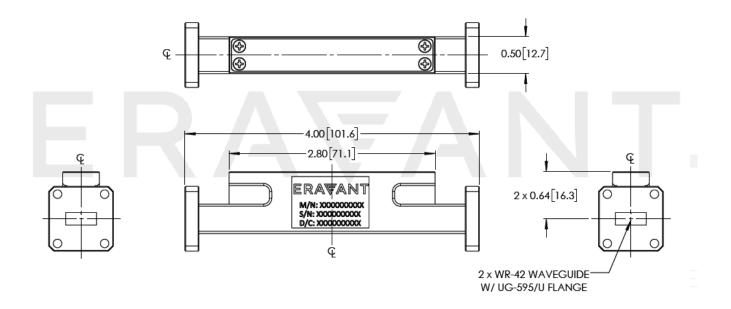
STA-50-42-F1



Typical Measured Attenuation vs Frequency

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

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NOTE:

- All data presented is collected from a sample lot. Actual data may vary unit to unit, slightly.
- All testing was performed under +25 °C case temperature.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- Exceeding absolute maximum ratings will damage the device.
- Any foreign objects in the waveguide will cause performance degradation and may damage the device.

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