

# K-Band Fixed Attenuator, High Precision, 30 dB

STA-30-42-F1 is a 30 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 30 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		30 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	4.00"	
Material	Brass	
Finish	Gold Plated	
Weight	6.0 Oz	
Outline	TA-FK	

### **ECCN**

EAR99

## **FEATURES**

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

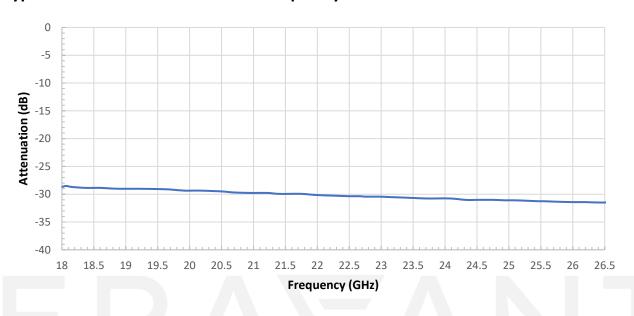
### **APPLICATIONS**

- · Test Lab
- Instrumentations
- System Integration

# **SUPPLEMENTAL DETAILS**

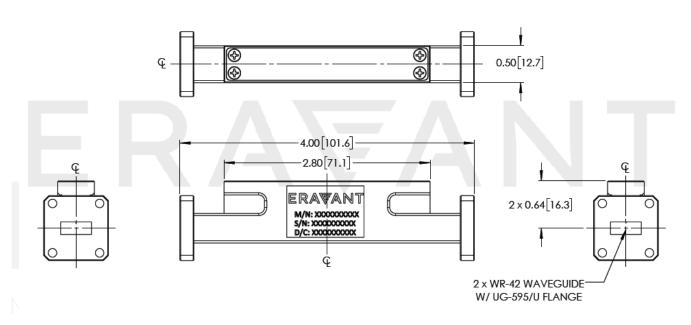


# **Typical Measured Attenuation vs Frequency**



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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