

## STA-30-04-M1-C-1.2

## WR-04 Compact Level Setting Attenuator

**STA-30-04-M1-C-1.2** is a WR-04 compact level setting attenuator that covers the frequency range from 170 to 260 GHz. The level setting attenuator is an ideal piece of equipment in waveguide systems where broadband level setting is required. The attenuator exhibits 1.6 dB typical insertion loss and up to 30 dB nominal attenuation value across the entire operating bandwidth. The other types, such as direct reading, programmable and fixed tuned attenuators are also available under different model numbers.



## Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	170 GHz		260 GHz
Insertion Loss		1.6 dB	
Attenuation Range		30 dB	
Return Loss		20 dB	
Power Handling			100 mW (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

## Mechanical Specifications:

Item	Specification
RF Ports	WR-04 Waveguide with UG-387/U-M Anti-Cocking Flange
Setting Type	Micrometer Head
Micrometer Pitch	0.5mm
Micrometer Resolution	0.01mm
Insertion Length	1.20"
Material	Aluminum
Finish	Gold Plated
Weight	3.5 Oz
Outline	TA-M04-A-1.2

## ECCN

EAR99

## FEATURES

- Full Band Coverage
- Compact Size
- High Resolution Micrometer
- Low Insertion Loss

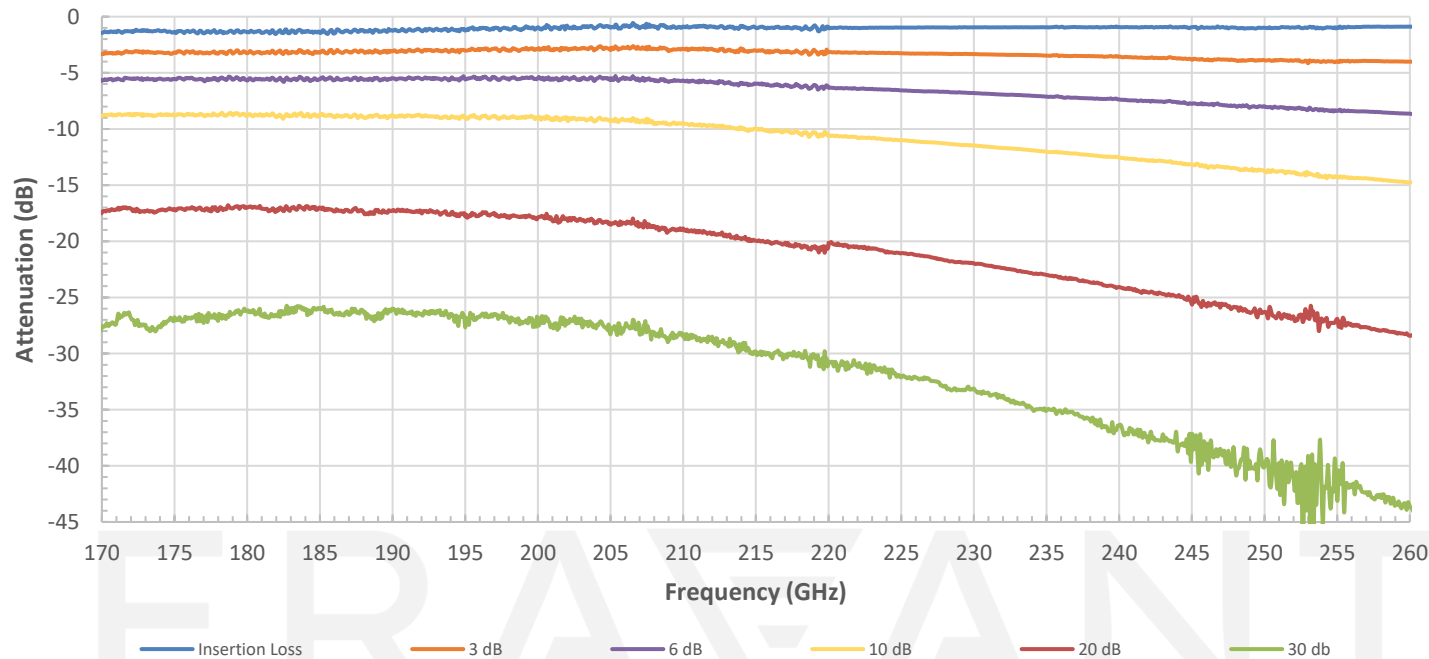
## APPLICATIONS

- Test Lab
- Instrumentations
- System Integration

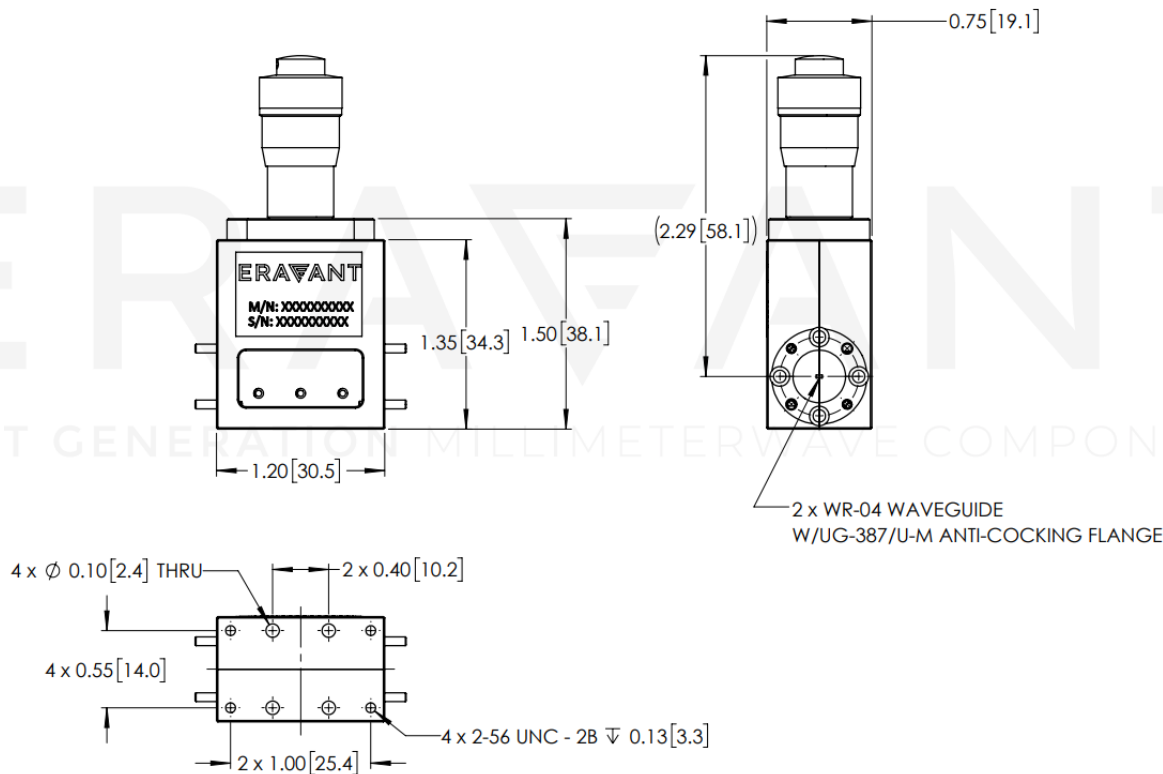
## SUPPLEMENTAL DETAILS



Typical Measured Attenuation vs Frequency



**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.
- For more information on the technical details of level-setting attenuators and other types of waveguide attenuators, a short, instructional blog is available here ([FIXED, LEVEL SETTING, DIRECT READING, AND PROGRAMMABLE ATTENUATORS](#)).
- Eravant reserves the right to change the information presented without notice.

**CAUTION:**

- RF power should never exceed 100 mW.
- Forcing the micrometer down after encountering resistance may damage the resistive sheet inside. This will cause permanent performance degradation and decrease the long-term stability and repeatability of the device.
- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.
- Any foreign objects in the antenna will cause performance degradation and possible device damage.
- For 1 mm connectors proper torque should be applied:  $4.0 \pm 0.15$  inch-pounds ( $0.45 \pm 0.02$  Nm). Torque wrench model [SCH-06004-S1](#) is highly recommended.
- 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.