STA-30-06-M1-C-1.2-CAL

WR-06 Compact Level Setting Attenuator with Reference Attenuation Chart

STA-30-06-M1-C-1.2-CAL is a WR-06 compact level setting attenuator that covers the frequency range from 110 to 170 GHz. The level setting attenuator is an ideal piece of equipment in waveguide systems where broadband level setting is required. The attenuator exhibits 1.0 dB typical insertion loss and up to 30 dB nominal attenuation value across the entire operating bandwidth. **Detailed attenuation vs. micrometer setting charts are provided for quick reference only.** For accurate direct reading attenuation, dual function direct reading and programmable attenuators are recommended. The other types, such as standard level setting without reference charts and fixed tuned attenuators are also available under different model numbers.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	110 GHz		170 GHz
Insertion Loss		1.0 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-06 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-MD-A-1.2

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FEATURES

- Reference Attenuation Chart vs. Micrometer Setting
- Full Band Coverage
- Compact Size
- High Resolution Micrometer
- Low Insertion Loss

APPLICATIONS

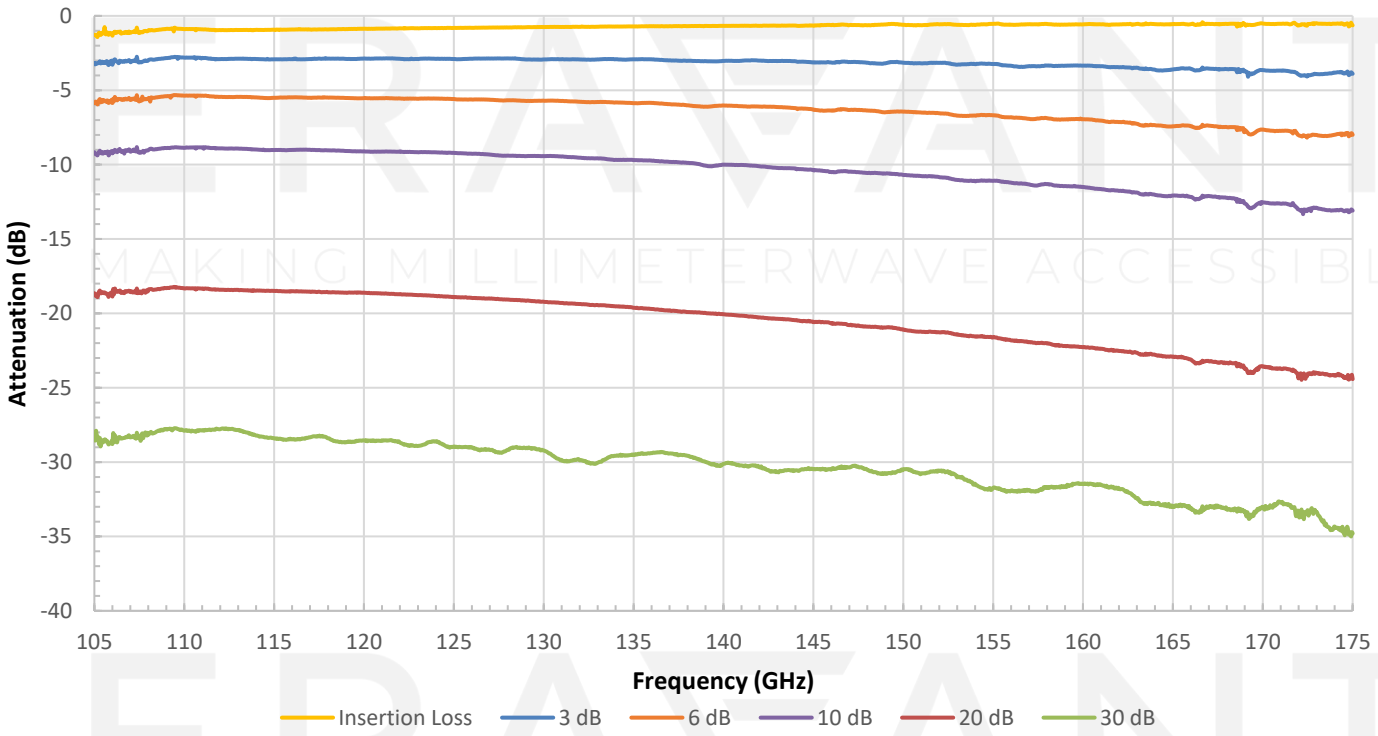
- Test Lab
- Instrumentations
- System Integration

SUPPLEMENTAL DETAILS

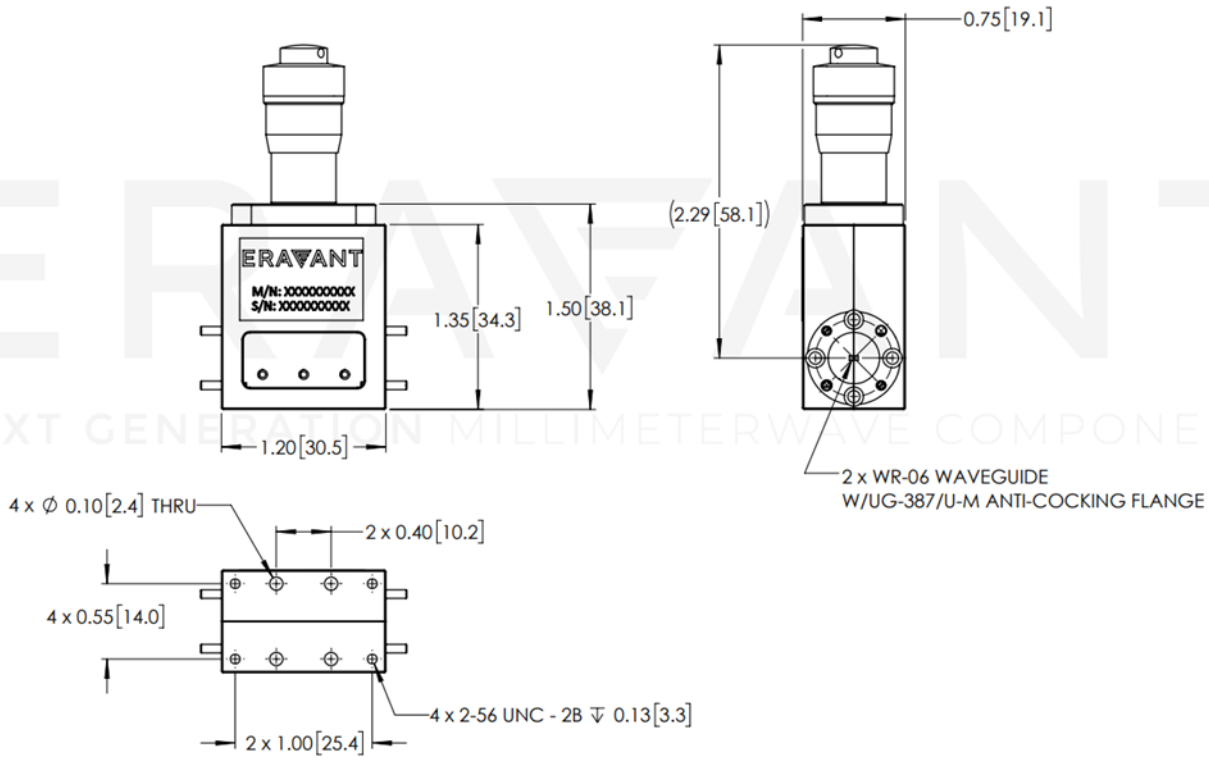
Components Included in Each Kit:

Item	Eravant Number	Quantity
Level Setting Attenuator	STA-30-06-M1-C-1.2	1 Piece
Waveguide Screws, 3/32 Hex Head	SWH-332-SS-10	(10 Pieces)
Waveguide Screwdriver, 3/32 Hex Head	SWH-332-DS	1 Piece
USB Flash Drive	-	1 Piece
Black Test Equipment Case	-	1 Piece

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.
- Continuous mechanical and/or electrical operation may cause a drift from provided reference charts over time.
- The intention of providing attenuation charts and tables vs. micrometer setting is for convenience and may provide a ballpark estimate of attenuation at a given micrometer setting. Accurate direct reading attenuation needs to be performed by direct reading and programmable attenuators.
- 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/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.