# SKA-9031444025-0808-A1-M

## High Dynamic Range Electrical Attenuator, F-Band

**SKA-9031444025-0808-A1-M** is a F-Band electrical attenuator. The attenuator exhibits 4 dB typical insertion loss and 25 dB nominal attenuation across the frequency range of 90 to 140 GHz. The control voltage of the standard model is 0 to -1 VDC. The control speed of the attenuator can go up to 100 ns. The RF input and output ports are WR-08 waveguides with UG-387/U-M flanges, and a female SMA coaxial connector provides the control signal.

### Electrical Specifications:

| Parameter | Minimum | Typical | Maximum |
|---|---|---|---|
| RF Frequency | 90 GHz | | 140 GHz |
| Insertion Loss (Bias @ -1V) | | 4 dB | |
| Attenuation (Bias @ 0V) | | 25 dB | |
| Power Handling | | | +8 dBm |
| Control Voltage | -1V | | 0V |
| Switching Speed | | 100 ns | |
| Specification Temperature | | +25°C | |
| Operating Temperature | 0°C | | +50°C |

### Mechanical Specifications:

| Item | Specification |
|---|---|
| RF Ports | WR-08 Waveguide with UG-387/U-M Anti-Cocking Flange |
| Bias Port | SMA (F) |
| Case Material | Aluminum |
| Finish | Gold Plated |
| Weight | 0.8 Oz |
| Size | 1.00'' (L) X 1.00'' (W) X 0.75'' (H) |
| Outline | KA-AF-A |

### ECCN

EAR99

### FEATURES

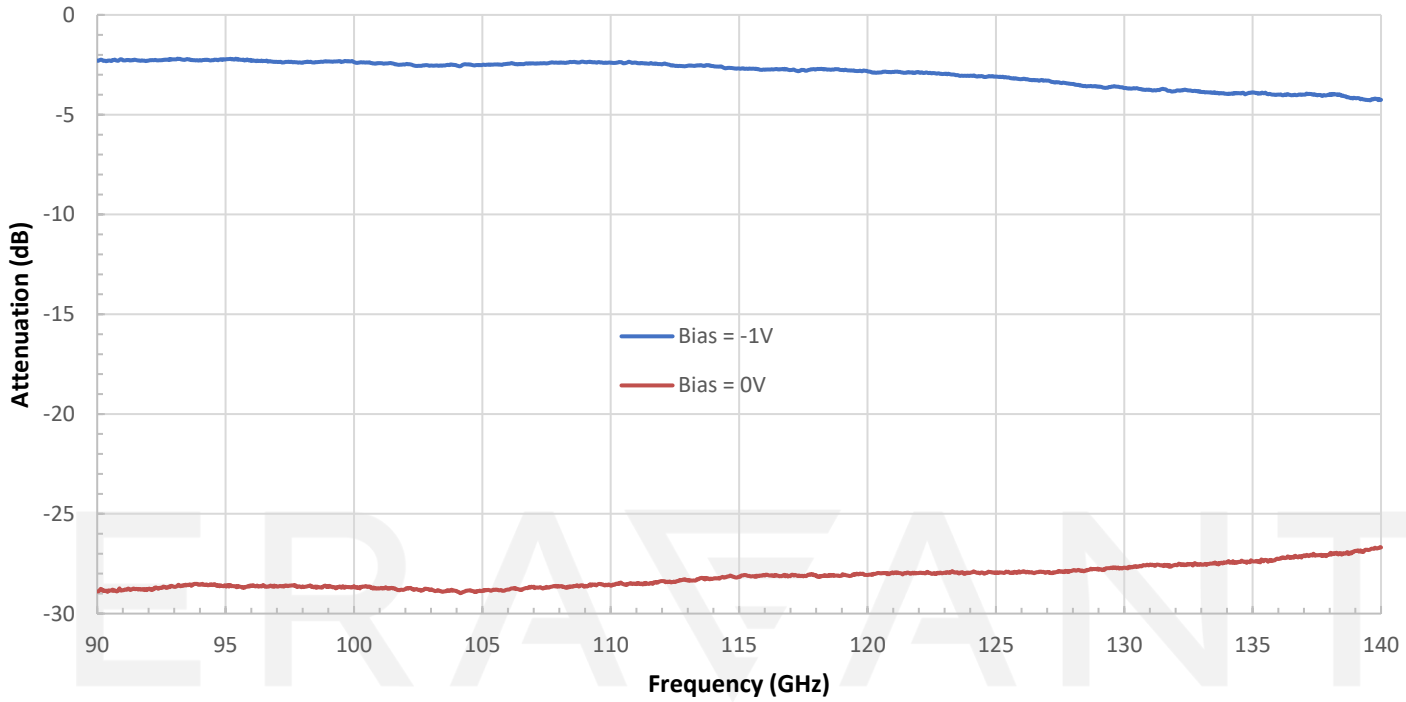
- High Dynamic Range

### APPLICATIONS

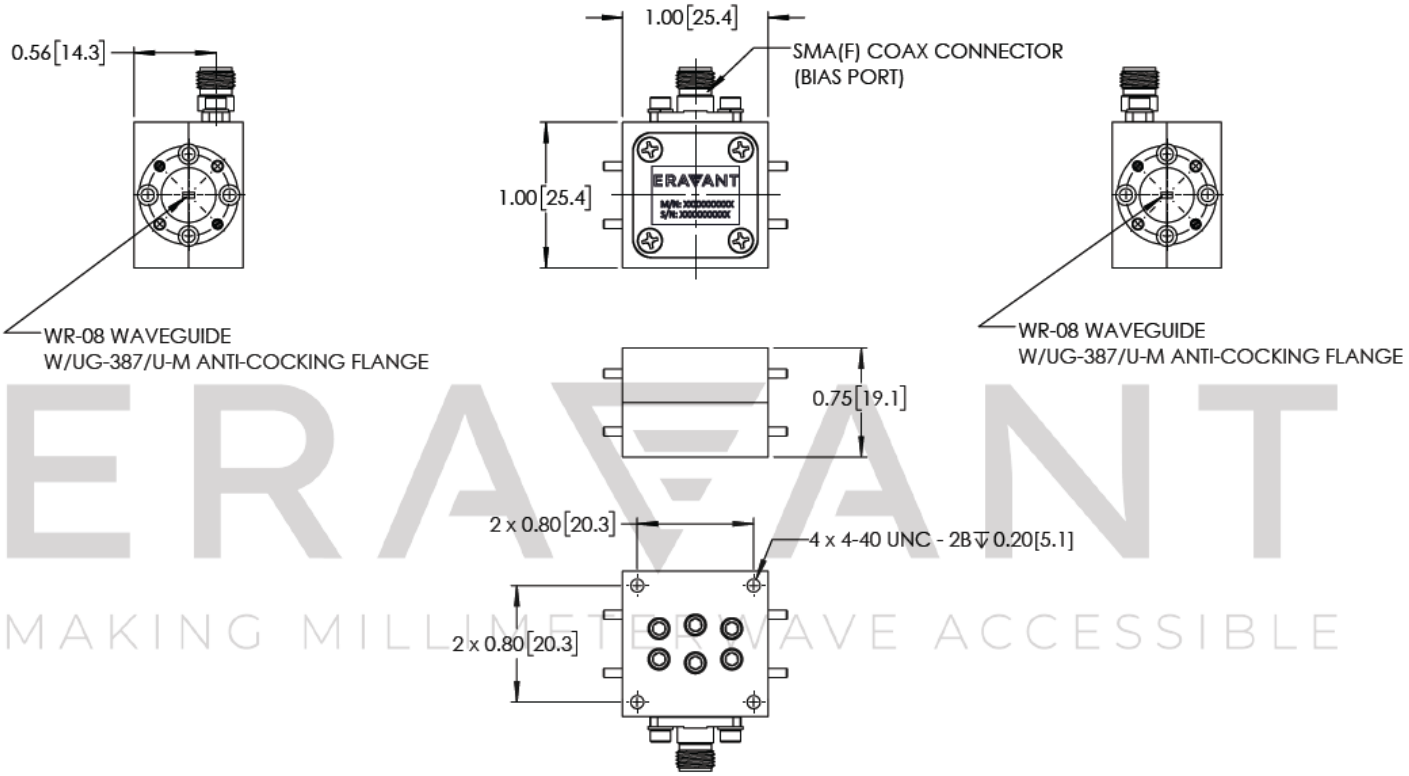
- THz Systems
- Testing Equipment

### SUPPLEMENTAL DETAILS

## 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.
- Other mechanical configurations are available under different model numbers.
- Eravant reserves the right to change the information presented without notice.

**CAUTION:**

- Exceeding absolute maximum ratings shown will damage the device.
- The switch is a static sensitive device. Always follow ESD rules when working with the switch.
- If a waveguide is present, 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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