

# High Dynamic Range Electrical Attenuator, D-Band

**SKA-1141745025-0606-A1-M** is a D-Band electrical attenuator. The attenuator exhibits 5 dB typical insertion loss and 25 dB nominal attenuation across the frequency range of 110 to 170 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-06 waveguides with UG-387/U-M anti-cocking flanges, and a female SMA coaxial connector provides the control signal.



# **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
RF Frequency	110 GHz		170 GHz
Insertion Loss (Bias @ -1V)		5 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-06 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-AD-A	

## **ECCN**

EAR99

## **FEATURES**

High Dynamic Range

#### **APPLICATIONS**

- THz Systems
- Testing Equipment

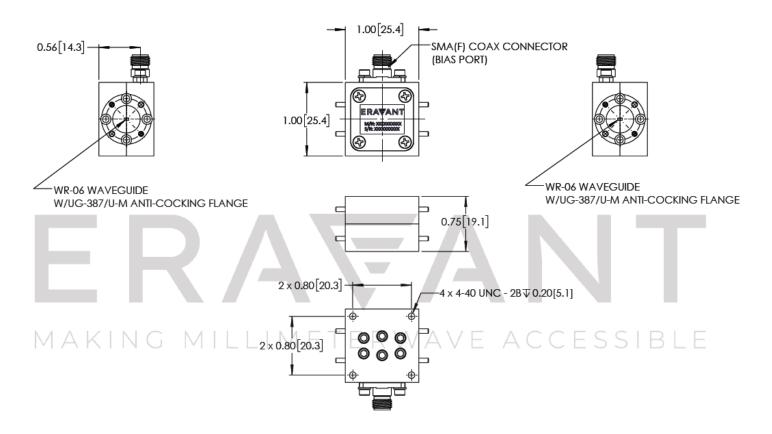
## **SUPPLEMENTAL DETAILS**







**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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