SKA-3034032530-2828-A1-WP

Final Rev. 1.2

High Dynamic Range Electrical Attenuator, Ka Band

Description:

Model SKA-3034032530-2828-A1-WP is a Ka Band, PIN diode based electrical attenuator. The attenuator exhibits 3 dB typical insertion loss and 27 dB nominal attenuation across the frequency range of 30 to 40 GHz. The control voltage of the standard model is 0 to -5 V_{DC} with a typical current draw of 10 mA. However, the attenuator can also be configured with a positive control voltage from 0 to +5 V_{DC}. The control speed of the attenuator can go up to 100 ns. The RF input and output ports are WR-28 waveguides with UG-599/U flanges, and a female SMA coaxial connector provides the control signal.

Features:

- Low Insertion Loss
- High Dynamic Range
- Fast Control Speed

Applications:

- Radar Systems
- Communication Systems
- Testing Equipment

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Center Frequency		35 GHz	
Bandwidth	+/- 5 GHz		
Insertion Loss		2.5 dB	
Attenuation	3 dB	27 dB	
Power Handling		+20 dBm	+23 dBm
Control Voltage		0 to -5 V_{DC}	
Control Current		10 mA	
Control Speed		100 ns	
Specification Temperature		+25 °C	
Operating Temperature	-25°C		+65°C

Mechanical Specifications:

Item	Specification
RF Interface	WR-28 Waveguide with UG-599/U Flange
Bias Port	SMA(F)
Case Material	Aluminum
Weight	0.6 Oz
Finish	Gold Plated
Insertion Length	1.25”
Outline	KA-AA

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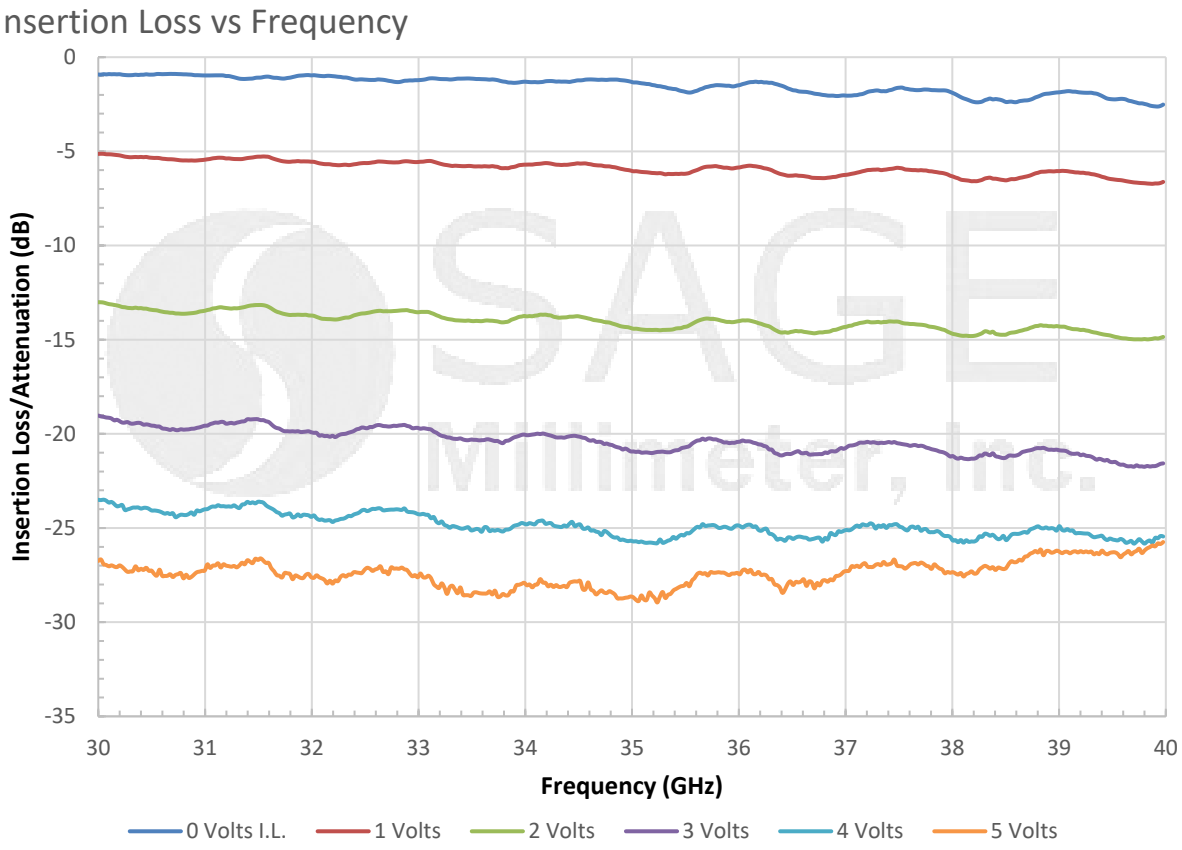
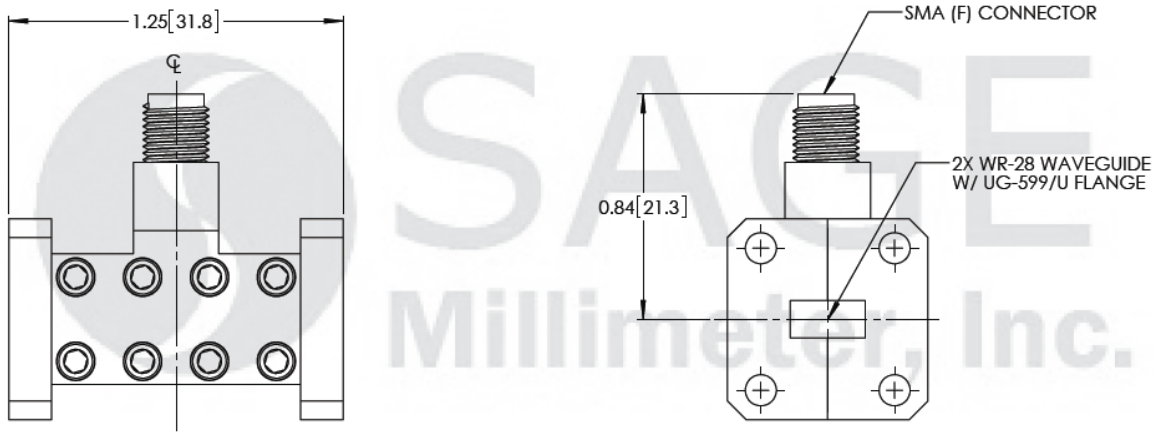


Mechanical Outline: (Unless otherwise specified, all dimensions are in inches)



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Note:

- All data is presented using a limited sample lot. Actual data may vary unit to unit.
- All testing was performed under +25˚C case 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 attenuator is a static sensitive device. Always follow ESD rules when working with the attenuator.
- Any foreign objects in the waveguide will cause performance degradation and possible device damage.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.92 ± 0.05 Nm), should be applied. **Eravant torque wrench, model SCH-08008-S1, is highly recommended.**