SKA-1834033537-KFKF-A1-M-WPC

Final Rev. 1.0

High Dynamic Range Electrical Attenuator, 18 to 40 GHz

Description:

Model SKA-1834033537-KFKF-A1-M-WPC is MMIC based electrical attenuator. The attenuator exhibits 3.5 dB typical insertion loss and 0 to 37 dB nominal attenuation range across the frequency range of 18 to 40 GHz while applying 0 to -3 V_{DC} control voltage. While the control voltage of the standard model is 0 to -3 $V_{DC,}$ the maximum damage control voltage is - 5 V_{DC}. The RF input and output ports are K(F) connectors, and the control port is with SMA(F) connector. The version with WR-28 waveguide interface is offered under moderl number **SKA-2734032530-2828-A1**. The model can also be converted to the waveguide interface by using the patent pending **Uni-Guide™** Waveguide connectors.

Features:

- Broadband Operation
- High Dynamic Range
- Compact Package Size

Applications:

- Radar Systems
- Communication Systems
- Testing Equipment

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	18 GHz		40 GHz
Insertion Loss		3.5 dB	
Attenuation Range		37 dB	
Input P_{1dB}		+10 dBm	
Damage RF Power Level			+30 dBm
Control Voltage		0 to -3 V_{DC}	
Damage Control Voltage Level			-5 V_{DC}
Input Return Loss		8 dB	
Output Return Loss		9 dB	
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

Mechanical Specifications:

Item	Specification
RF Ports	K(F)
Bias Port	SMA(F)
Case Material	Aluminum
Connector Material	Passivate Stainless Steel
Finish	Gold Plated
Weight	0.68 Oz
Size	0.80” (W) x 0.80” (L) x 0.39” (H)
Outline	UH-235-3C

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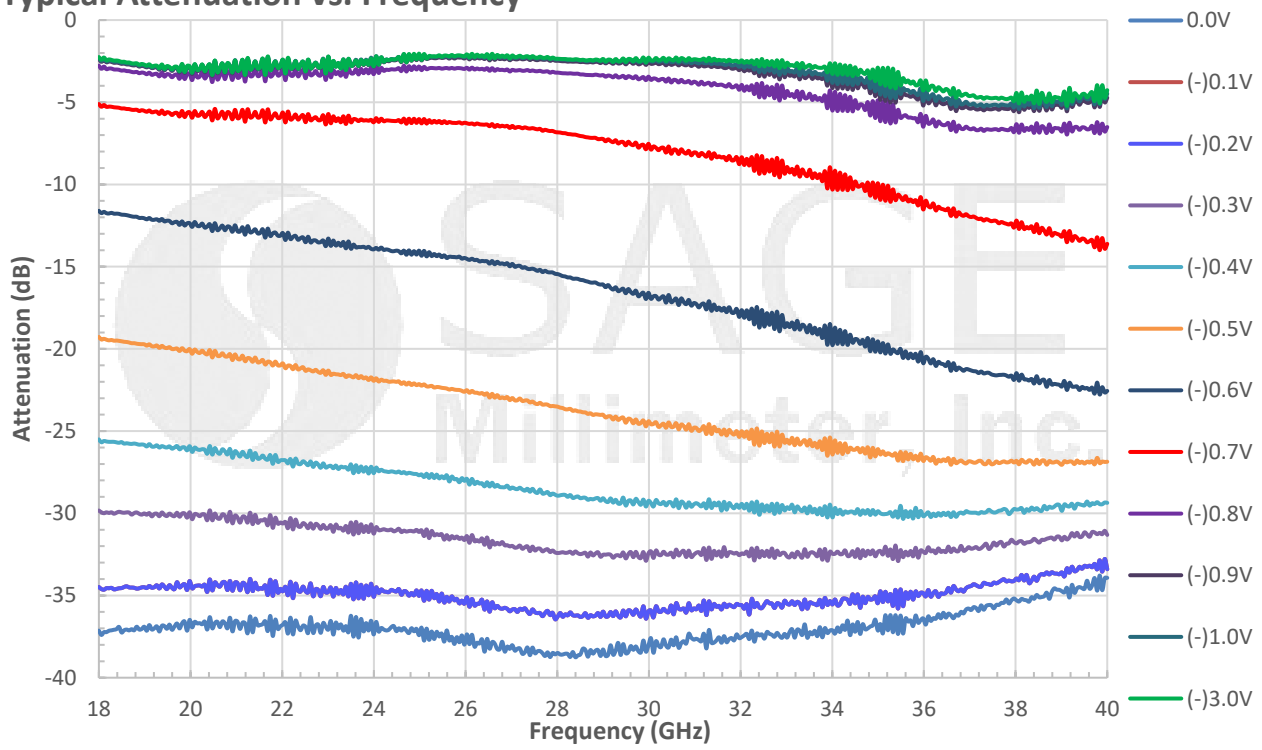
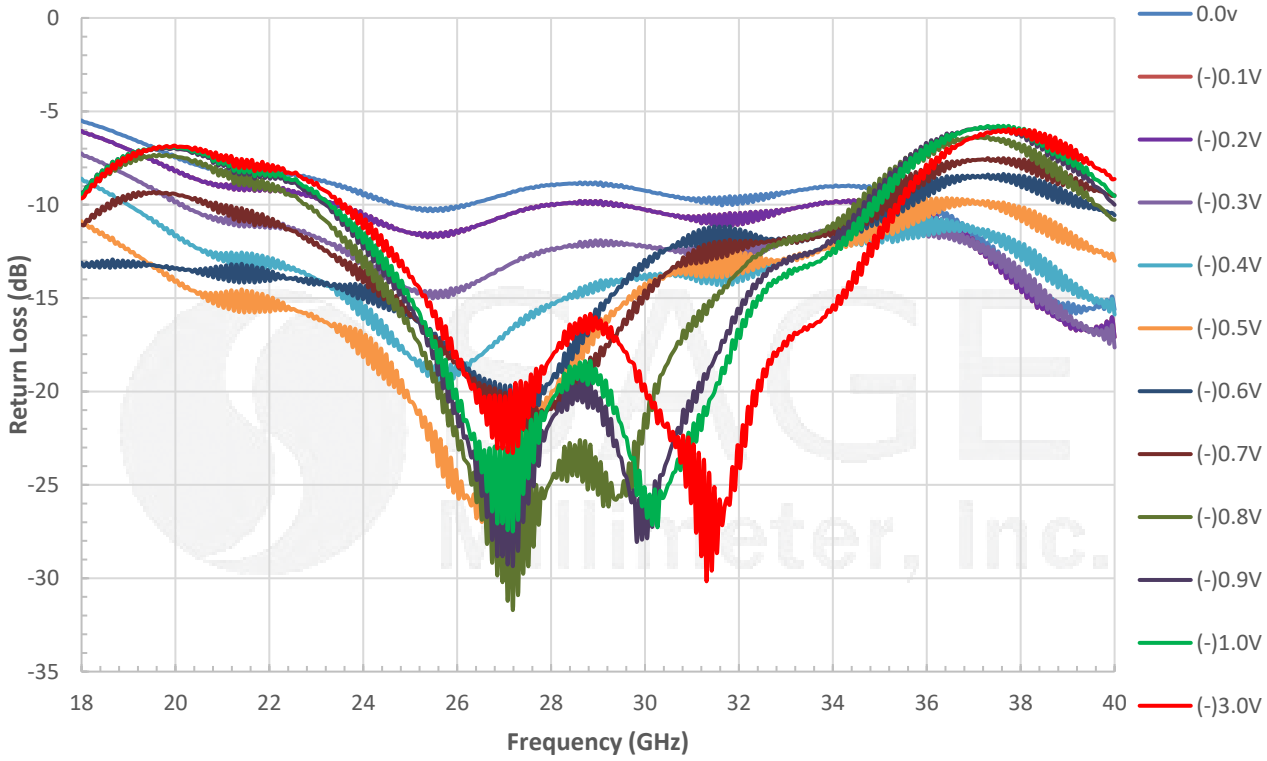
High Dynamic Range Electrical Attenuator, 18 to 40 GHz

Typical Attenuation vs. Frequency



Typical Input Return Loss vs. Frequency



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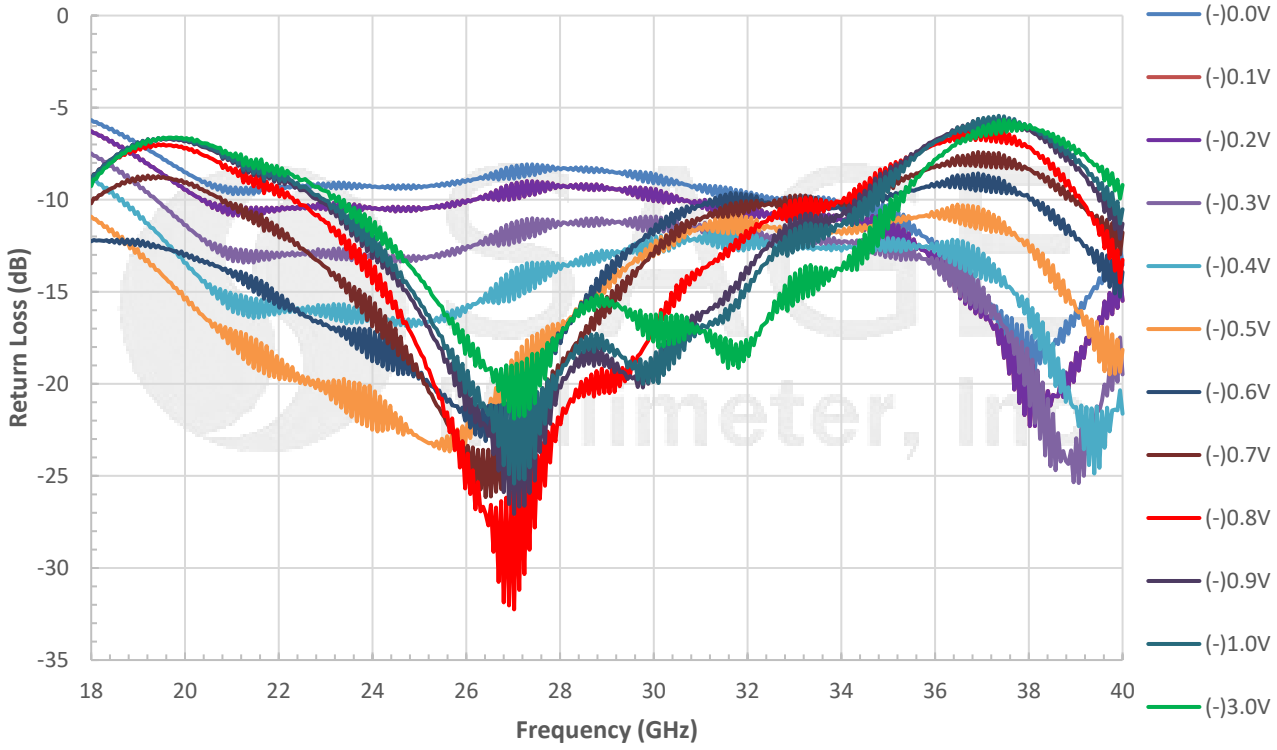
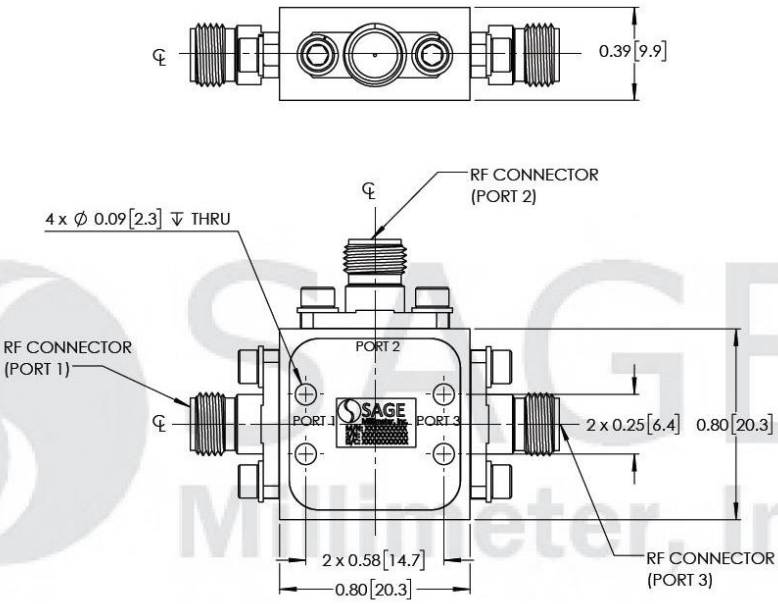
Typical Output Return Loss vs. Frequency



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



NOTE:
COAX CAN BE MALE OR FEMALE

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Note:

- All data presented is collected from a 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.
- SAGE Millimeter, Inc. 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 attenuator will cause performance degradation and possible device damage.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.92 ± 0.05 Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.**