

Voltage Variable PIN Diode Attenuator from 0 to 60 dB 4 GHz to 8 GHz and SMA 15-Pin D-Subminiature Control



SAA-0408-060-SMA

Features

- Analog Controlled 60 dB Pin Diode Attenuator
- 4 GHz to 8 GHz Frequency Range
- Insertion Loss 2.5 dB Max
- VSWR 2.0:1 Max
- Input Power 20 dBm Operating
- Input Power 30 dBm Survival
- Switching Time 500 nsec
- Removable SMA Female Connectors
- 15 Pin Micro D Control Connector

Applications

- Electronic Warfare
- Test & Measurement
- Military & Space
- Radar
- Military Communications Systems

Description

SAA-0408-060-SMA is an Analog Controlled 60 dB Pin Diode Attenuator operating from 4 GHz to 8 GHz, and over a temperature range of -55 Deg C to + 85 Deg C. The Input/Output RF Connectors are Removable SMA Female. The control connector is a 15 Pin Micro D, with a mating connector supplied.

Electrical Specifications (Values at +25°C, sea level)

Description	Minimum	Typical	Maximum	Units
Frequency Range	4		8	GHz
Attenuation Range	0		60	dB
			2.5	dB
VSWR			2:1	
Input at 0.1 dB Compression Point		+20		dBm
Survival Power Rating			+30	dBm
		±0.5		dB
		±0.87		dB
		±1.5		dB
		±1.6		dB
Switching Time			500	ns
Switching Speed			500	ns
Analog Control		10		dB/Volt
Control Voltage			6	Volts
DC Power Supply				
12 to 15 VDC			125	mA
-12 to -15 VDC			50	mA
Attenuation Range	0		60	dB

Mechanical Specifications

Size

Length

2 in [50.8 mm]

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Width	1.8 in [45.72 mm]
Height	0.5 in [12.7 mm]
Weight	0.145 lbs [65.77 g]
Input Connector	SMA Female
Output Connector	SMA Female
Power and Control	15-Pin D-Subminiatur

Environmental Specifications

Temperature	
Operating Range	-55 to +85 deg C
Storage Range	-65 to +125 deg C
Humidity	MIL-STD-202F, METHOD 103B COND. B
Shock	MIL-STD-202F, METHOD 213B COND. B
Vibration	MIL-STD-202F, METHOD 204D COND. B
Altitude	MIL-STD-202F, METHOD 105C COND. B
Temperature Cycle	MIL-STD-202F, METHOD 107
Salt Spray	MIL-STD-202F, METHOD 105C COND. B

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

- Values at +25 °C, sea level
ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.

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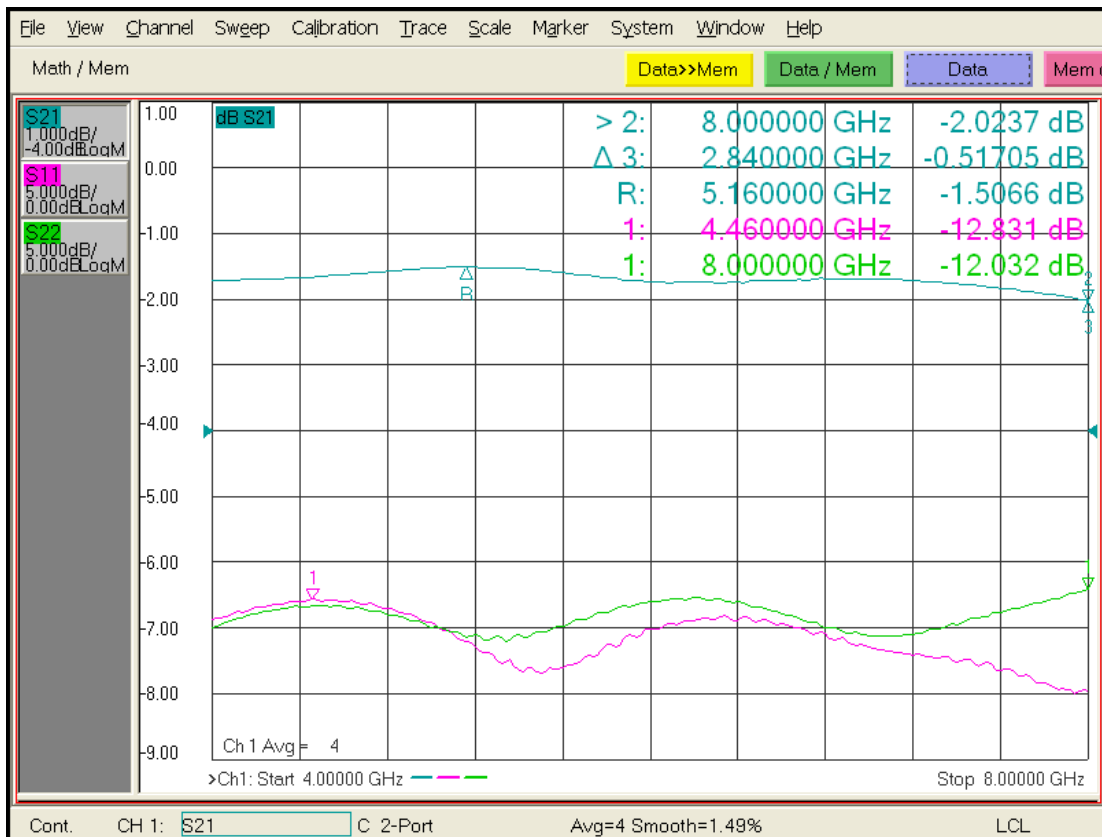


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Functional Block Diagram

Performance Data

Insertion Loss and VSWR

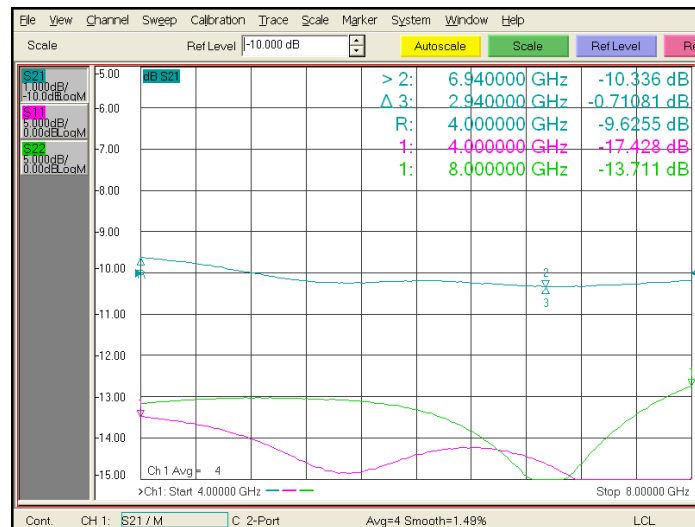


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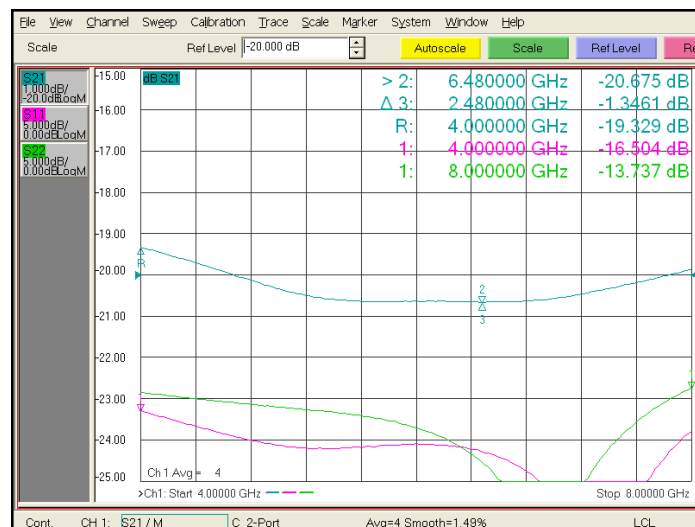


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10dB Attenuation



20dB Attenuation



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40dB Attenuation



60dB Attenuation

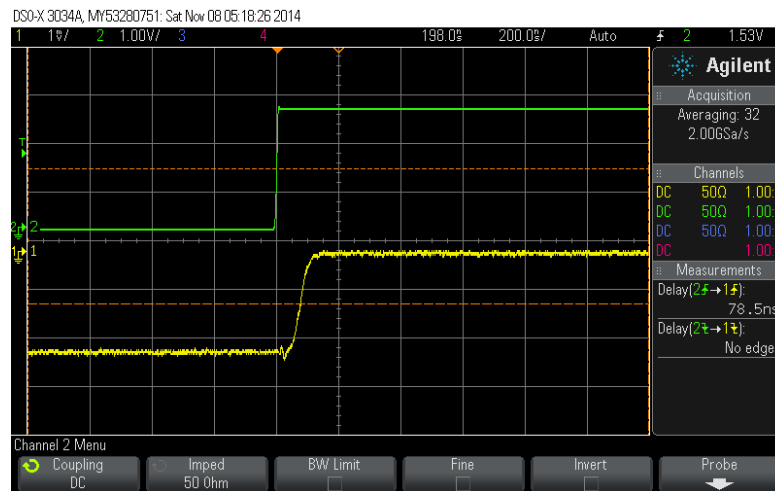


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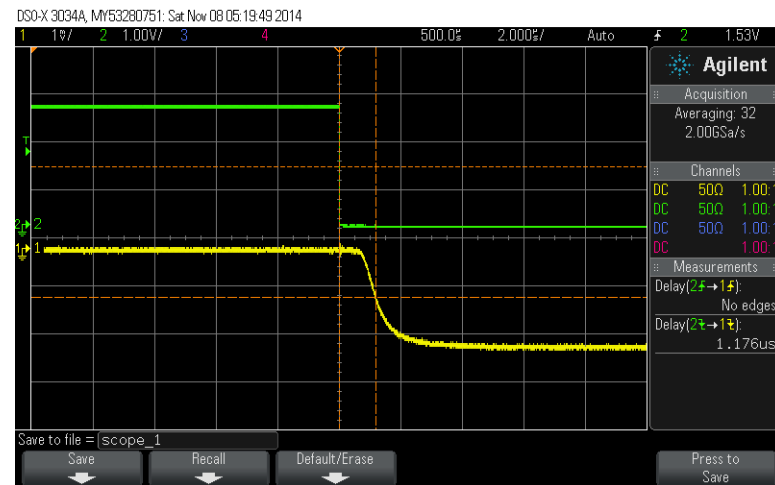


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Delay 0 to 60 dB



Delay 60 to 0 dB



Channel 1 (Yellow): RF output
Channel 2 (Green): TTL Input from Signal Generator

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Voltage Variable PIN Diode Attenuator from 0 to 60 dB 4 GHz to 8 GHz and SMA 15-Pin D-Subminiature Control from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

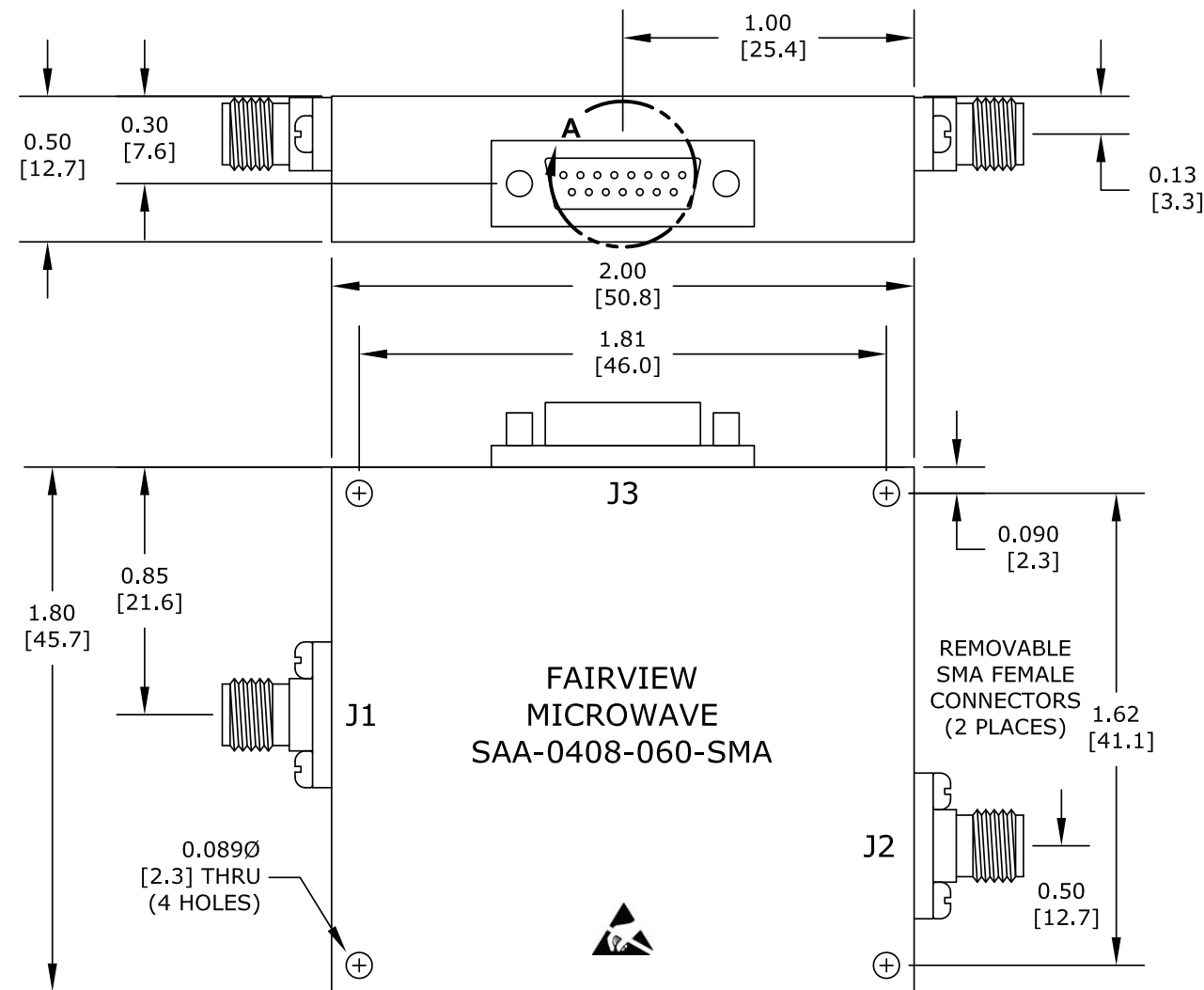
For additional information on this product, please click the following link: [Voltage Variable PIN Diode Attenuator from 0 to 60 dB 4 GHz to 8 GHz and SMA 15-Pin D-Subminiature Control SAA-0408-060-SMA](https://www.fairviewmicrowave.com/60db-voltage-variable-attenuator-pin-diode-8-ghz-saa-0408-060-sma-p.aspx)

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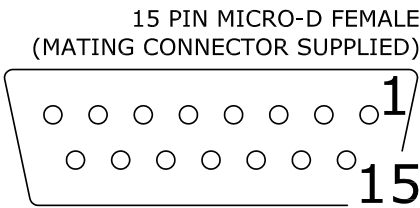
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SAA-0408-060-SMA CAD Drawing

Voltage Variable PIN Diode Attenuator from 0 to 60 dB 4 GHz to 8 GHz and SMA 15-Pin D-Subminiature Control



PIN	DESCRIPTION	PIN	DESCRIPTION
1	NO CONNECTION	9	NO CONNECTION
2	NO CONNECTION	10	NO CONNECTION
3	ANALOG INPUT	11	NO CONNECTION
4	GROUND	12	NO CONNECTION
5	NO CONNECTION	13	+12 OR +15 VDC
6	NO CONNECTION	14	-12 OR -15 VDC
7	NO CONNECTION	15	NO CONNECTION
8	NO CONNECTION		



View A

FAIRVIEW MICROWAVE INC. ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].			
TITLE		DWG NO SAA-0408-060-SMA		CAGE CODE 3FKR5	
		CAD FILE 051815	SHEET	SCALE N/A	SIZE A 2233