

0 to 60 dB Voltage Variable Attenuator From 2 GHz To 4 GHz PIN Diode And SMA

SAA-0204-060-SMA is an Analog Controlled 60 dB Pin Diode Attenuator operating from 2 GHz to 4 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	Min	Typ	Max	Unit
Frequency Range	2		4	GHz
Mean Attenuation Range	0		60	dB
Insertion Loss			2	dB
VSWR			2:1	
Input at 1 dB Compression Point		+20		dBm
Survival Power Rating			+30	dBm
Attenuation Flatness				
10 dB		±0.45		dB
20 dB		±0.8		dB
40 dB		±1.5		dB
60 dB		±1.6		dB
Switching Time			500	ns
Analog Control		10		dB/Volt
DC Power Supply				
12 to 15 VDC			125	mA
-12 to -15 VDC			50	mA

Mechanical Specifications

Size	
Length	2 in [50.8 mm]
Width	1.8 in [45.72 mm]
Height	0.5 in [12.7 mm]
Weight	0.2 lbs [90.72 g]
Input Connector	SMA Female
Output Connector	SMA Female

Environmental Specifications

Temperature

Operating Range	-55 to +85 deg C
Storage Range	-65 to +125 deg C

Environment	MIL-STD-202F, METHOD 107
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



Features:

- Analog Controlled 60 dB Pin Diode Attenuator
- 2 GHz to 4 GHz Frequency Range
- Insertion Loss 2.0 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

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Compliance Certifications (visit www.FairviewMicrowave.com for current document)

Plotted and Other Data

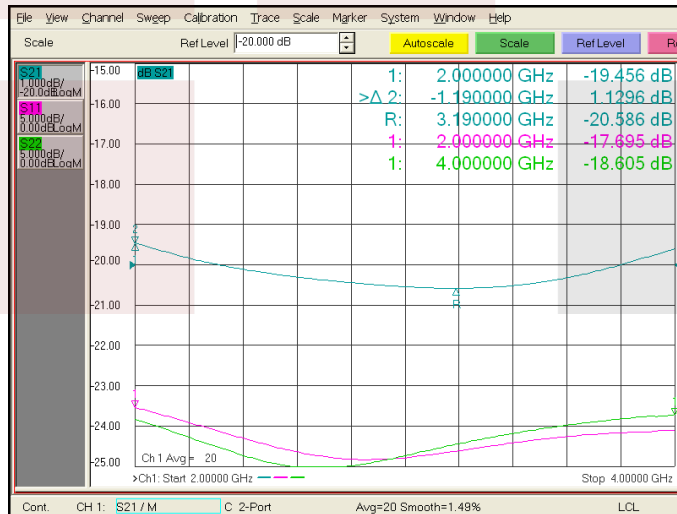
Notes:

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

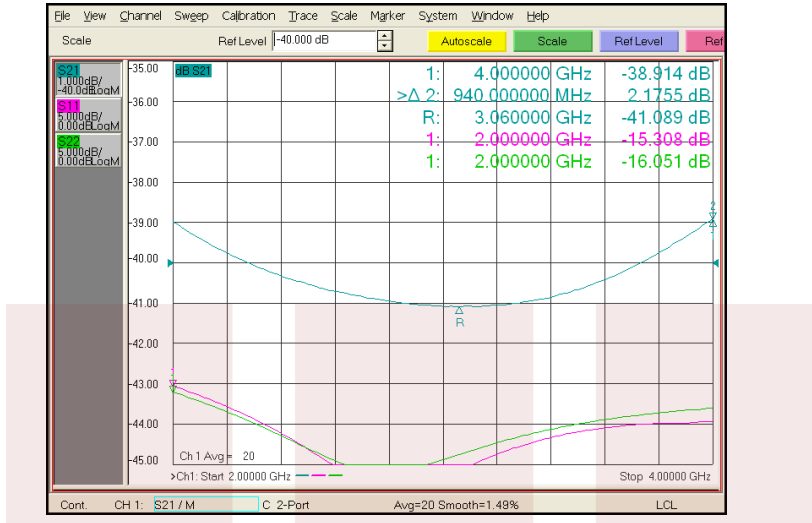
10dB Attenuation



20dB Attenuation



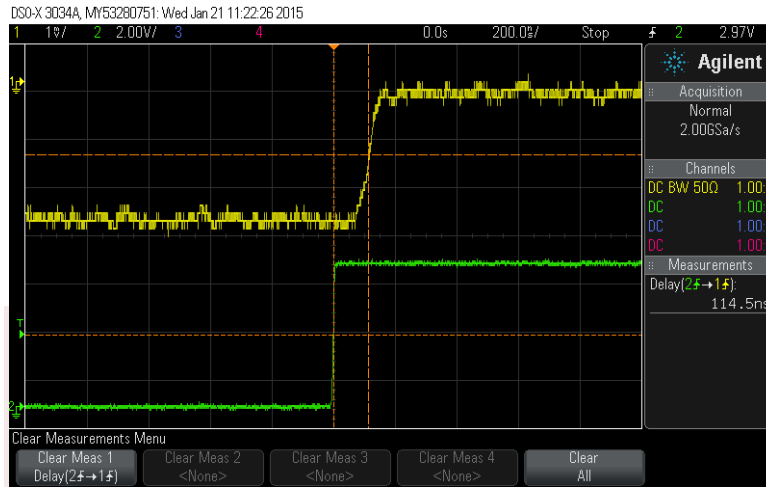
40dB Attenuation



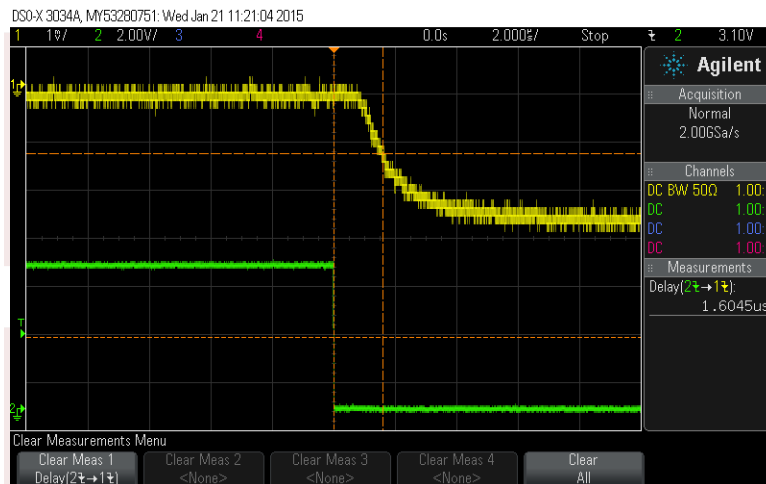
60dB Attenuation



Delay 0 to 60 dB



Delay 60 to 0 dB



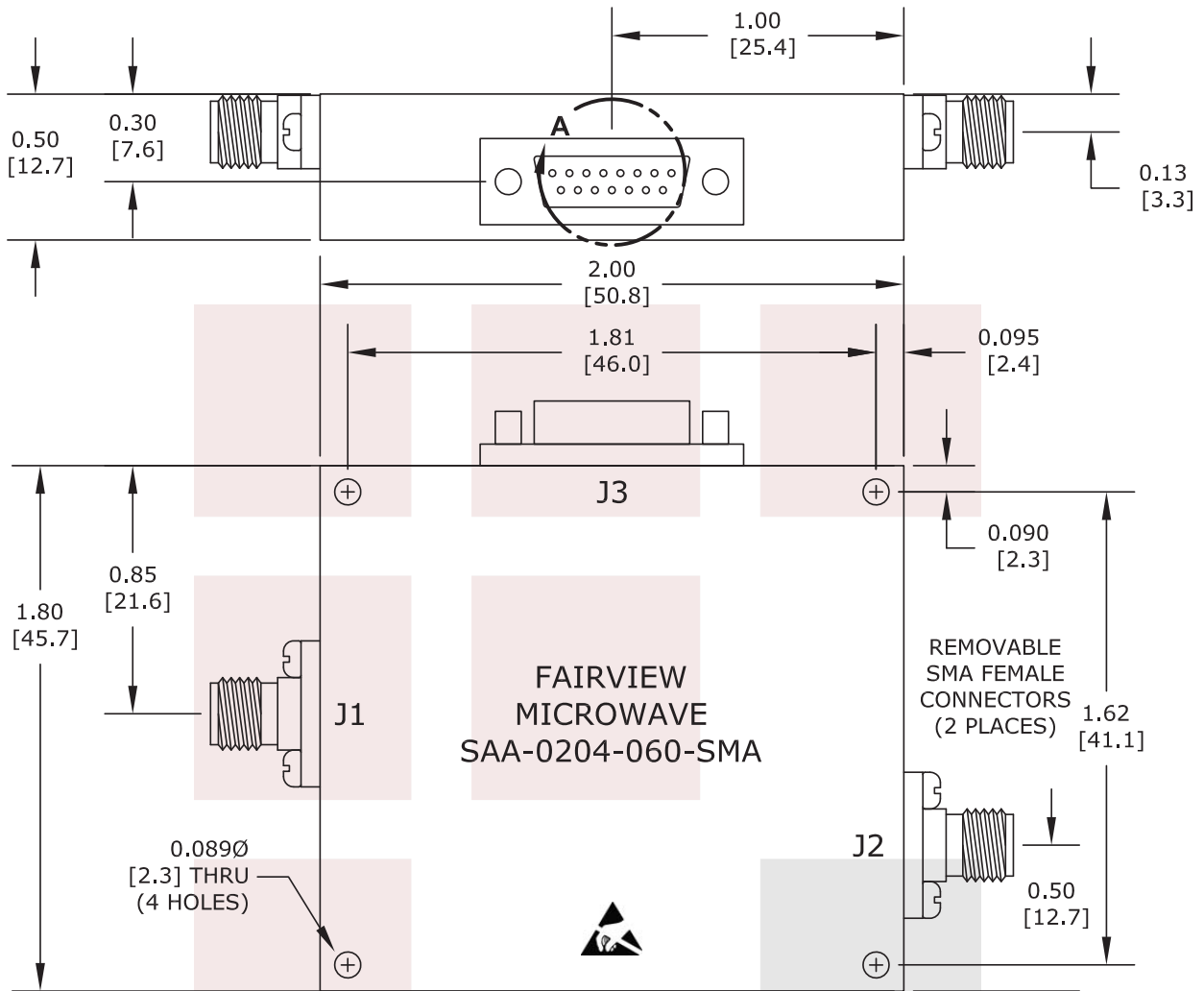
Channel 1 (Yellow): RF output
Channel 2 (Green): TTL Input from Signal Generator

0 to 60 dB Voltage Variable Attenuator From 2 GHz To 4 GHz PIN Diode And SMA 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 Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [0 to 60 dB Voltage Variable Attenuator From 2 GHz To 4 GHz PIN Diode And SMA SAA-0204-060-SMA](http://www.fairviewmicrowave.com/60db-voltage-variable-attenuator-pin-diode-4-ghz-saa-0204-060-sma)

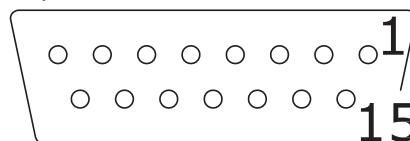
URL: <http://www.fairviewmicrowave.com/60db-voltage-variable-attenuator-pin-diode-4-ghz-saa-0204-060-sma-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



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		

15 PIN MICRO-D FEMALE
(MATING CONNECTOR SUPPLIED)



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 0 to 60 dB Voltage Variable Attenuator From 2 GHz To 4 GHz PIN Diode And SMA		DWG NO SAA-0204-060-SMA	CAGE CODE 3FKR5		
CAD FILE	051815	SHEET	SCALE	N/A	SIZE A 2233