



SDA-060-060-0025-SMA

Features

- 8 Bit Programmable 60 dB Pin Diode Attenuator
- · 0.03 GHz to 6 GHz Frequency Range
- · 60 dB Attenuation Range
- · Step Resolution of 0.25 dB

Applications

- · Electronic Warfare
- · Test & Measurement
- · Military & Space

- · Insertion Loss 4 dB Max
- · RF Connectors are SMA Female
- 15 Pin Micro-D Female Connector
- Radar
- Military Communications Systems

Description

The SDA-060-060-0025-SMA is a 8 Bit Programmable 60 dB Pin Diode Attenuator with Step Resolution as Low as 0.25 dB over the Operating Frequency Range from 0.03 GHz to 6 GHz. The RF Input/Output Connectors are SMA Female. Along with a 15 Pin Micro-D Female Control Socket. The unit is shipped with a Micro-D Mating Connector.

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

Description	Min	Тур	Max	Unit
Frequency Range	0.03		6	GHz
Impedance		50		Ohms
Attenuation Range	0		60	dB
Insertion Loss			4	dB
Return Loss			-8.5	dB
VSWR			2.2:1	
Power Rating			20	dBm
Survial Power Average -40 to +85 deg C				
Attenuation Flatness				
@ 10 dB		±1		dB
@ 20 dB		±1.5		dB
@ 40 dB		±3		dB
@ 60 dB		±5		dB
Accuracy of Attenuation				
0 dB to 30 dB		±1		dB
30 dB to 50 dB		±1.3		dB
50 dB to 60 dB		±1.5		dB
Step Size	0.25			dB
Switching Time		50		us
DC Voltage	10.8	±12	13.2	Volts
DC Current		155		mA
Control Bits		8		Bits





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

Description	Min	Тур	Max	Unit
Logic Input "0" (Bit Off)	-0.3		0.8	Volts
Logic Input "1" (Bit On)	2		5	Volts

Mechanical Specifications

Size

Length 2 in [50.8 mm] Width 1.8 in [45.72 mm] Height 0.5 in [12.7 mm] Weight 0.0145 lbs [6.58 g] Connector 1 SMA Female Connector 2 **SMA Female**

Environmental Specifications

Temperature

Operating Range -40 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

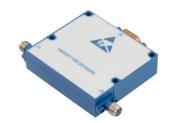
Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

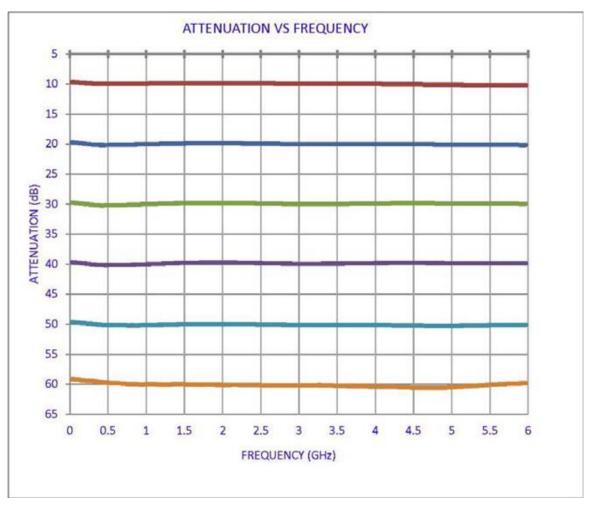
- · Values at 25 °C, sea level
- ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.





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Typical Performance Data





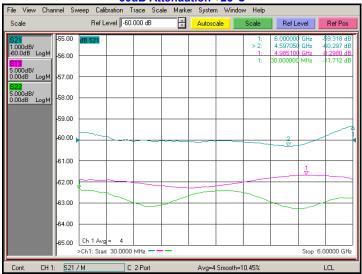


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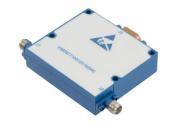
Insertion Loss and VSWR @ 0dB Attenuation +25°C



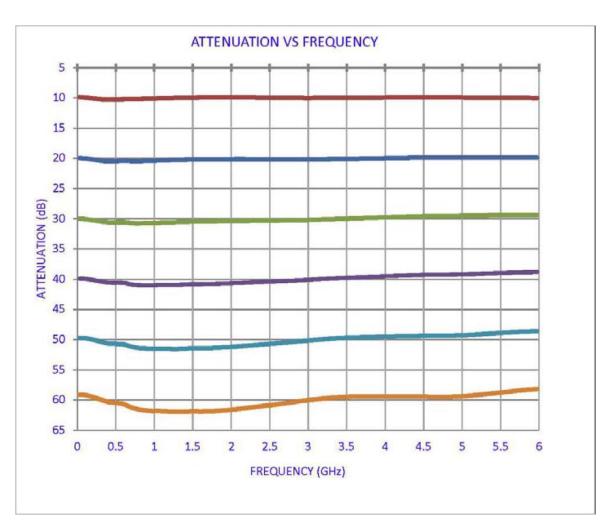
60dB Attenuation +25°C







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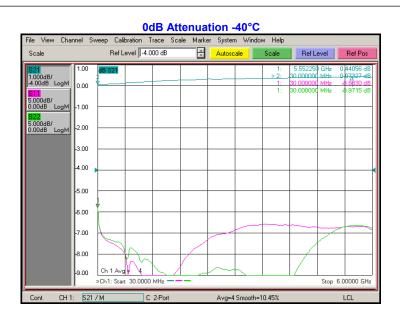


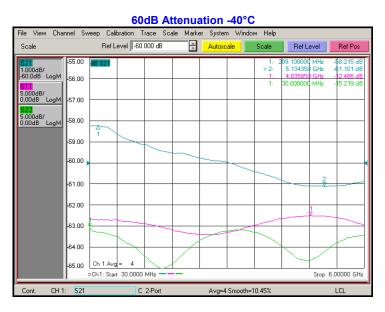
-40°C @ 5dBm



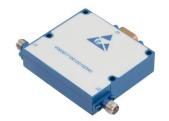


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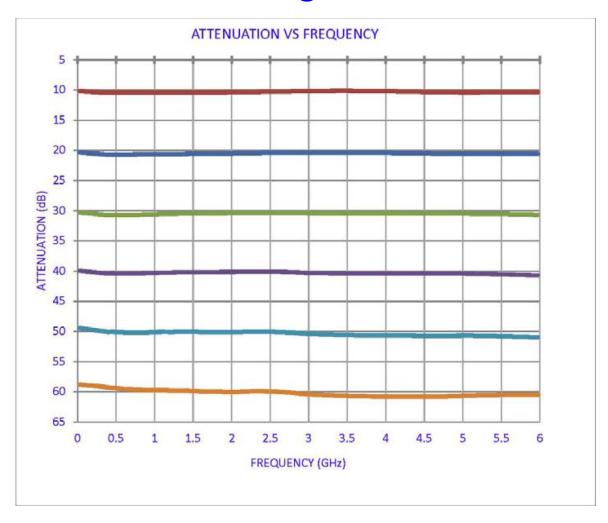






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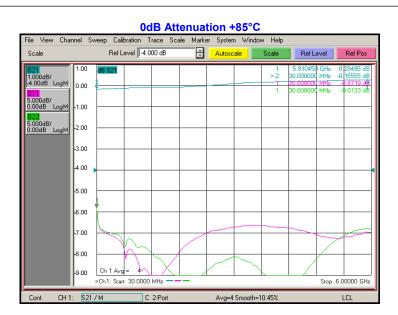
+85°C @ 5dBm







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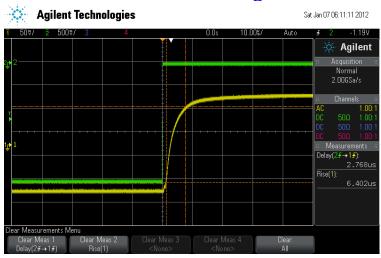




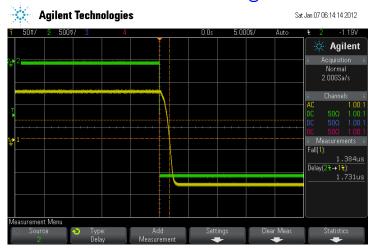


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Delay Off Measured with a Tunnel Diode @ 2GHz



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







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0 to 60 dB 8 Bit Programmable TTL Controlled Step Attenuator With a 0.25 dB Step SMA Female To SMA Female From 30 MHz To 6 GHz 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.

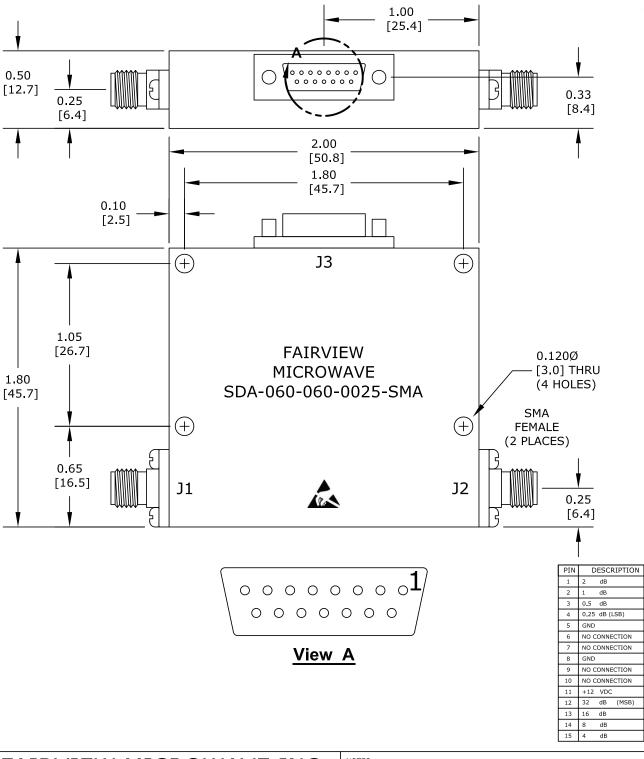
For additional information on this product, please click the following link: 0 to 60 dB 8 Bit Programmable TTL Controlled Step Attenuator With a 0.25 dB Step SMA Female To SMA Female From 30 MHz To 6 GHz SDA-060-060-0025-SMA

URL: https://www.fairviewmicrowave.com/60-db-programmable-step-attenuator-sma-female-sda-060-060-0025-sma-p.

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SDA-060-060-0025-SMA CAD Drawing

0 to 60 dB 8 Bit Programmable TTL Controlled Step Attenuator With a 0.25 dB Step SMA Female To SMA Female From 30 MHz To 6 GHz



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	SDA-060-060-0025-SMA			CAGE CODE 3FKR5		
	CAD FILE 052715	SHEET	SCALE N	/A SIZE A	2233	