PASTERNACK®
THE ENGINEER'S RF SOURCE

60 dB With 10 Bit Programmable TTL Controlled Attenuator, SMA Female To SMA Female, 0.06 dB Steps From 500 MHz To 18 GHz

TECHNICAL DATA SHEET PE70A6000

The PE70A6000 is a Non-Reflective 10 Bit Programmable 60 dB Pin Diode Attenuator with Step Resolution as Low as 0.06 dB over the Operating Frequency Range from 0.5 GHz to 18 GHz. The PE70A6000 is offered in a slim line housing measuring only 0.5" Height. 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.

Features

- Non-Reflective 10 Bit Programmable 60 dB Pin Diode Attenuator
- 0.5 GHz to 18 GHz Frequency Range
- 60 dB Attenuation Range
- Step Resolution of 0.06 dB
- 1 Watt Average Survival Power
- Insertion Loss 4.5 dB Max
- VSWR 2.0:1 Max
- RF Connectors are SMA Female
- 15 Pin Micro-D Female Connector

Applications

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

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

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.5		18	GHz
Mean Attenuation Range	0		60	dB
Insertion Loss			4.5	dB
Input VSWR			2:1	
Power Rating		15	+30	dBm
Survival Power Average			+30	dBm
Attenuation Flatness				
@ 10 dB		±1		dB
@ 20 dB		±1		dB
@ 40 dB		±1.25		dB
@ 60 dB		±3		dB
Accuracy of Attenuation				
0 dB to 20 dB		±1		dB
20 dB to 40 dB		±1.5		dB
40 dB to 60 dB		±2		dB
Step Size	0.06			dB
Switching Time				
On Time			1	µs
Off Time			0.5	µs

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 60 dB With 10 Bit Programmable TTL Controlled Attenuator, SMA Female To SMA Female, 0.06 dB Steps From 500 MHz To 18 GHz PE70A6000

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

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Logic Input			
Logic "0" (Bit Off)	-0.3	0.8	Volts
Logic "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	0.137 lbs [62.14 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 Cycling	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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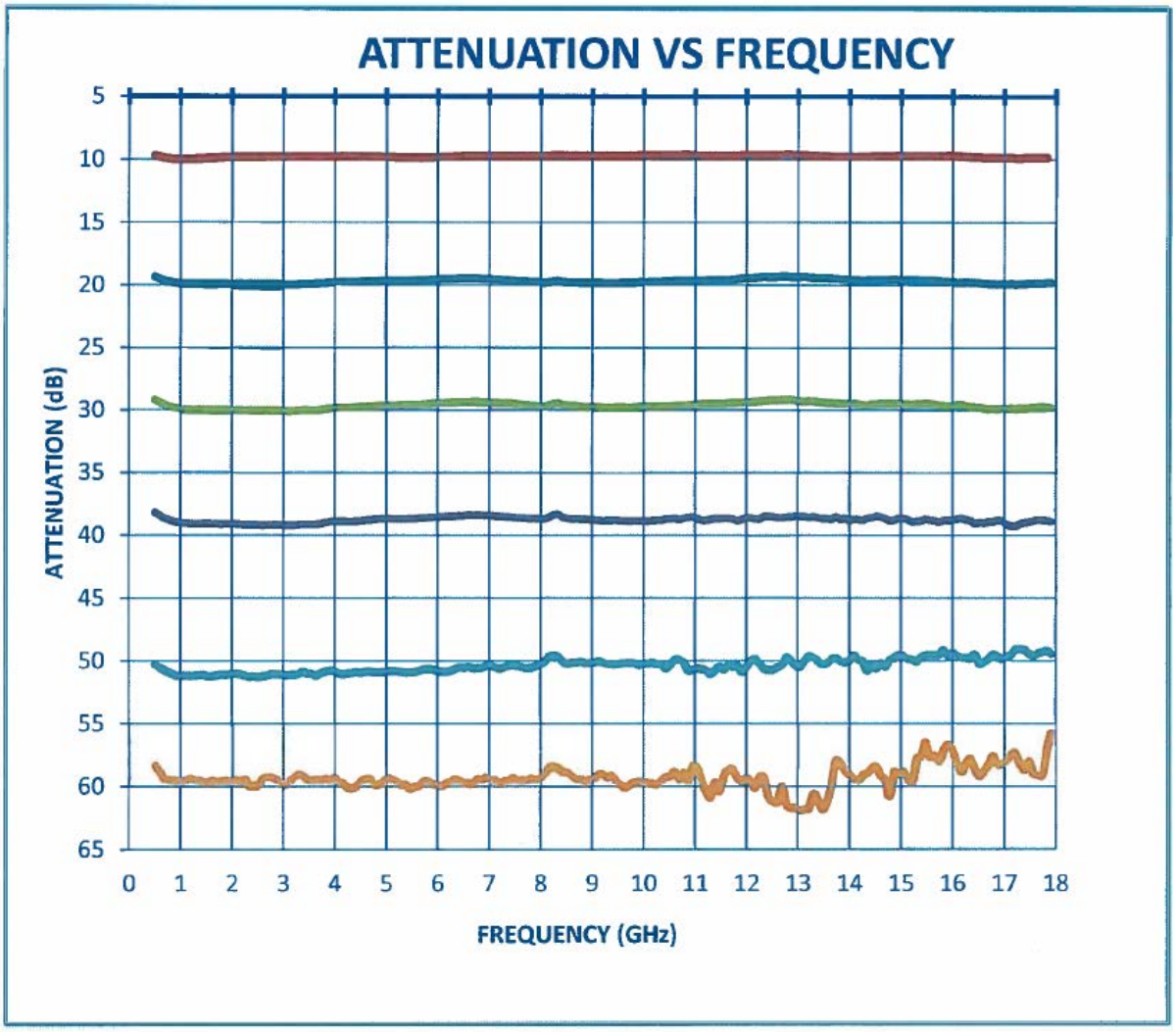
Performance Data



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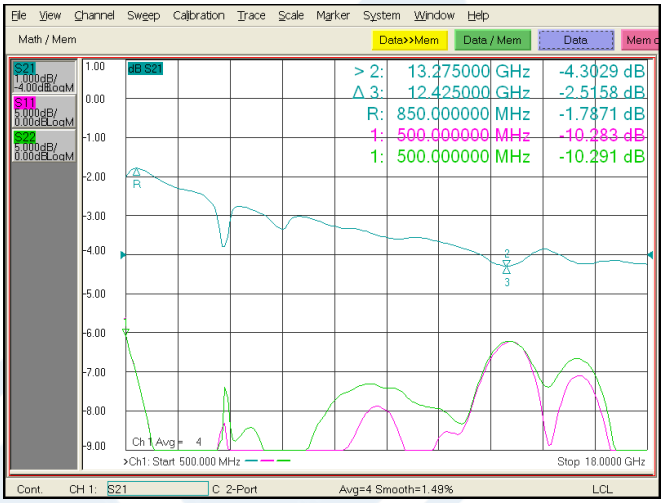
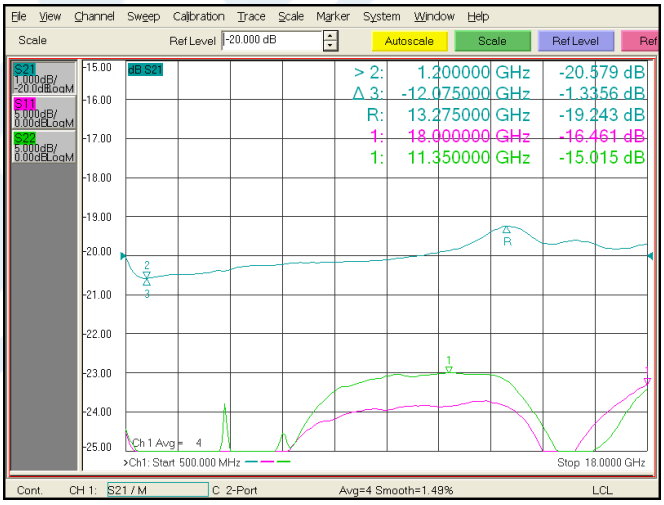
Insertion Loss and VSWR @ 0dB Attenuation



20dB Attenuation



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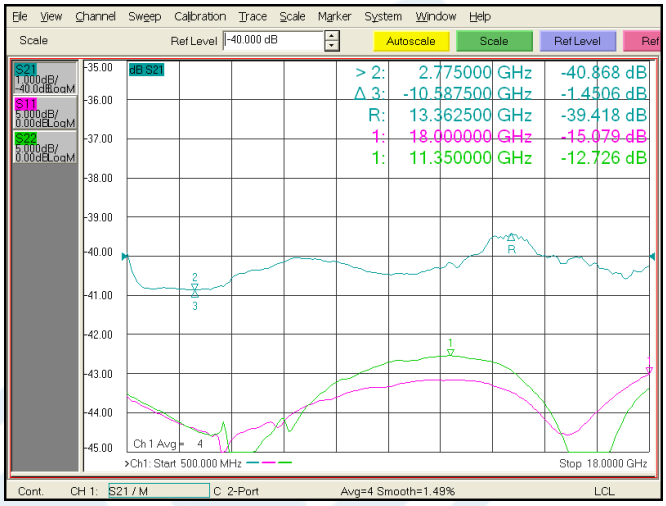
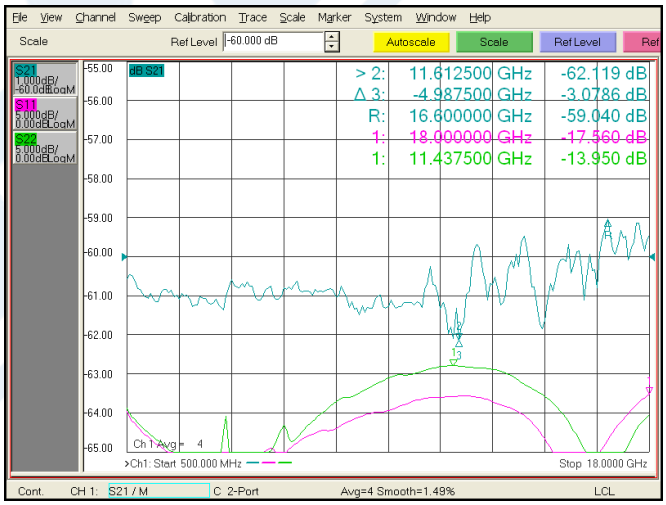
40dB Attenuation



60dB Attenuation



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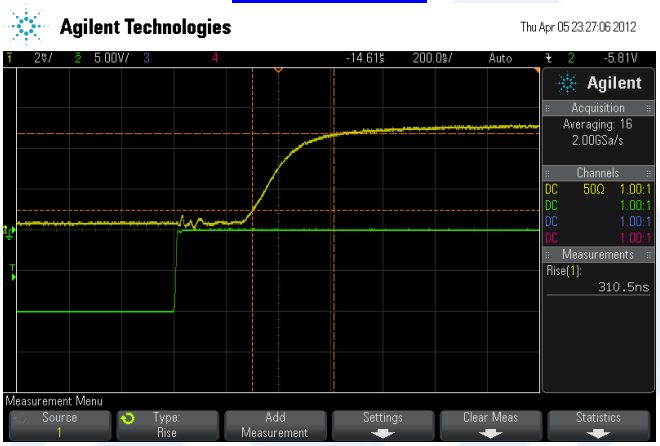
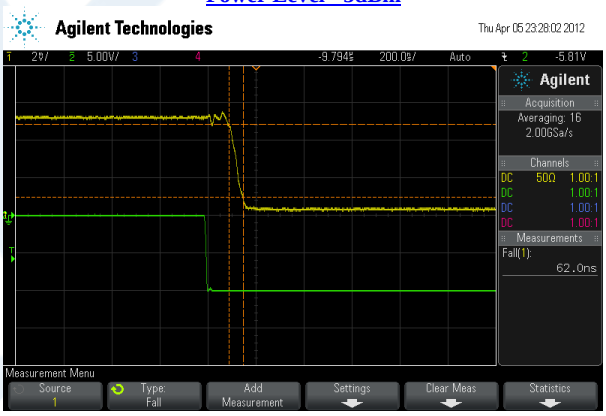
Delay On
Measured with a Tunnel Diode @ 10GHz
Power Level +5dBm



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

Delay Off
Measured with a Tunnel Diode @ 10GHz
Power Level +5dBm



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URL: https://www.pasternack.com/60db-programmable-sma-female-sma-female-0-watts-attenuator-pe70a6000-p.aspx

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PE70A6000 CAD Drawing

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