



0 to 40 dB Voltage Variable Attenuator, 400 MHz To 6 GHz SMA

TECHNICAL DATA SHEET

PE70A1000

The PE70A1000 is a Non-Reflective Linear Voltage Controlled 40 dB PIN Diode Attenuator that operates from 0.4 GHz to 6 GHz. The PE70A1000 has an Insertion Loss of 4 dB max and a typical IP1dB of +23 dBm.

Features

- PIN Attenuator
- 0.4 GHz to 6 GHz Frequency Range
- 40 dB Attenuation
- 0 - 10 VDC Control Voltage Range

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	0.4		6	GHz
Mean Attenuation Range	0		40	dB
Insertion Loss			4	dB
VSWR		1.5:1	2:1	
Power Rating		+23		dBm
Switching Time			10	μs
Control	0		10	Volts
DC Power Supply			12	VDC
			-12	

Mechanical Specifications

Size	
Length	2 in [50.8 mm]
Width	1.81 in [45.97 mm]
Height	0.88 in [22.35 mm]
Weight	0.2 lbs [90.72 g]

Environmental Specifications

Temperature	
Operating Range	-50 to +100 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

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [0 to 40 dB Voltage Variable Attenuator, 400 MHz To 6 GHz SMA PE70A1000](#)



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Altitude
Temperature Cycle

MIL-STD-202F, METHOD 105C COND. B
MIL-STD-202F, METHOD 107

Compliance Certifications (visit www.Pasternack.com for current document)
RoHS Compliant

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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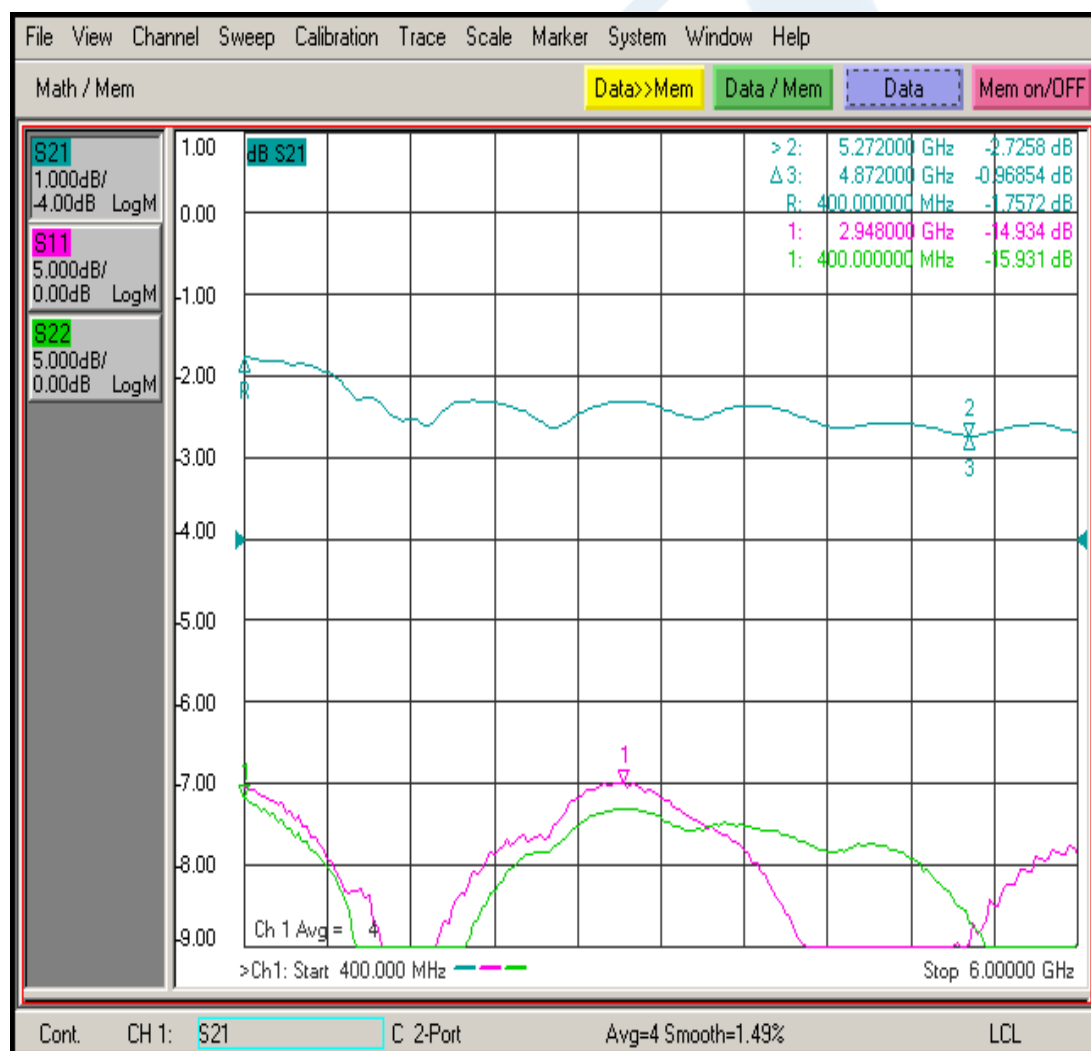
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Power Data

Insertion Loss and Return Loss



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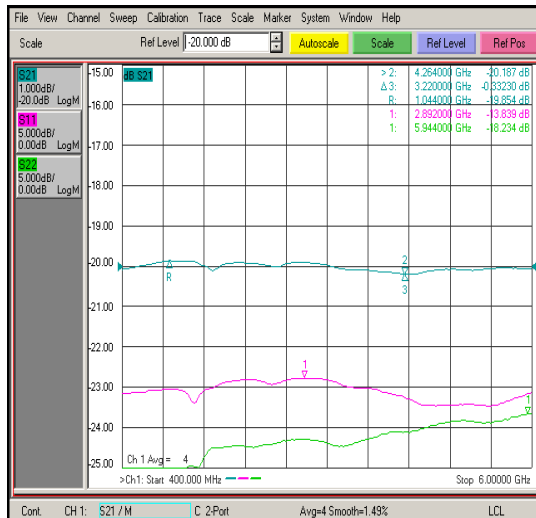


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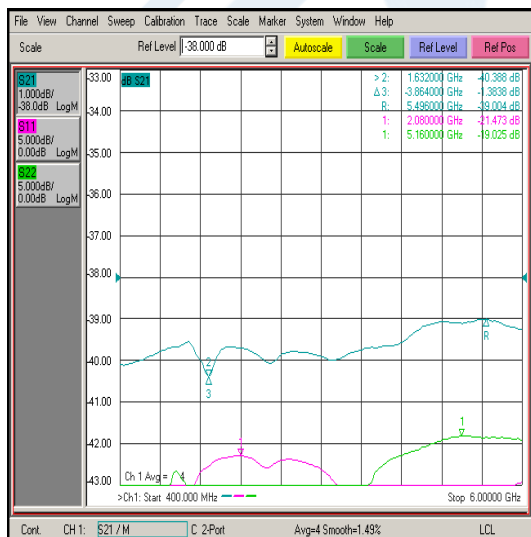
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20dB Attenuation



40dB Attenuation



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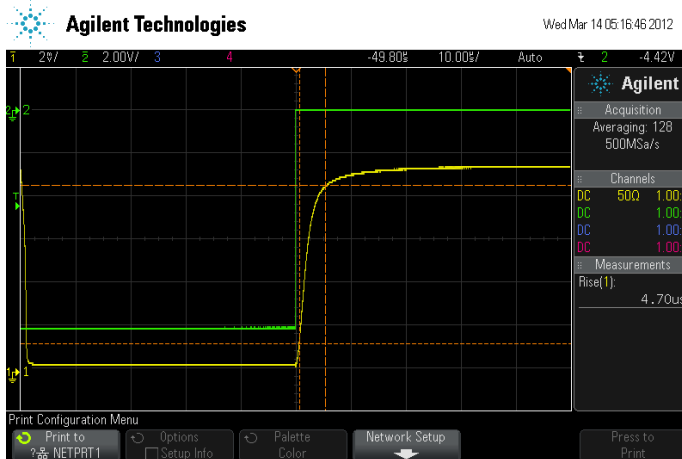
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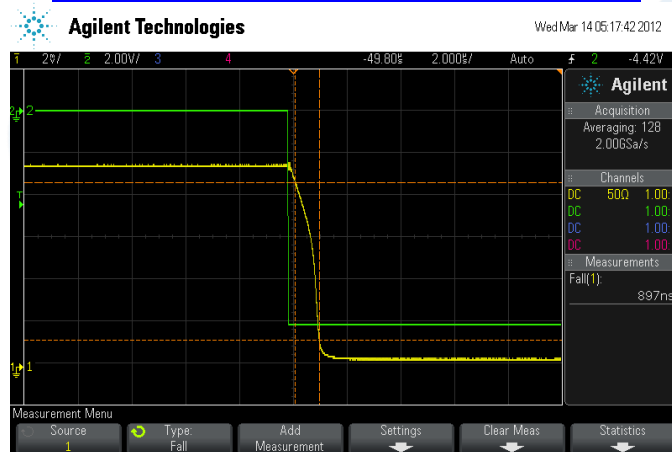
Delay ON Time

Measured @ 4GHz, 5dBm with a Crystal Detector



Channel 1 (Yellow Trace): RF output
Channel 2 (Green Trace): 10 Volt Input from Signal Generator

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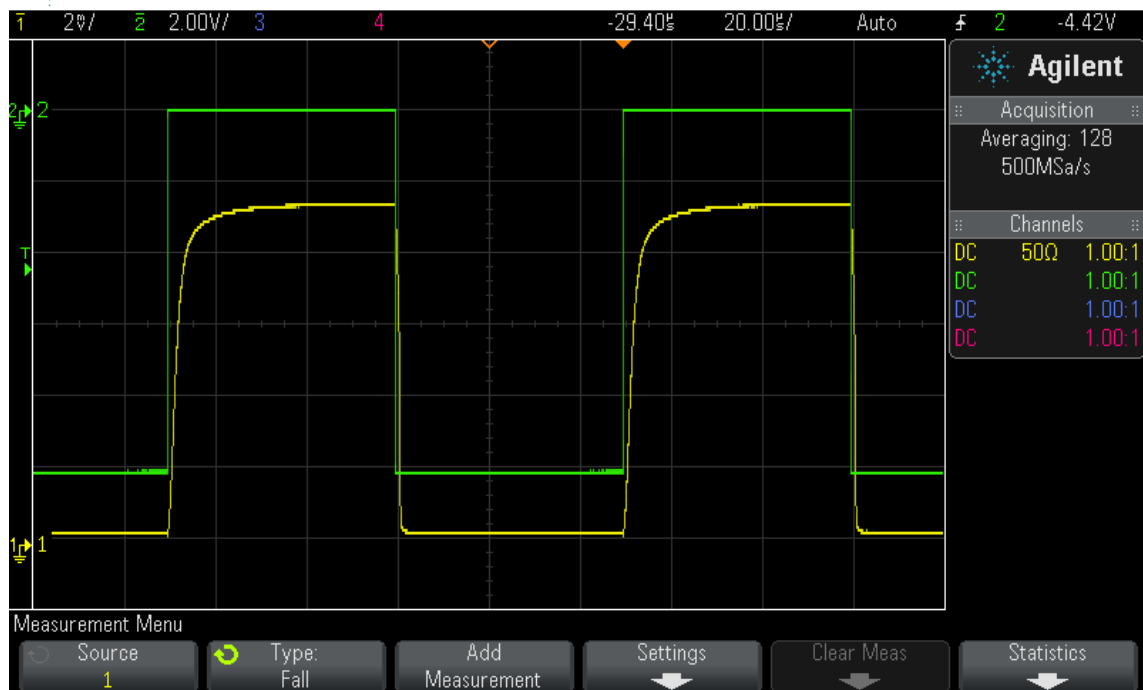
Switching

Measured @ 4GHz, 5dBm with a Crystal Detector



Agilent Technologies

Wed Mar 14 05:18:08 2012



Channel 1 (Yellow Trace): RF output
Channel 2 (Green Trace): 10 Volt Input from Signal Generator

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0 to 40 dB Voltage Variable Attenuator, 400 MHz To 6 GHz SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

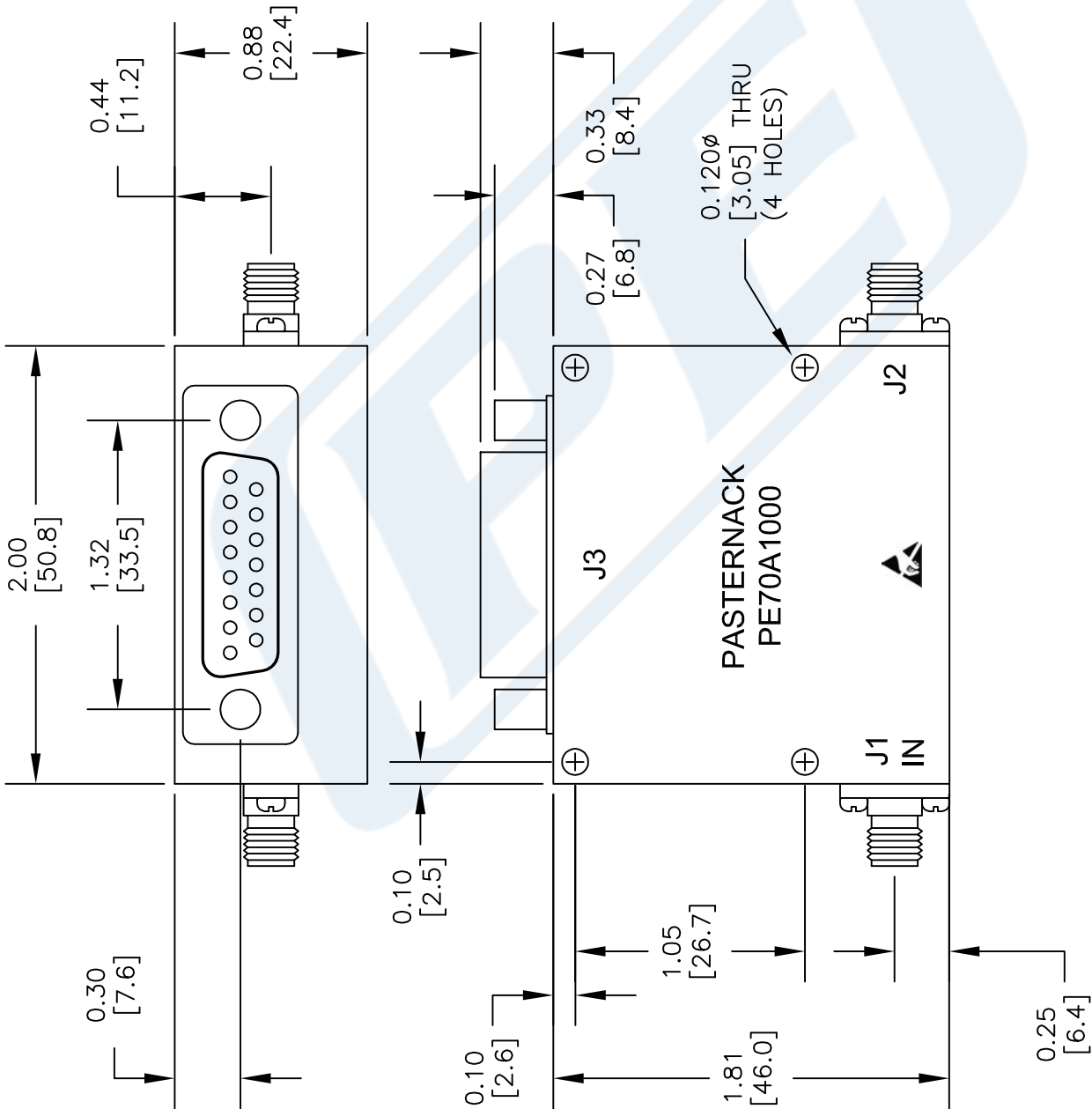
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements.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

PE70A1000 CAD Drawing

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

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].

DWG TITLE

PE70A1000

FSCM NO. 53919

CAD FILE 052814

SCALE N/A

SIZE A

150

PE

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THE ENGINEER'S RF SOURCE

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