



Voltage Variable PIN Diode Attenuator, 0 to 60 dB, 8 GHz to 18 GHz, SMA, 15-Pin D-Subminiature Control

TECHNICAL DATA SHEET

PE70A2003

The PE70A2003 is a 60 dB PIN Diode Attenuator that operates from 8 GHz to 18 GHz. The Input/Output RF Connectors are Removable SMA Female. The control connector is a 15 Pin Micro D, with a mating connector supplied. The Attenuator has an Insertion Loss of 3.7 dB max, a typical IP1dB of +20 dBm and a survival Power Max of +30 dBm.

Features

- PIN Attenuator
- 8 GHz to 18 GHz Frequency Range
- 60 dB Attenuation
- 0 - 6 VDC Control Voltage Range
- Removeable SMA Female Connectors

Applications

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

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

Description	Minimum	Typical	Maximum	Units
Frequency Range	8		18	GHz
Mean Attenuation Range	0		60	dB
Insertion Loss			3.7	dB
VSWR			2:1	
Power Rating		+20		dBm
Survival Power Rating			+30	dBm
Attenuation Flatness				
10 dB		±0.8		dB
20 dB		±1.1		dB
40 dB		±1.5		dB
60 dB		±1.6		dB
Switching Time			500	ns
Analog Control		10		dB/Volt
Control	0		6	Volts
DC Power Supply				
12 to 15 VDC			125	mA
-12 to -15 VDC			50	mA

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Voltage Variable PIN Diode Attenuator, 0 to 60 dB, 8 GHz to 18 GHz, SMA, 15-Pin D-Subminiature Control PE70A2003](#)



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Mechanical Specifications

Size

Length	2 in [50.8 mm]
Width	1.81 in [45.97 mm]
Height	0.5 in [12.7 mm]
Weight	0.1425 lbs [64.64 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

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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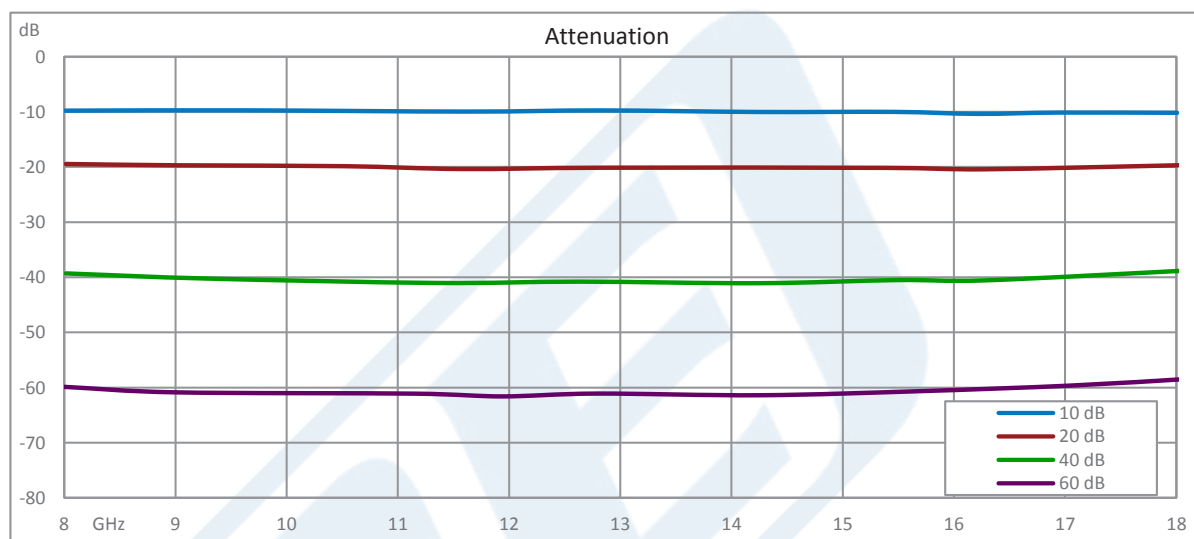


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TECHNICAL DATA SHEET

PE70A2003

Performance Data



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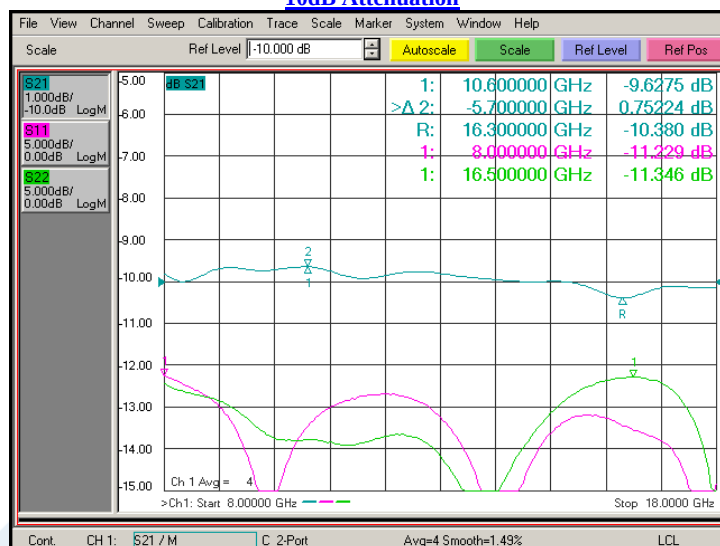


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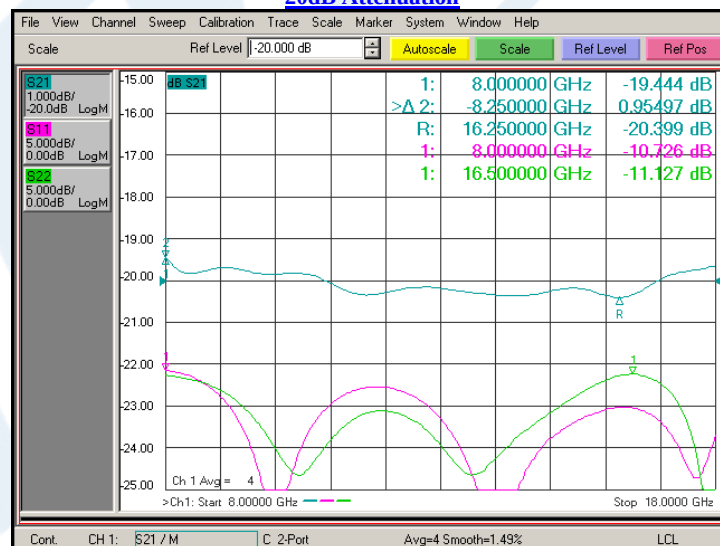
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10dB Attenuation



20dB Attenuation



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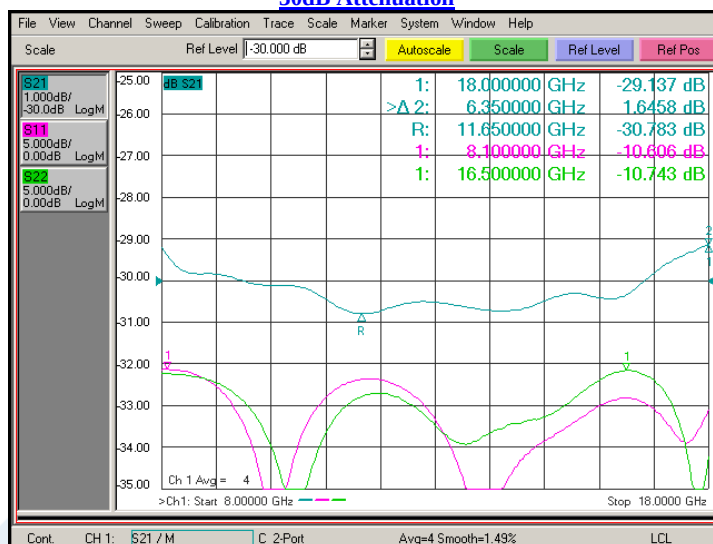


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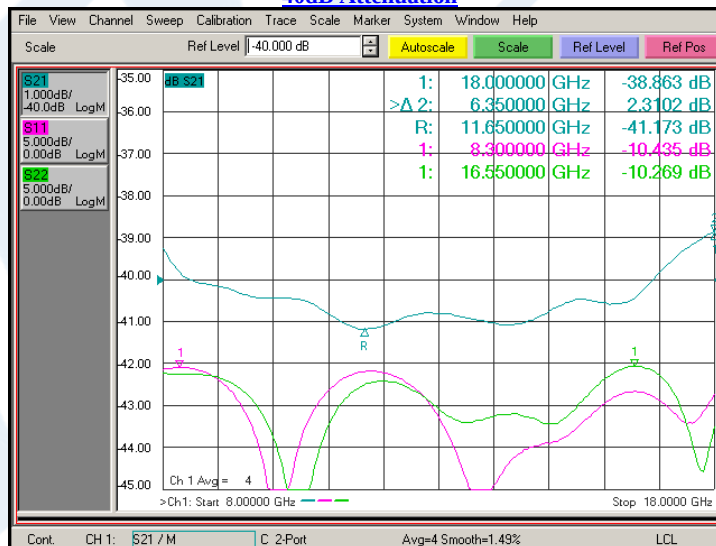
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30dB Attenuation



40dB Attenuation



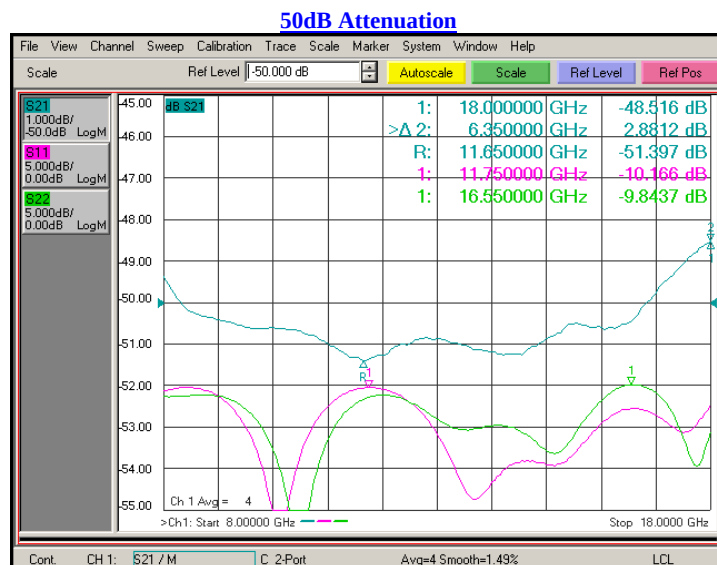
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Voltage Variable PIN Diode Attenuator, 0 to 60 dB, 8 GHz to 18 GHz, SMA, 15-Pin D-Subminiature Control from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

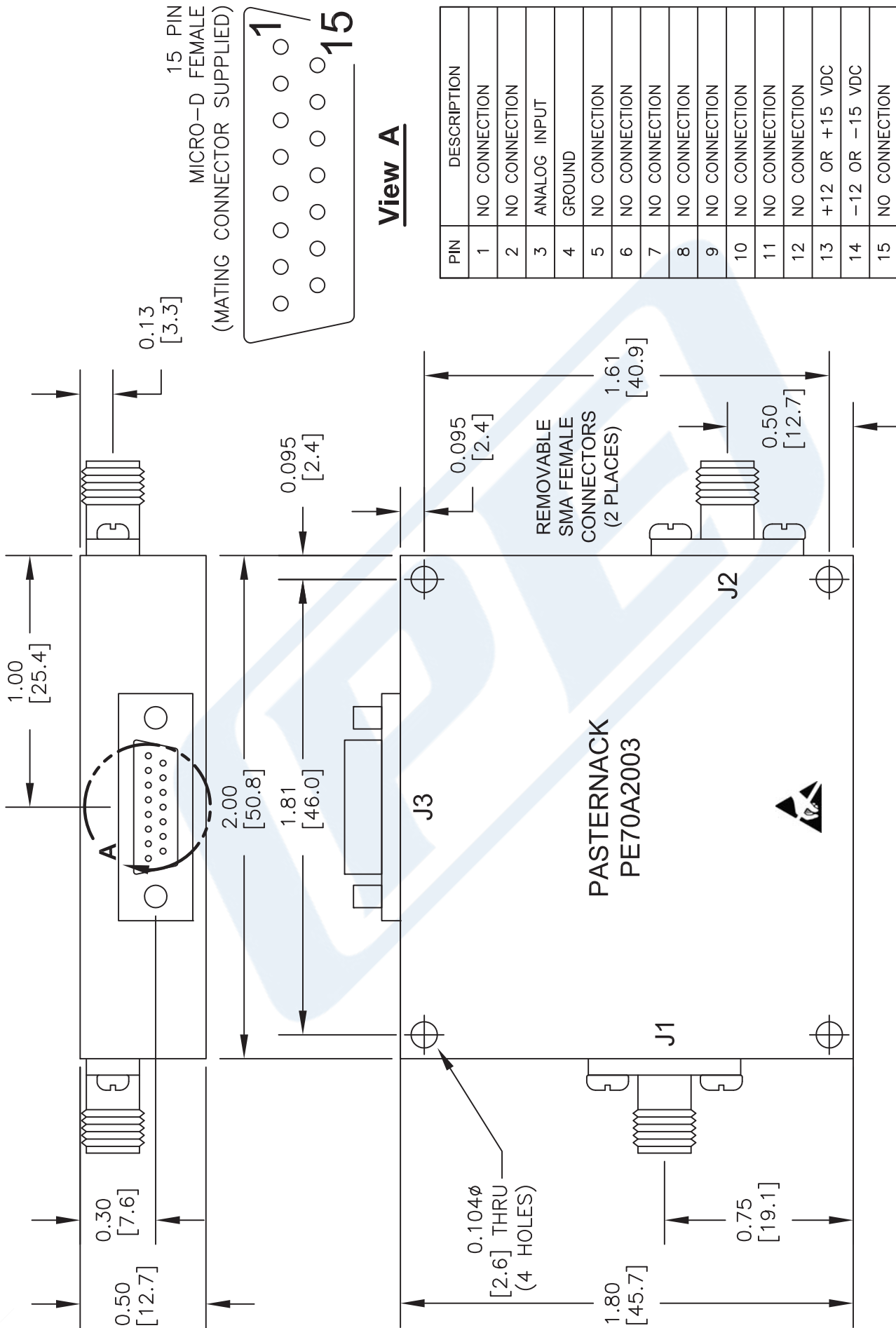
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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.

PE70A2003 CAD Drawing

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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
PE70A2003

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FSCM NO. 53919

CAD FILE 051815

SCALE N/A

SIZE A

2233