



5 Bit TTL Controlled Programmable Attenuator, 30 dB, from 100 MHz to 18 GHz, 1 dB Steps, 2.92mm Female

TECHNICAL DATA SHEET

PE70A5001

The PE70A5001 is a 5 Bit Programmable 30 dB Pin Diode Attenuator with Step Resolution as Low as 1 dB over the Operating Frequency Range from 0.1 GHz to 18 GHz. The RF Input/Output Connectors are 2.92mm Female. Along with a 15 Pin Micro-D Female Control Socket. The unit is shipped with a Micro-D Mating Connector.

Features

- 5 Bit Programmable 30 dB Pin Diode Attenuator
- 0.1 GHz to 18 GHz Frequency Range
- 30 dB Attenuation Range
- Step Resolution of 1 dB
- Insertion Loss 5 dB Typ
- RF Connectors are 2.92mm 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	0.1		18	GHz
Mean Attenuation Range	0		30	dB
Insertion Loss		5		dB
Input VSWR		2.5:1		
Power Rating		24	+24	dBm
Input at 1 dB Compression Point		+20		dBm
Accuracy of Attenuation				dB
0 dB to 30 dB		±2.5		dB
Step Size	1			dB
Switching Time				
On Time			1	us
Off Time			0.5	us
DC Power Supply			15	Volts
DC Current			50	mA
Logic Input				
Logic "0" (Bit Off) @ 0μA	0		0.8	Volts
Logic "1" (Bit On) @ 0μA	2		5	Volts

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [5 Bit TTL Controlled Programmable Attenuator, 30 dB, from 100 MHz to 18 GHz, 1 dB Steps, 2.92mm Female PE70A5001](#)



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Mechanical Specifications

Size

Length	2 in [50.8 mm]
Width	1.8 in [45.72 mm]
Height	0.5 in [12.7 mm]
Weight	0.13 lbs [58.97 g]
Connector 1	2.92mm Female
Connector 2	2.92mm Female

Environmental Specifications

Temperature

Operating Range	-50 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:

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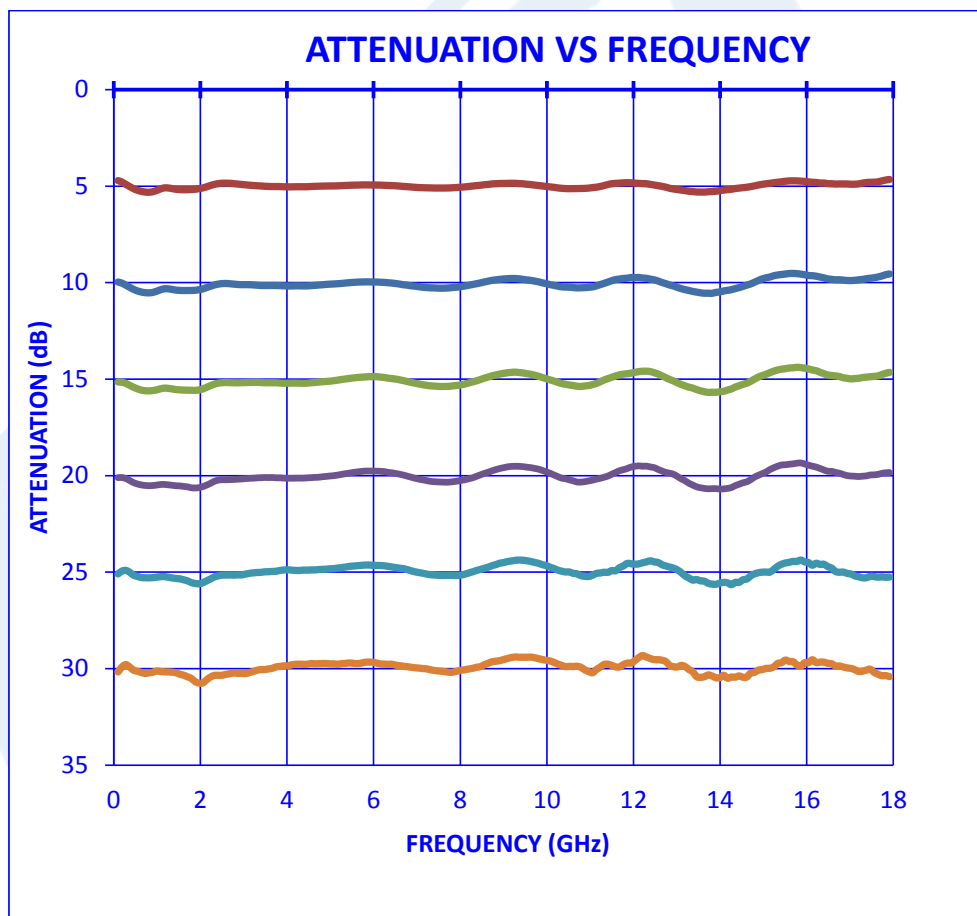
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Performance Data

Attenuation vs. Frequency Plot



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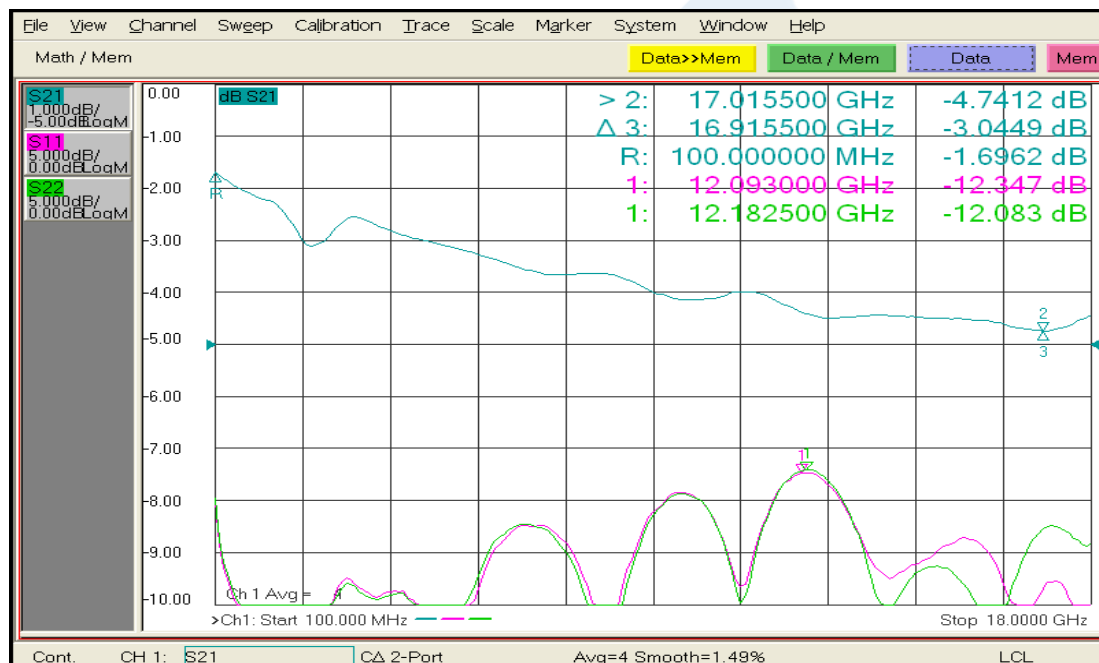


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Insertion Loss & Return Loss



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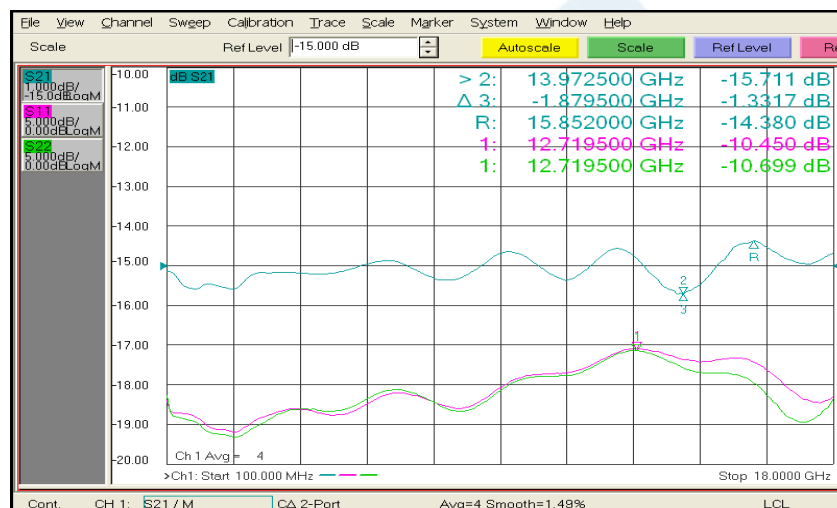


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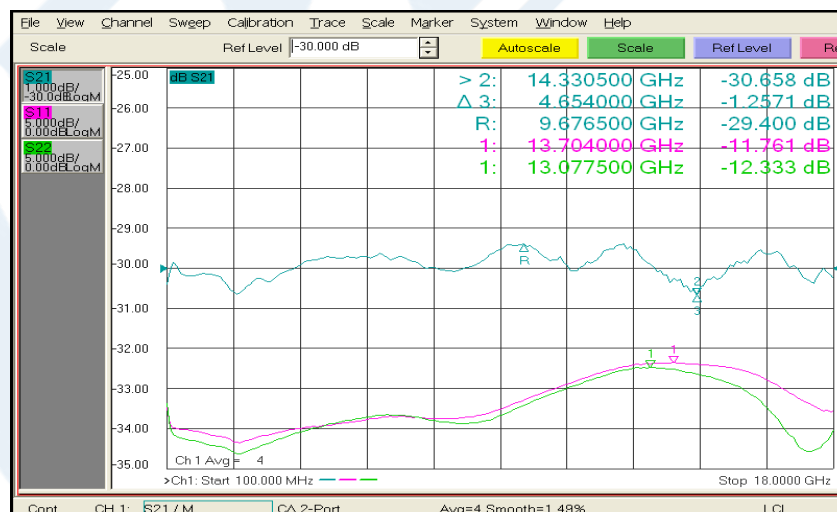
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-15dB Attenuation



-30dB Attenuation



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5 Bit TTL Controlled Programmable Attenuator, 30 dB, from 100 MHz to 18 GHz, 1 dB Steps, 2.92mm Female 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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PE70A5001 CAD Drawing

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