

## 30 dB Programmable USB Controlled Attenuator, 2.92mm Female to 2.92mm Female, 1 dB Steps From 100 MHz to 40 GHz



### PE70A3901

#### Features

- Programmable 30 dB Pin Diode Attenuator
- 0.1 GHz to 40 GHz Frequency Range
- 30 dB Attenuation Range
- Step Resolution of 1 dB
- Insertion Loss 5 dB Typ, 8 dB typ to 40 GHz
- 2.92mm Female Input/Output connectors

#### Applications

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

#### Description

The PE70A3901 is a 5 Bit Programmable 30 dB Pin Diode Attenuator with Step Resolution of 1 dB over the Operating Frequency Range from 0.1 GHz to 40 GHz. The Attenuator is controlled and powered via USB 2.0 with drivers installation, so no external power supply is required.

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

Description	Min	Typ	Max	Unit
Frequency Range	0.1		40	GHz
Impedance		50		Ohms
Attenuation Range	0		30	dB
VSWR		2.5:1		
Output VSWR		2.5:1		
Power Rating			23	dBm
Accuracy of Attenuation to 30 dB		±2.5		dB
Step Size		1		dB

#### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	0.1-20	20-40				GHz
Insertion Loss, Typ	5	8				dB

#### Mechanical Specifications

##### Size

Length	2.25 in [57.15 mm]
Width	1 in [25.4 mm]
Height	0.33 in [8.38 mm]
Weight	0.075 lbs [34.02 g]
Connector 1	2.92mm Female
Connector 2	2.92mm Female

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### Environmental Specifications

Temperature

**Compliance Certifications** (see [product page](#) for current document)

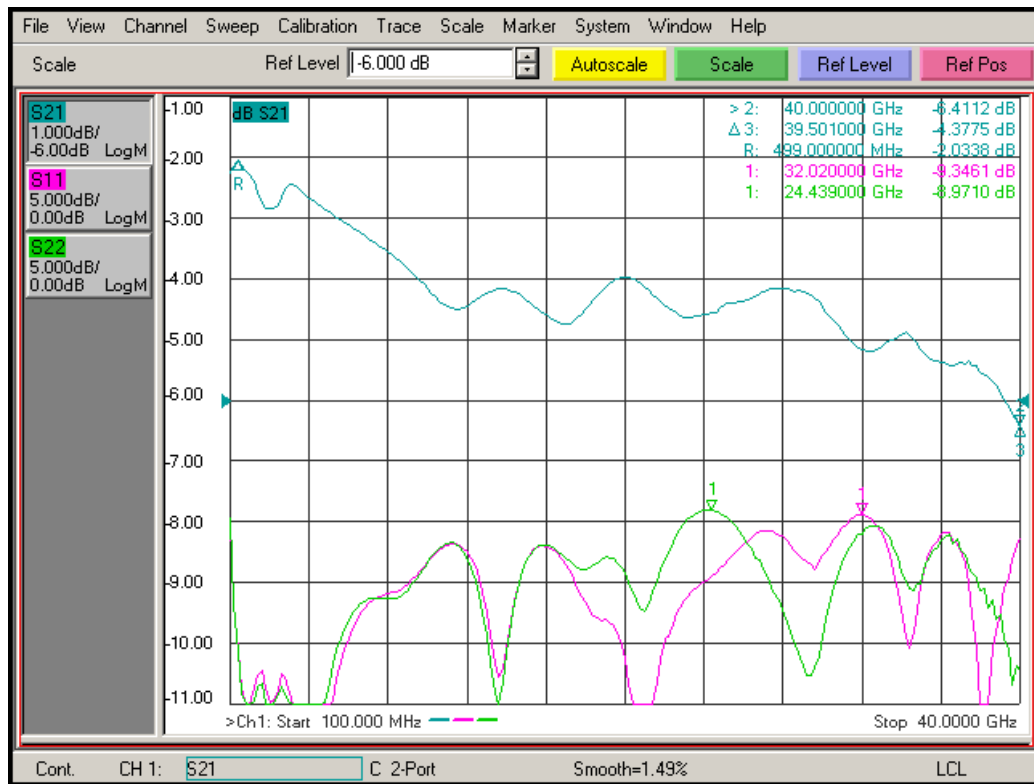
### Plotted and Other Data

Notes:

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

### Typical Performance Data

#### Insertion Loss & Return Loss



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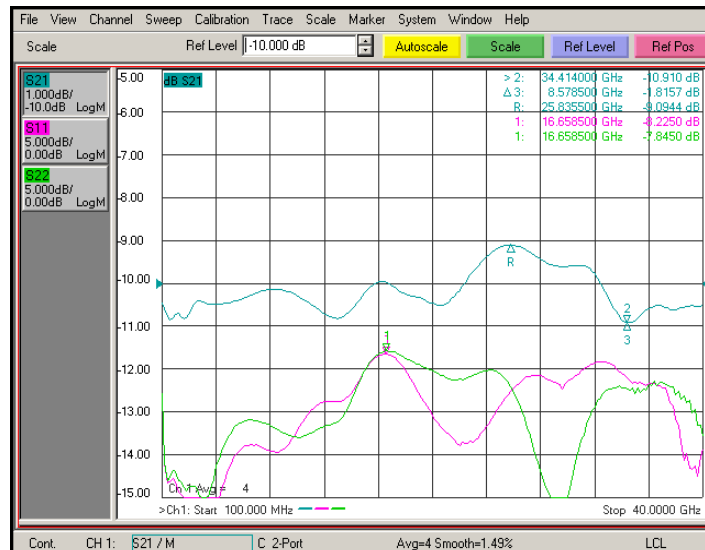


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### 5dB Attenuation



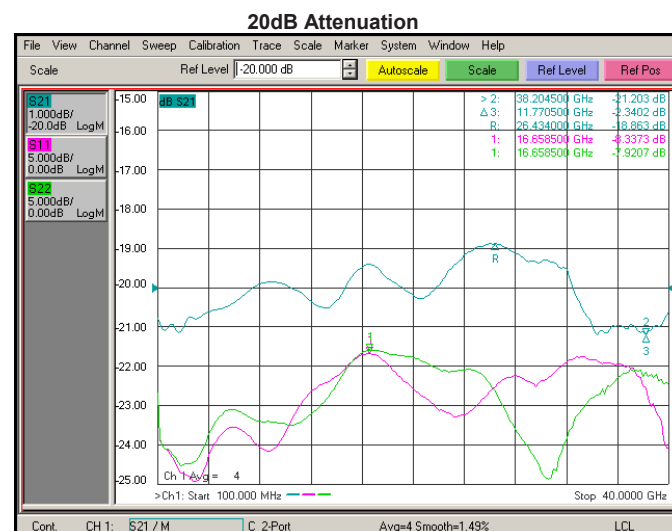
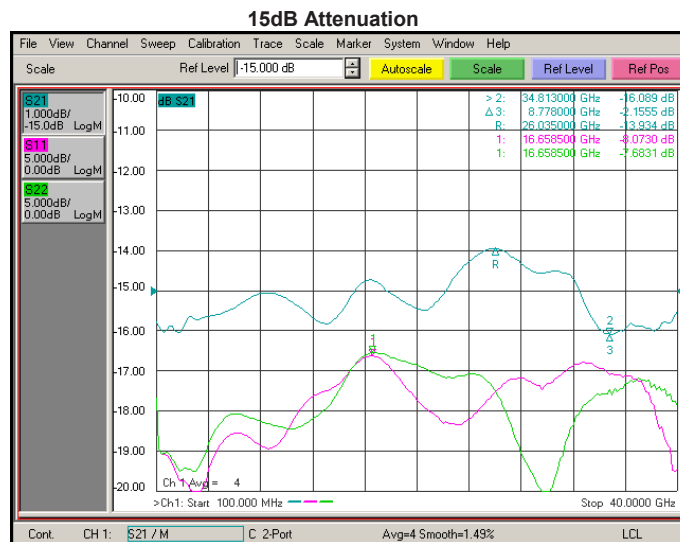
### 10dB Attenuation



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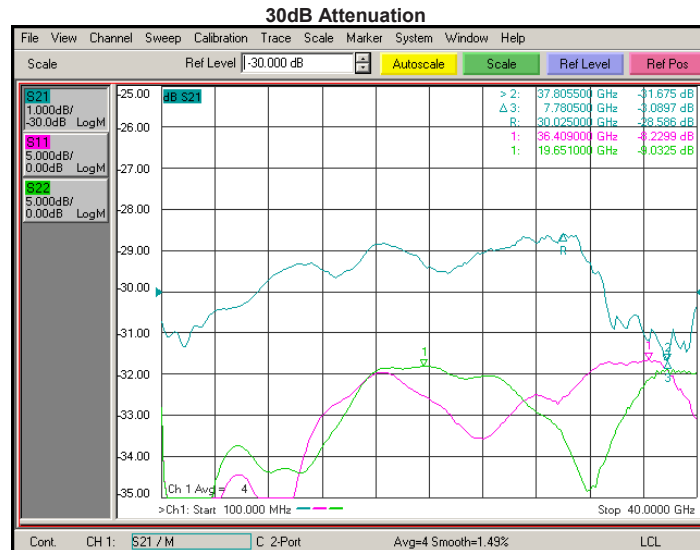
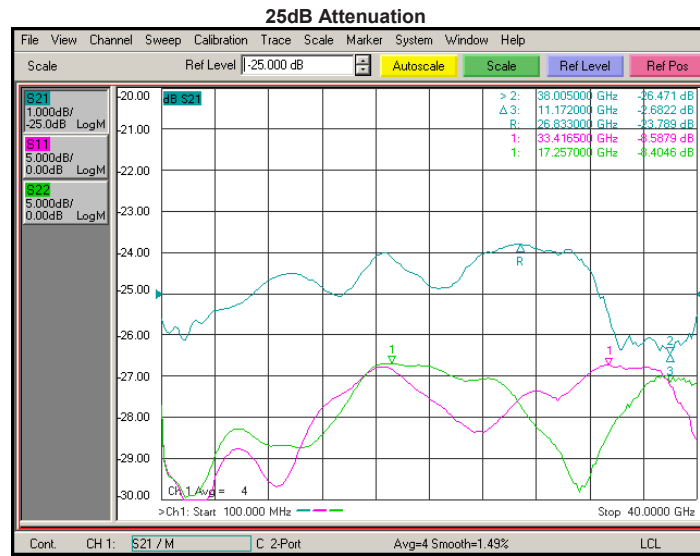
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30 dB Programmable USB Controlled Attenuator, 2.92mm Female to 2.92mm Female, 1 dB Steps From 100 MHz to 40 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [30 dB Programmable USB Controlled Attenuator, 2.92mm Female to 2.92mm Female, 1 dB Steps From 100 MHz to 40 GHz PE70A3901](https://www.pasternack.com/30db-programmable-usb-controlled-2.92mm-female-2.92mm-female-0-watts-attenuator-pe70a3901-p.aspx)

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The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE70A3901 CAD Drawing

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