



## PE70A3900

#### **Features**

- Programmable 30 dB Pin Diode Attenuator
- 0.1 GHz to 18 GHz Frequency Range
- · 30 dB Attenuation Range

## **Applications**

- · Electronic Warfare
- · Test & Measurement
- · Military & Space

- · Step Resolution of 1 dB
- Insertion Loss 5 dB Typ
- Radar
- · Military Communications Systems

## **Description**

The PE70A3900 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 18 GHz. This attenuator is controlled and powered via USB 2.0 with driverless installation, so no external power supply is required.

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

Description	Min	Тур	Max	Unit
Frequency Range	0.1		18	GHz
Impedance		50		Ohms
Attenuation Range	0		30	dB
Insertion Loss		5		dB
VSWR		2.5:1		
Output VSWR		2.5:1		
Power Rating			20	dBm
Survial Power Average -40 to +85 deg C				
Attenuation Flatness				
@ 30 dB				
Accuracy of Attenuation				
0 dB to 30 dB		±2.5		dB
Step Size		1		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
 0.072 lbs [32.66 g]

 Connector 1
 SMA Female

 Connector 2
 SMA Female

#### **Environmental Specifications**

**Temperature** 

Operating Range -40 to +85 deg C





## PE70A3900

Storage Range

-55 to +125 deg C

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.//Heat Sink Required for Proper Operation, Unit is cooled by conduction to heat sink.





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#### **Typical Performance Data**

#### **Insertion Loss & Return Loss**









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#### **5dB Attenuation**









## PE70A3900

#### **15dB Attenuation**









## PE70A3900

#### **25dB Attenuation**









## PE70A3900

30 dB Programmable USB Controlled Attenuator, SMA Female to SMA Female, 1 dB Steps From 100 MHz to 18 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, SMA Female to SMA Female, 1 dB Steps From 100 MHz to 18 GHz PE70A3900

URL: https://www.pasternack.com/30db-programmable-usb-controlled-sma-female-o-watts-attenuator-pe70a3900-p.aspx

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## PE70A3900 CAD Drawing

30 dB Programmable USB Controlled Attenuator, SMA Female to SMA Female, 1 dB Steps From 100 MHz to 18 GHz

