

7 Bit Relay Controlled Programmable Attenuator, 127 dB Up to 1.5 GHz, 1 dB Steps, +12V, SMA Female



PE70A8005

Features

- 7 Bit Relay Programmable Attenuator
- DC to 1500 MHz Bandwidth
- 0-127 dB Attenuation Range
- 1 dB Step Size
- 50 Ohms
- Switching Speed: 6 milliseconds
- Insertion Loss: 4 dB max
- Attenuation Accuracy: +/- 0.5 dB typ
- 1 Watt Average
- +12 Vdc at 30 mA
- SMA female connectors

Applications

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

Description

The PE70A8005 is a 7 Bit Relay Programmable Attenuator which operates over the frequency range of DC to 1500 MHz. The 50 ohm design has an attenuation range that covers 0 to 127 dB in 1 dB steps. Attenuation steps are 1, 2, 4, 8, 16, 32, and 64 dB. Insertion loss is 3.2 dB typical with a maximum RF input power 1 Watt average. Additional typical performance includes +/- 0.5 dB attenuation accuracy and switching speed of 6 milliseconds. The DC supply is +12 Vdc @ 30 mA per relay (7 relay solder terminals 1 GND solder terminal). The compact and rugged package design supports SMA female RF input/output connectors and DC connector solder terminals. Operational temperature is -20°C to +85°C.

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

Description	Min	Typ	Max	Unit
Frequency Range	DC		1.5	GHz
Impedance		50		Ohms
Attenuation Range	0		127	dB
Insertion Loss		3.2	4	dB
VSWR			1.4:1	
Power Rating			30	dBm
Survival Power Average -20 to +85 deg C				
Accuracy of Attenuation or 2% whichever is greater				
Step Size		1		dB
Switching Time		6		ms
DC Voltage		±12		Volts
DC Current			30	mA
Control Bits		7		Bits

7 Bit Relay Controlled Programmable Attenuator, 127 dB
Up to 1.5 GHz, 1 dB Steps, +12V, SMA Female



PE70A8005

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC-0.5	0.5-1	1-1.5			GHz
Insertion Loss, Typ	2.1	2.7	3.2			dB

Electrical Specification Notes:

1, 2, 4, 8, 16, 32, and 64 dB bit Steps

Mechanical Specifications

Size

Length	5.13 in [130.3 mm]
Width	1.56 in [39.62 mm]
Height	0.97 in [24.64 mm]
Weight	0.593 lbs [268.98 g]
Connector 1	SMA Female
Connector 2	SMA Female

Environmental Specifications

Temperature

Operating Range	-20 to +85 deg C
-----------------	------------------

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

Plotted and Other Data

Notes:

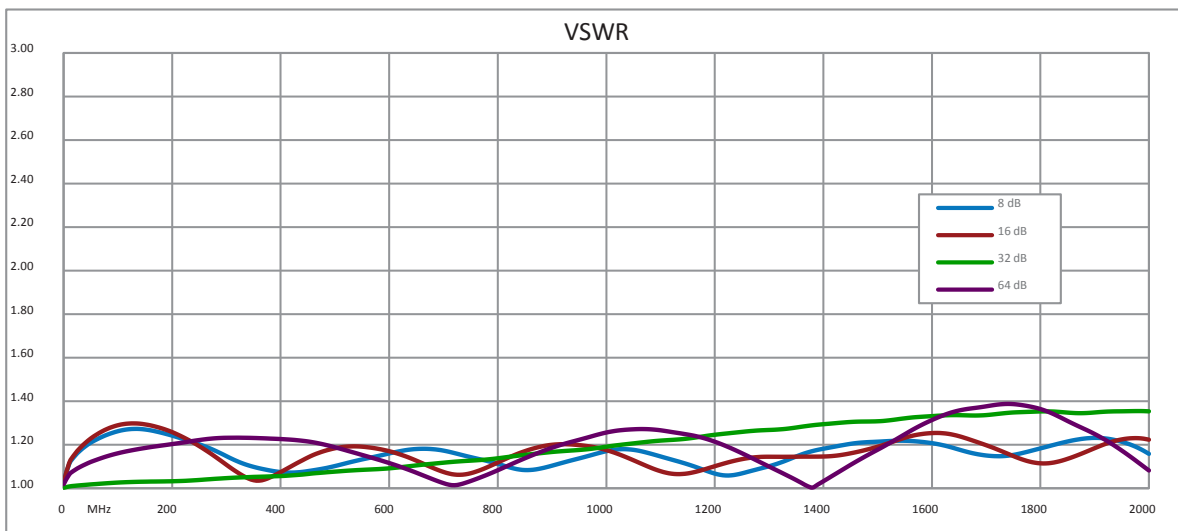
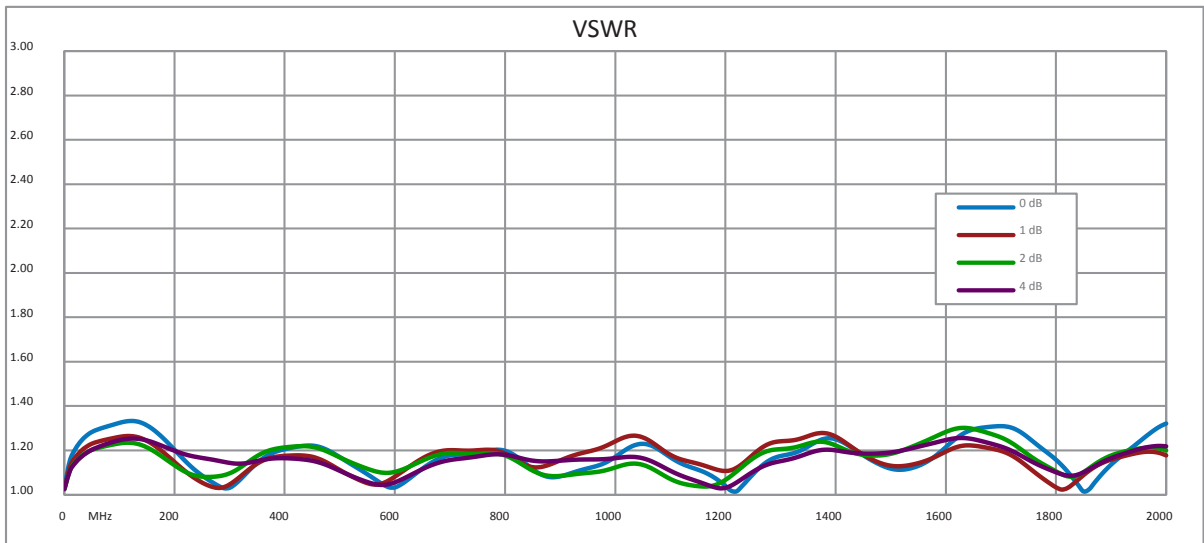
- Values at 25 °C, sea level

7 Bit Relay Controlled Programmable Attenuator, 127 dB
Up to 1.5 GHz, 1 dB Steps, +12V, SMA Female



PE70A8005

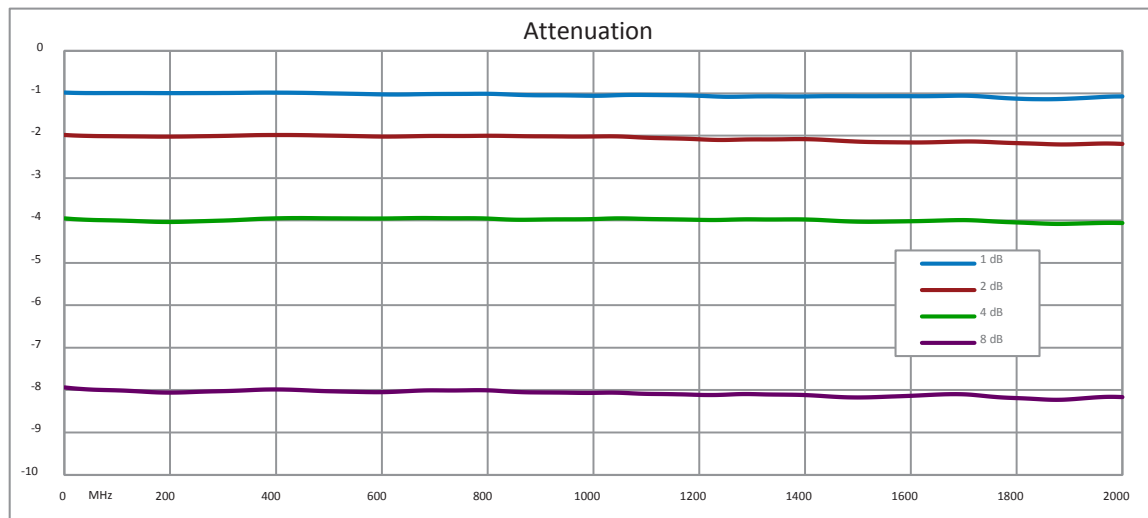
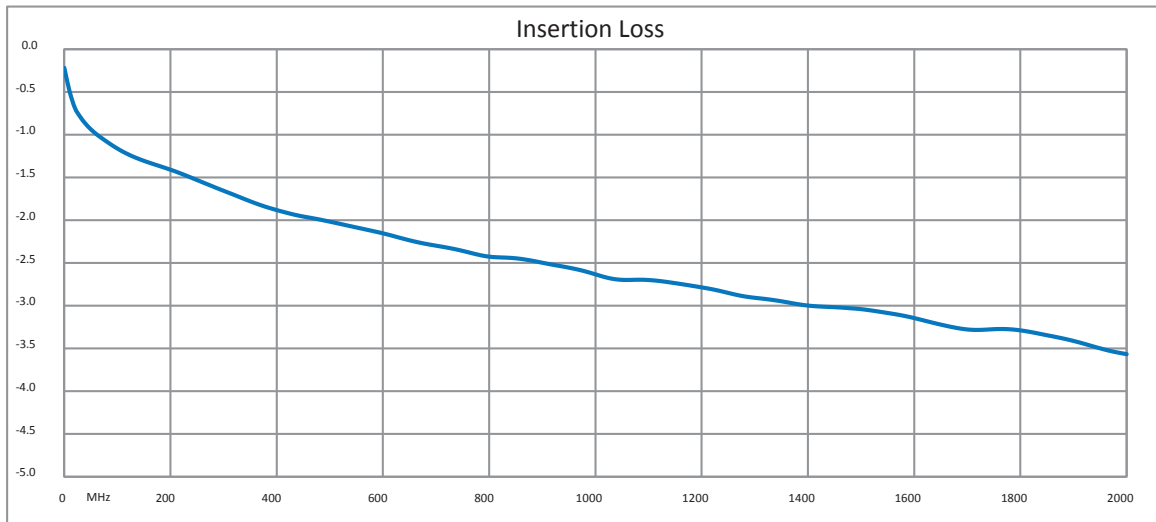
Typical Performance Data



7 Bit Relay Controlled Programmable Attenuator, 127 dB
Up to 1.5 GHz, 1 dB Steps, +12V, SMA Female



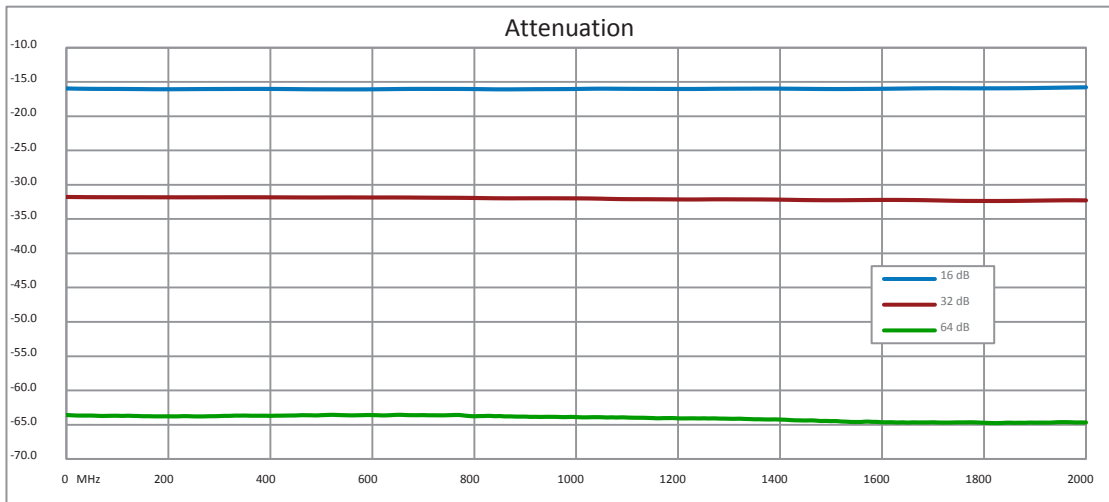
PE70A8005



7 Bit Relay Controlled Programmable Attenuator, 127 dB
Up to 1.5 GHz, 1 dB Steps, +12V, SMA Female



PE70A8005



7 Bit Relay Controlled Programmable Attenuator, 127 dB Up to 1.5 GHz, 1 dB Steps, +12V, SMA Female



PE70A8005

7 Bit Relay Controlled Programmable Attenuator, 127 dB Up to 1.5 GHz, 1 dB Steps, +12V, SMA 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [7 Bit Relay Controlled Programmable Attenuator, 127 dB Up to 1.5 GHz, 1 dB Steps, +12V, SMA Female PE70A8005](https://www.pasternack.com/127db-relay-controlled-sma-female-sma-female-1-watt-attenuator-pe70a8005-p.aspx)

URL: <https://www.pasternack.com/127db-relay-controlled-sma-female-sma-female-1-watt-attenuator-pe70a8005-p.aspx>

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.

PE70A8005 CAD Drawing

7 Bit Relay Controlled Programmable Attenuator, 127 dB Up to 1.5 GHz, 1 dB Steps, +12V, SMA Female

