

6 Bit Relay Controlled Programmable Attenuator, 63 dB Up to 1,000 MHz, 1 dB Steps, +12V, SMA Female



PE70A8000

Features

- 6 Bit Relay Programmable Attenuator
- DC to 1000 MHz Bandwidth
- 0-63 dB attenuation
- 1 dB Step Size
- 50 Ohms
- Switching Speed: 6 milliseconds
- Insertion Loss: 1.5 dB max
- Attenuation Accuracy: +/- 0.2 dB
- Max Pin 0.5 watts average, 100 watts peak
- DC Supply: +12 Vdc @ 15 mA per relay
- SMA female connectors

Applications

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

Description

The PE70A8000 is a 6 Bit Relay Programmable Attenuator which operates over the frequency range of DC to 1000 MHz. The 50 ohm design has an attenuation range that covers 0 to 63 dB in 1 dB steps. Attenuation steps are 1, 2, 4, 8, 16, and 32 dB. Insertion loss is 1.5 dB max with a maximum RF input power 0.5 Watt average and 100 Watts peak. Additional typical performance includes switching speed of 6 milliseconds. The DC supply is +12 Vdc @ 15 mA per relay. 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		1,000	MHz
Impedance		50		Ohms
Attenuation Range	0		63	dB
Insertion Loss			1.5	dB
VSWR			1.25:1	
Power Rating			27	dBm
Survial Power Average -20 to +85 deg C				
Accuracy of Attenuation ±0.2 dB or 2% whichever is greater				
Step Size		1		dB
Switching Time		6		ms
DC Voltage		±12		Volts
DC Current			15	mA
Control Bits		6		Bits

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC-0.5	0.5-1				GHz

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Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Insertion Loss, Max	0.8	1.5				dB

Electrical Specification Notes:
1, 2, 4, 8, 16, and 32 dB

Mechanical Specifications

Size	
Length	0 in [0 mm]
Width	0 in [0 mm]
Height	0 in [0 mm]
Weight	0.5458 lbs [247.57 g]
Connector 1	Field Replaceable SMA Female
Connector 2	Field Replaceable SMA Female

Environmental Specifications

Temperature	
Operating Range	-20 to +85 deg C
Storage Range	-65 to +150 deg C

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

Plotted and Other Data

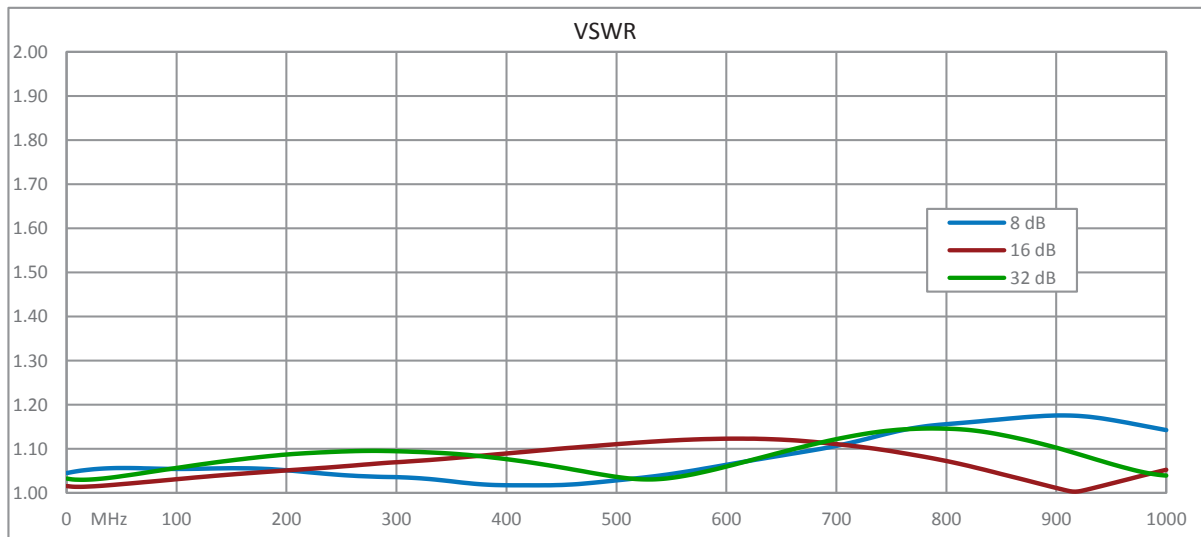
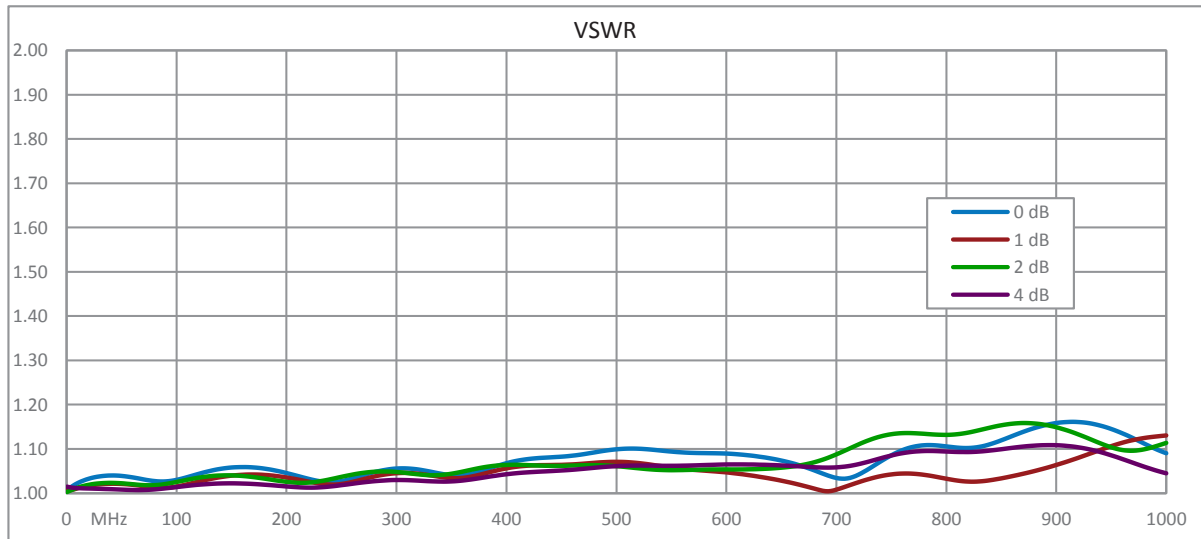
- Notes:
- Values at 25 °C, sea level
 - ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.

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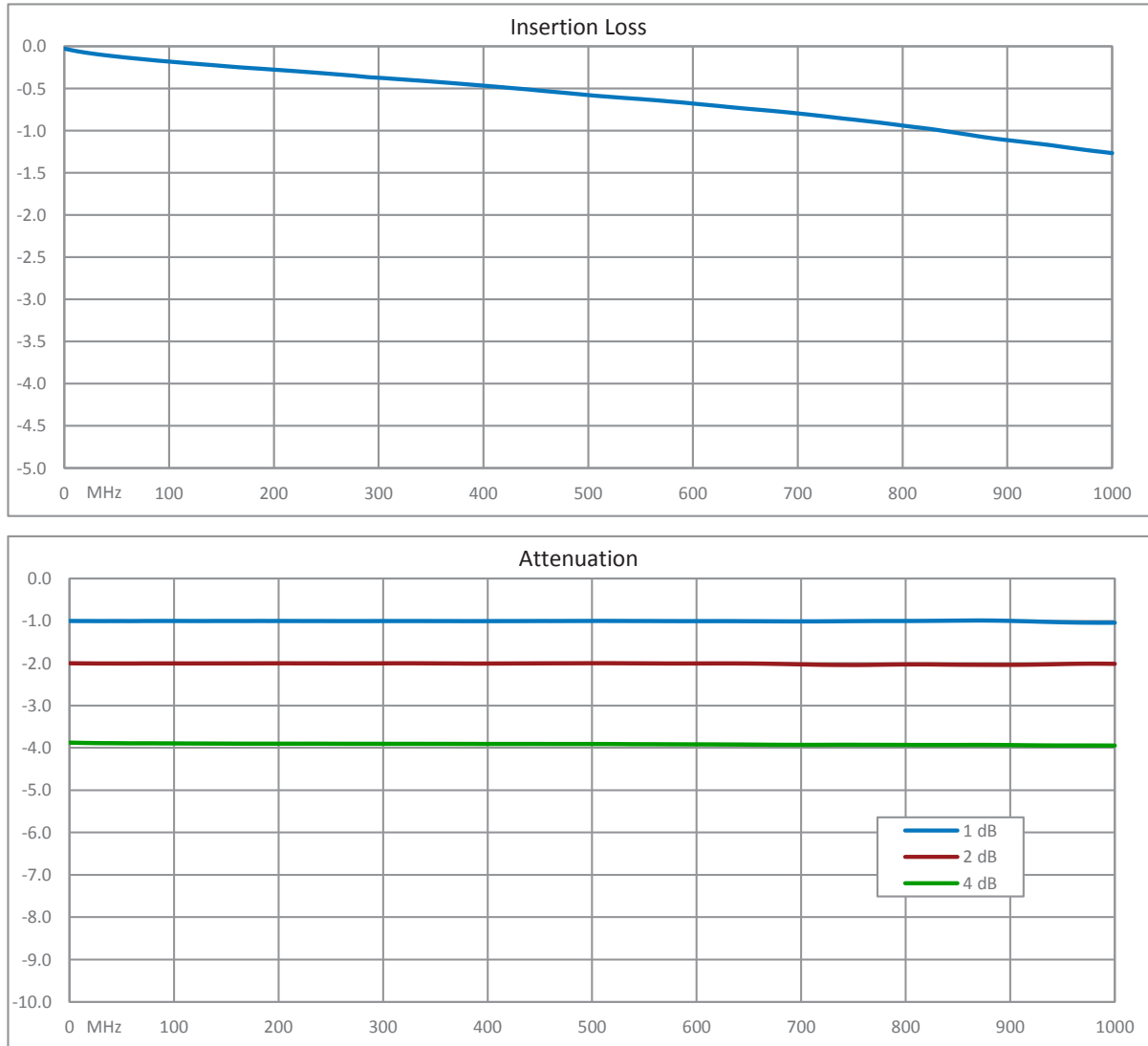
Typical Performance Data



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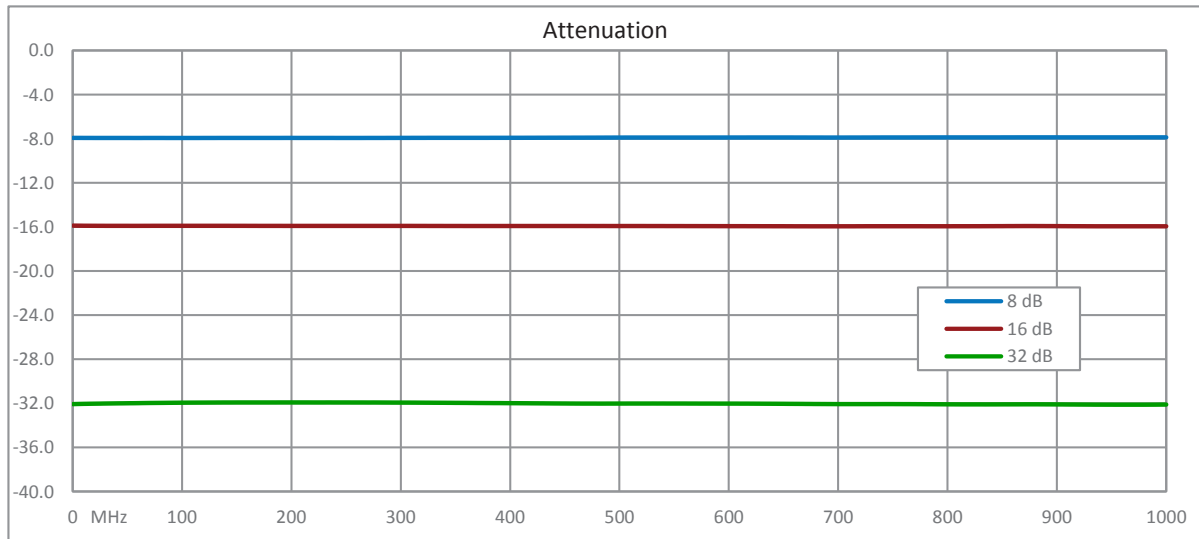
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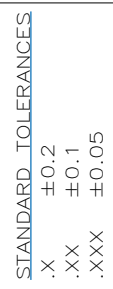
6 Bit Relay Controlled Programmable Attenuator, 63 dB Up to 1,000 MHz, 1 dB Steps, +12V, SMA Female from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection 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: [6 Bit Relay Controlled Programmable Attenuator, 63 dB Up to 1,000 MHz, 1 dB Steps, +12V, SMA Female PE70A8000](https://www.pasternack.com/63db-relay-controlled-sma-female-sma-female-0.5-watts-attenuator-pe70a8000-p.aspx)

URL: <https://www.pasternack.com/63db-relay-controlled-sma-female-sma-female-0.5-watts-attenuator-pe70a8000-p.aspx>

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*STANDARD TOLERANCES APPLY
ONLY TO DIMENSIONS IN INCHES

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DWG TITLE

PE70A8000

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].

CAD FILE 040517

CAGE CODE 53919

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