



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

TECHNICAL DATA SHEET

PE70A8005

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.

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

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

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		1.5	GHz
Mean Attenuation Range	0		127	dB
Insertion Loss		3.2	4	dB
Input VSWR			1.4:1	
Power Rating			+30	dBm
Accuracy of Attenuation or 2% whichever is greater			±0.5	dB
Step Size	1			dB
Switching Time			6	ms
DC Power Supply		12		Volts

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [8 Bit Relay Controlled Programmable Attenuator, 127 dB Up to 1.5 GHz, 1 dB Steps, +12V, SMA Female PE70A8005](#)



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Performance by Frequency

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

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:

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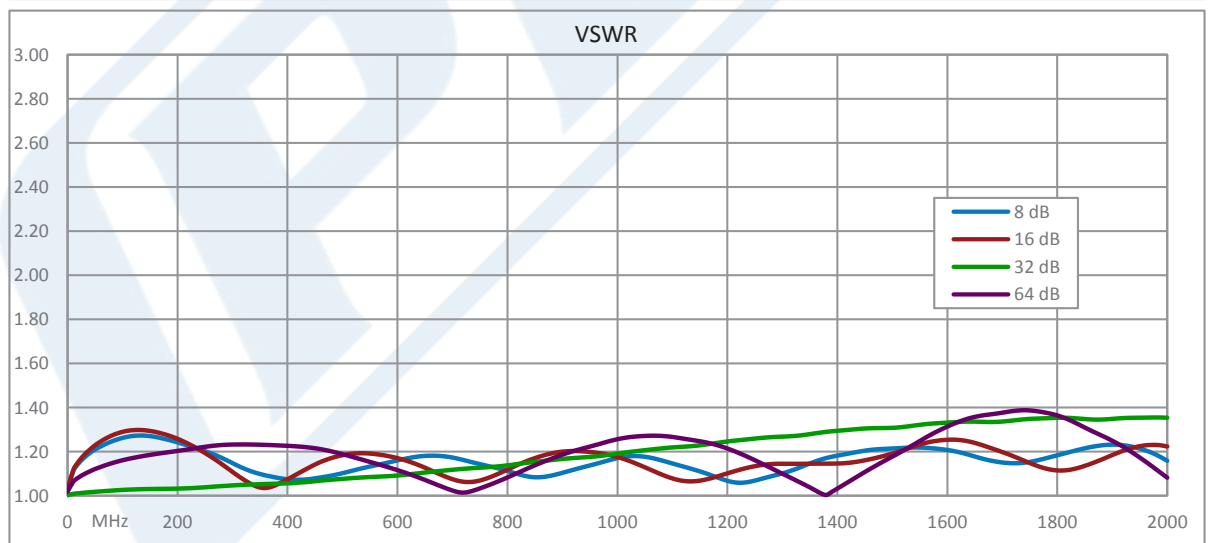
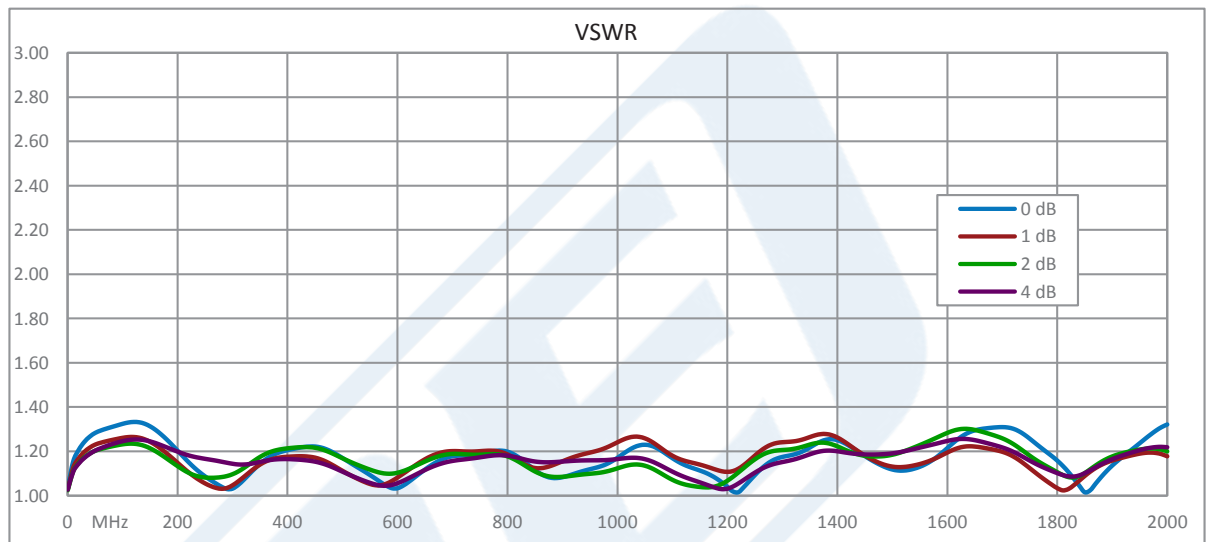


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Performance Data

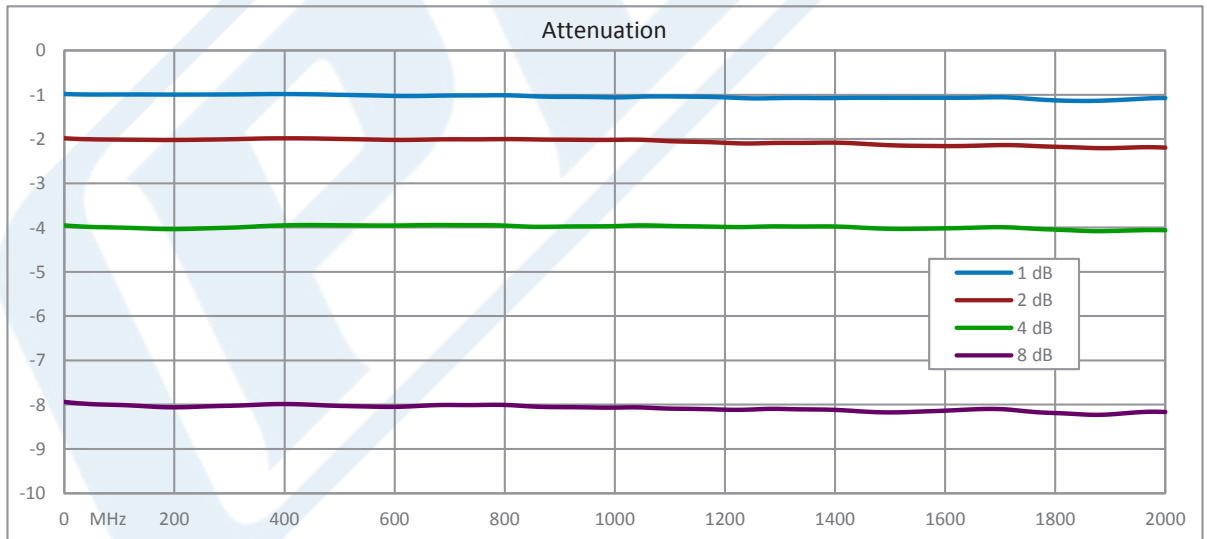
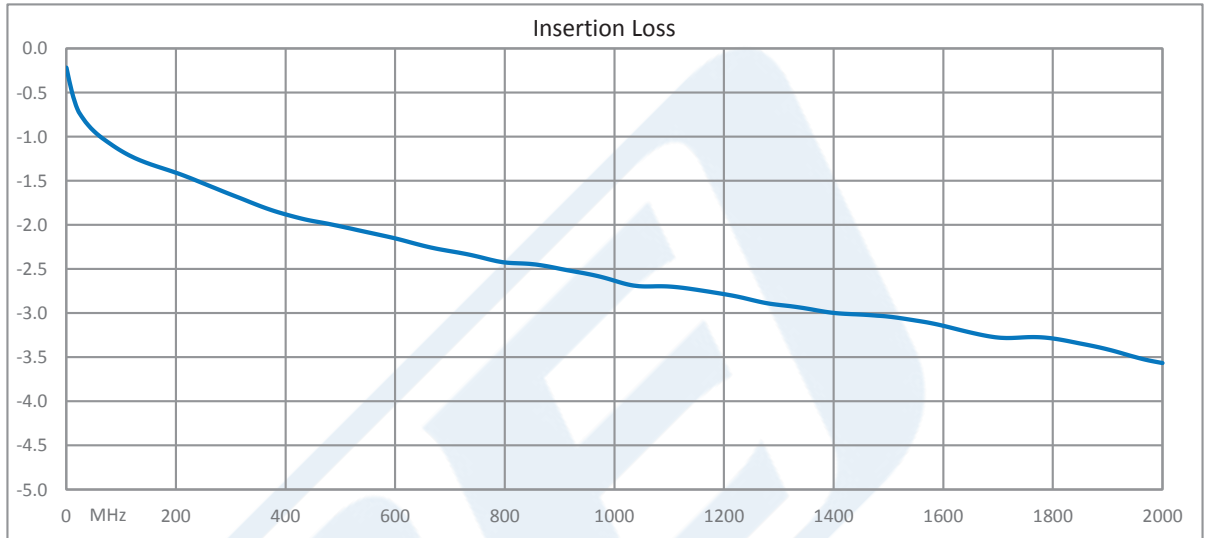


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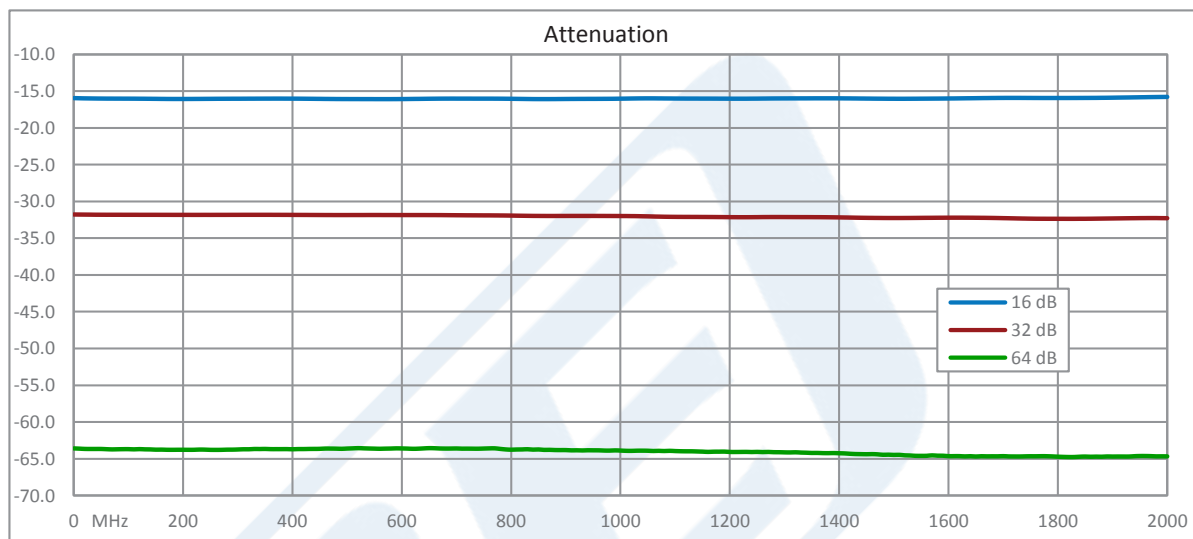
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8 Bit Relay Controlled Programmable Attenuator, 127 dB Up to 1.5 GHz, 1 dB Steps, +12V, SMA Female from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

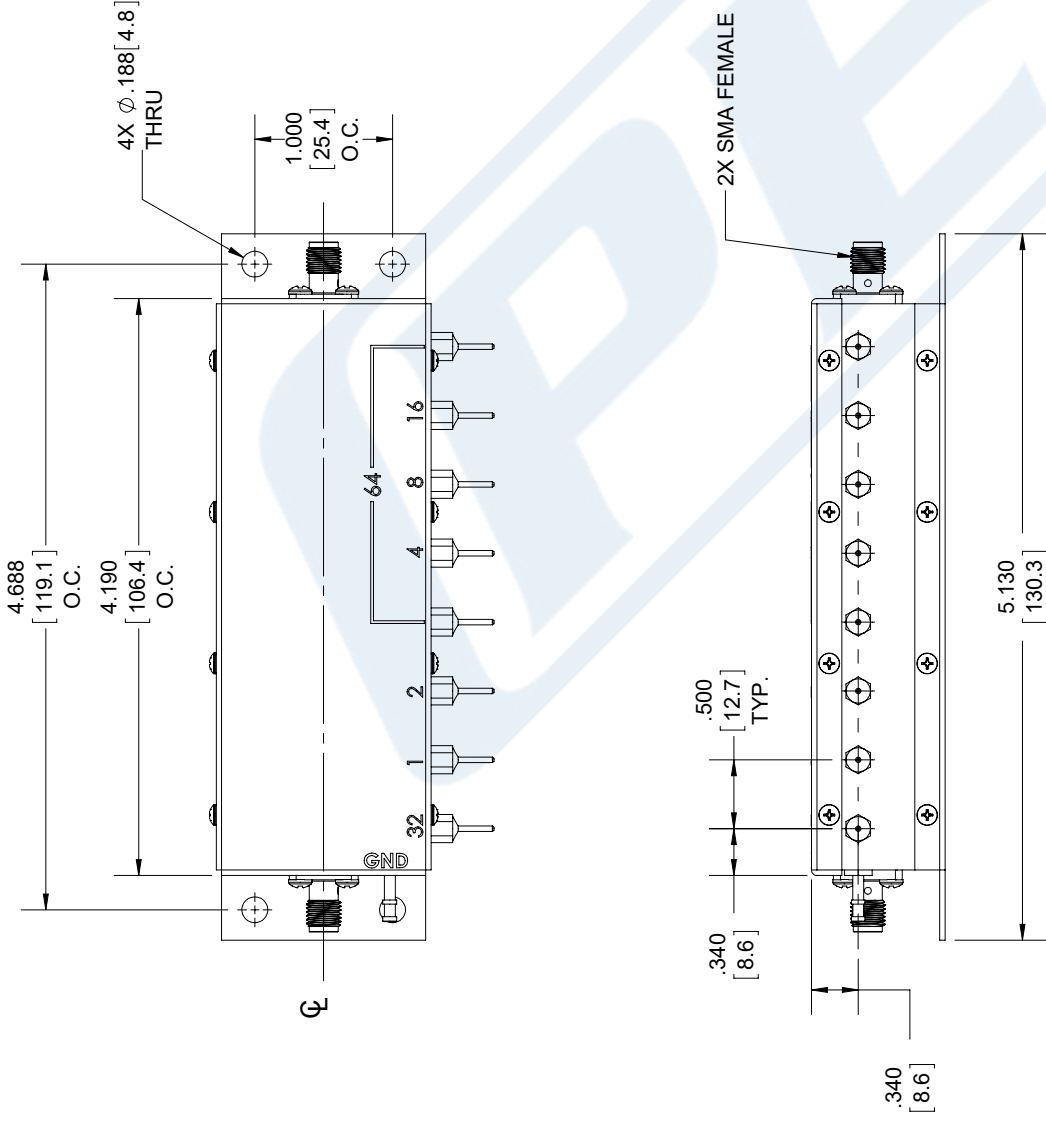
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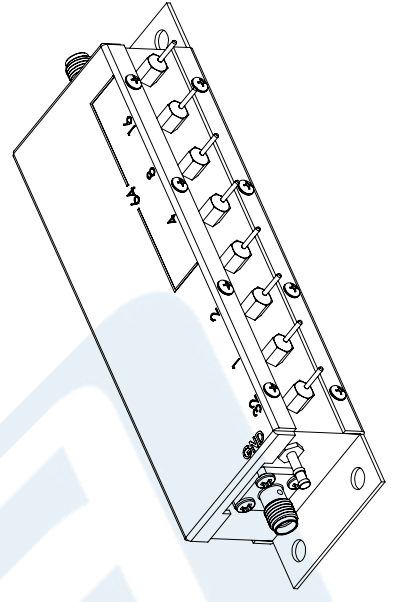
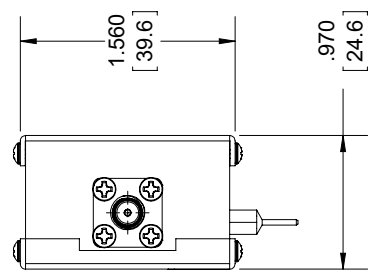
PE70A8005 CAD Drawing


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STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



 PASTERNAK® <small>THE ENGINEER'S RF SOURCE</small> Pasternack Enterprises, Inc. P.O. Box 16759 Irvine CA 92623 Phone: (949) 261-1920 Fax: (949) 261-7451 Website: www.pasternack.com E-Mail: sales@pasternack.com	DWG TITLE PE70A8005		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].	
	CAGE CODE 53919	CAD FILE 062717	SCALE N/A	SIZE A