



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
- 75 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 @ 30 mA		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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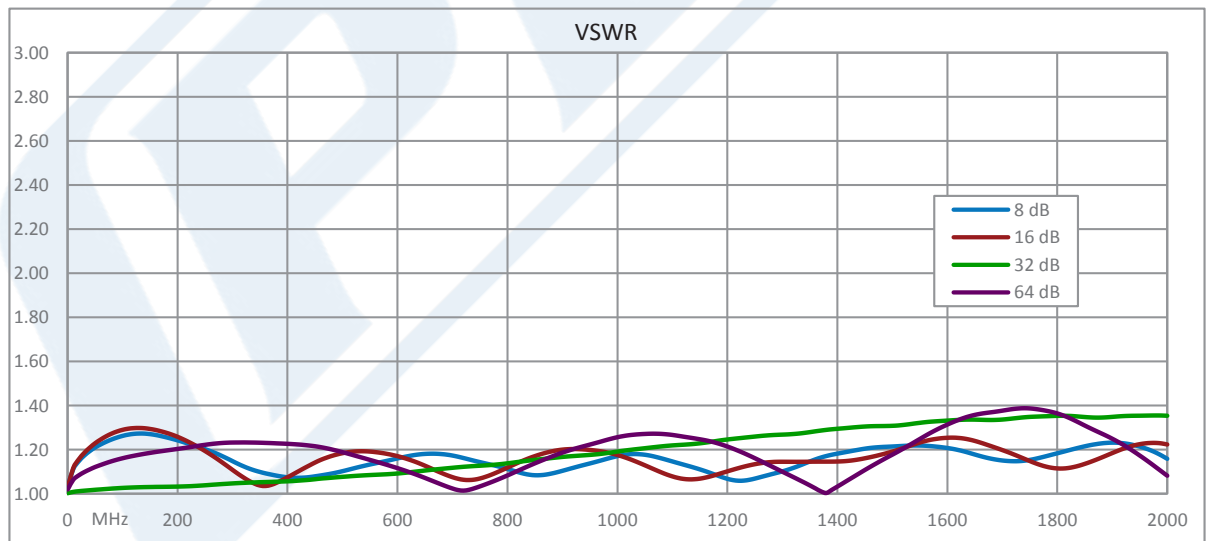
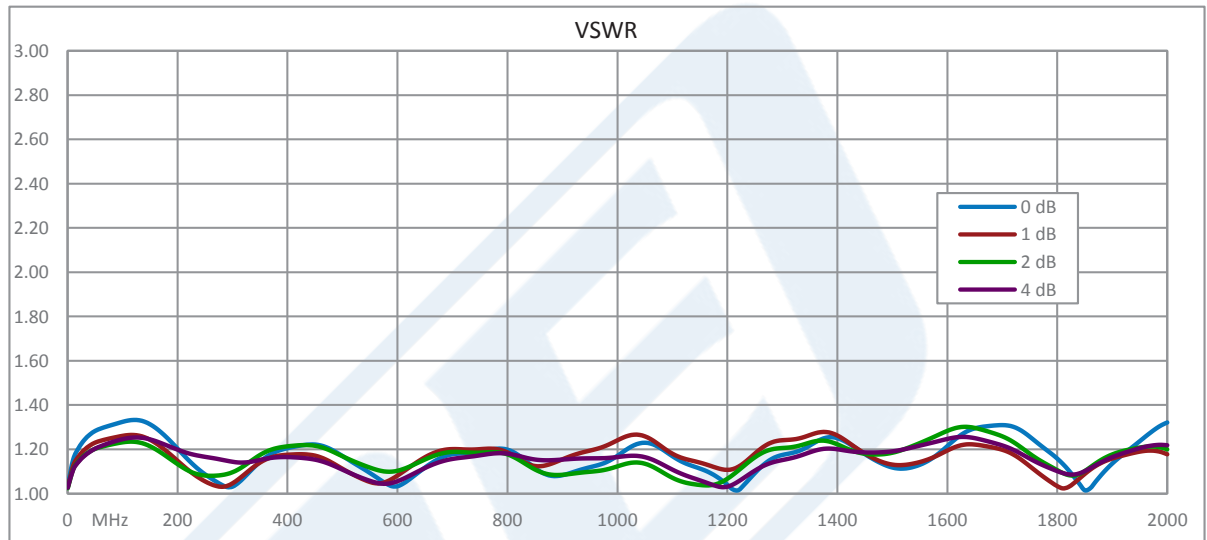


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Performance Data



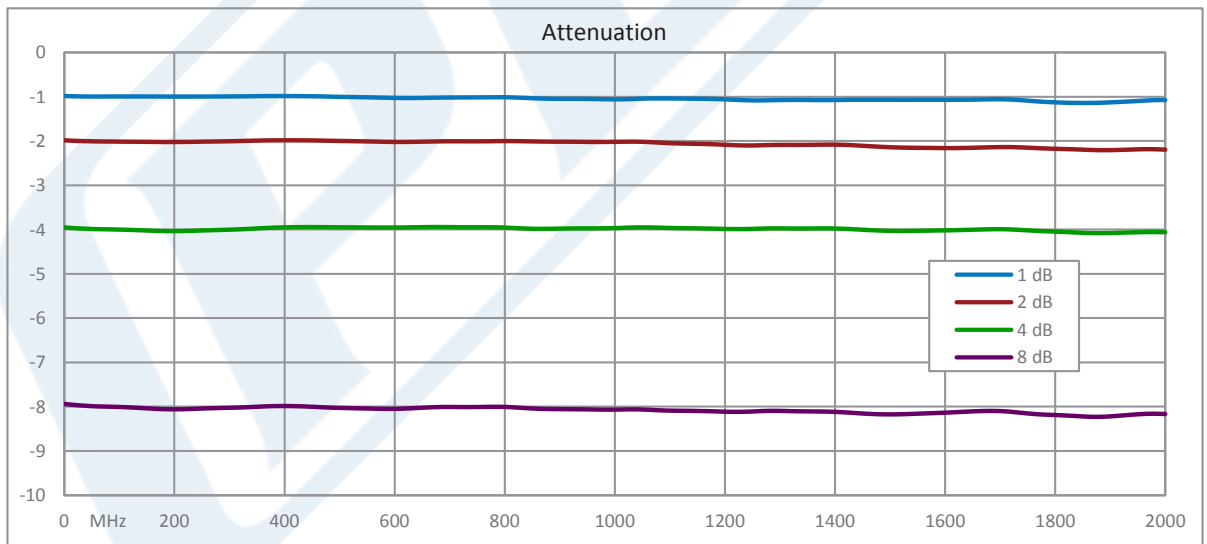
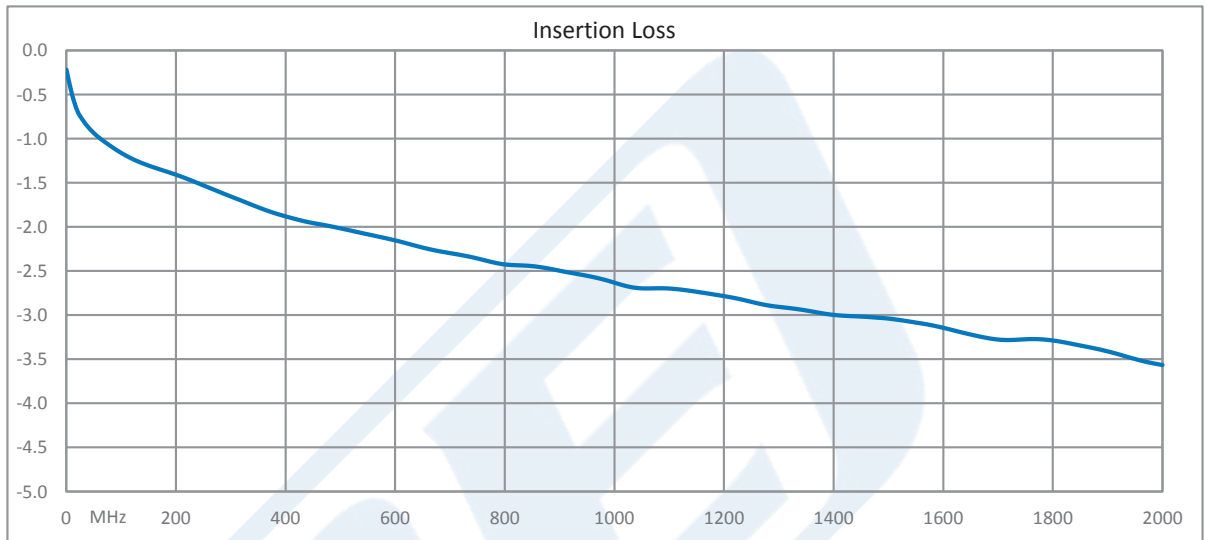
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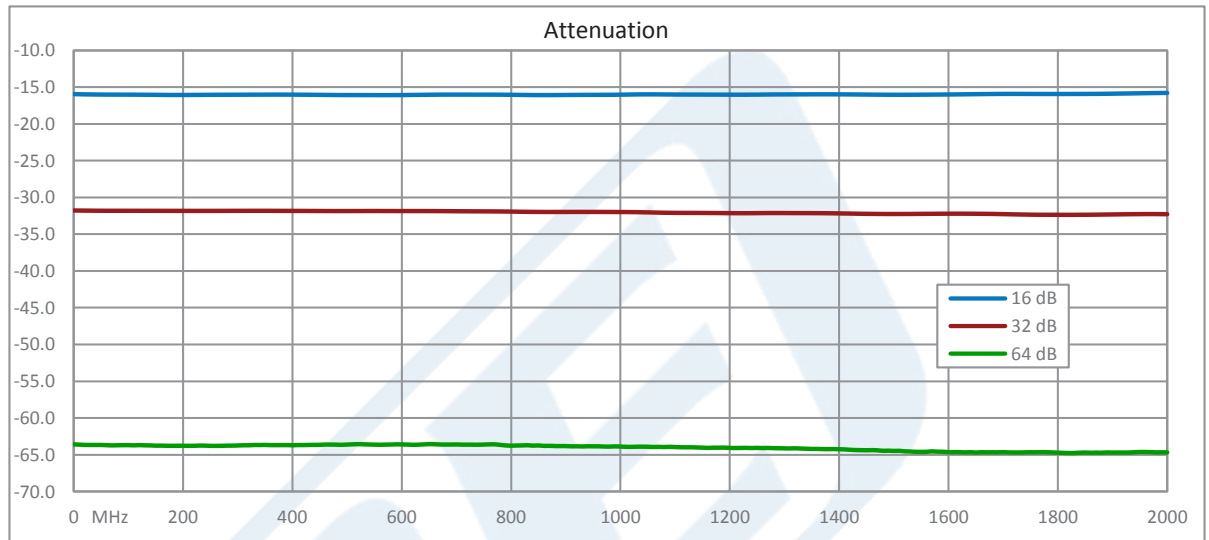
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8 Bit Relay Controlled Programmable Attenuator, 127 dB Up to 1.5 GHz, 1 dB Steps, +12V, SMA Female from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4%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

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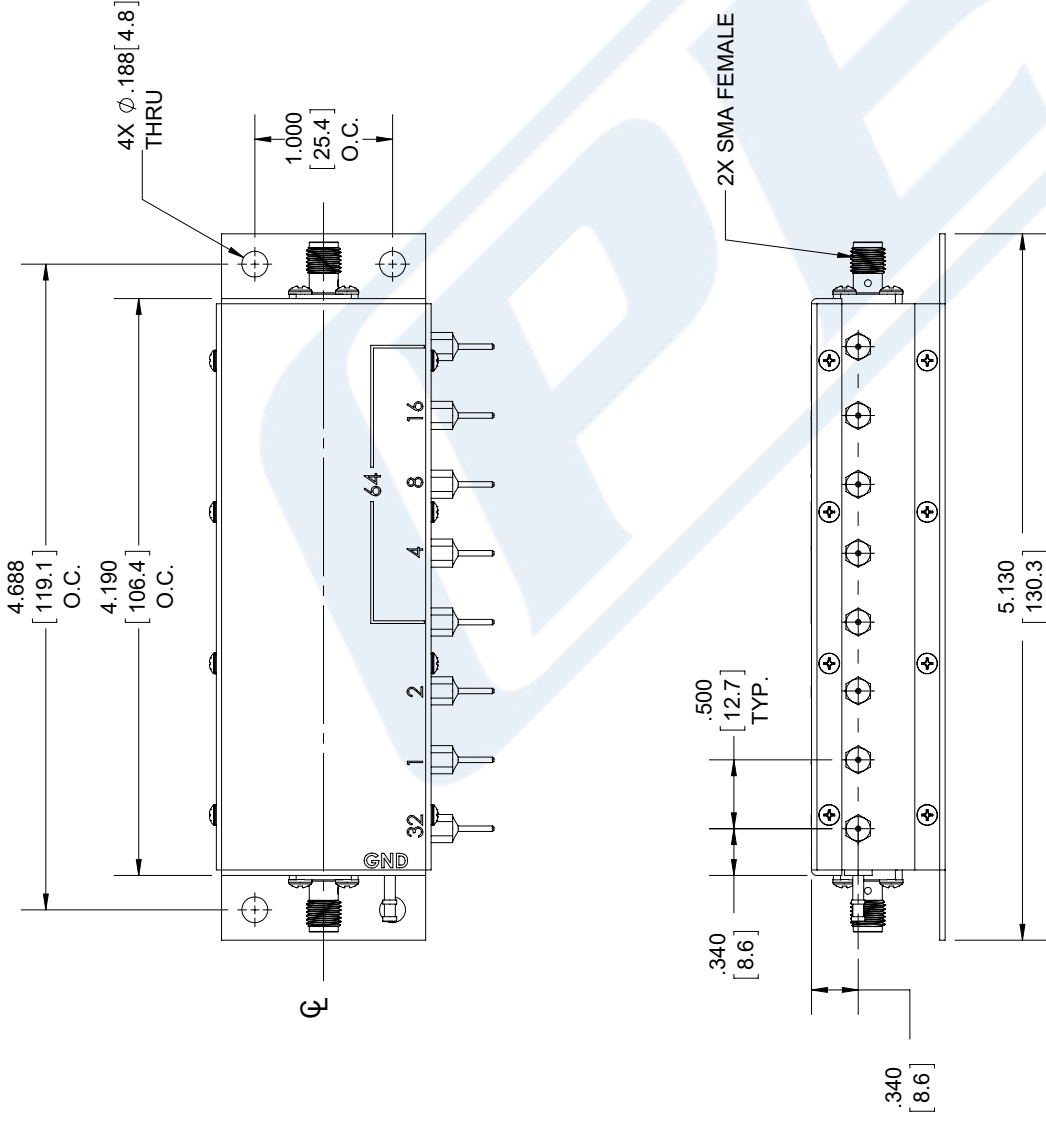
URL: <https://www.pasternack.com/127db-relay-controlled-sma-female-sma-female-1-watt-attenuator-pe70a8005-p.aspx>

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



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



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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