



6 Bit Relay Controlled Programmable Attenuator, 63 dB Up
to 1,000 MHz, 75 Ohm, 1 dB Steps, +12V, F Female

TECHNICAL DATA SHEET

PE70A8003

The PE70A8003 is a 6 Bit Relay Programmable Attenuator which operates over the frequency range of DC to 1000 MHz. The 75 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 2.2 dB maximum with a maximum RF input power 1 Watt average. Additional typical performance includes +/- 0.3 dB attenuation accuracy and switching speed of 6 milliseconds. The DC supply is +12 Vdc @ 30 mA per relay (6 relay solder terminals, 1 GND solder terminal). The compact and rugged package design supports F female RF input/output connectors and DC connector solder terminals. Operational temperature is -20°C to +85°C.

Features

- 6 Bit Relay Programmable Attenuator
- DC to 1000 MHz Frequency Range
- 0-63 dB Attenuation Range
- Step Resolution of 1 dB
- Insertion Loss 2.2 dB max
- F Female
- 7 Solder Terminals
- CMOS control

Applications

- Electronic Warfare
- Electronic Countermeasures
- Microwave Radio
- VSAT
- Radar
- Fiber Optic
- Space Systems
- Test Instrumentation
- Telecom Infrastructure

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

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		1,000	MHz
Mean Attenuation Range	0		63	dB
Insertion Loss			2.2	dB
Input VSWR			1.4:1	
Power Rating			+30	dBm
Accuracy of Attenuation or 1.5% whichever is greater			0.3	dB
Step Size	1			dB
Switching Time			6	ms
DC Power Supply @ 30 mA		12		Volts

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

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, 75 Ohm, 1 dB Steps, +12V, F Female PE70A8003](#)



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Mechanical Specifications

Size

Connector 1
Connector 2

F Female
F 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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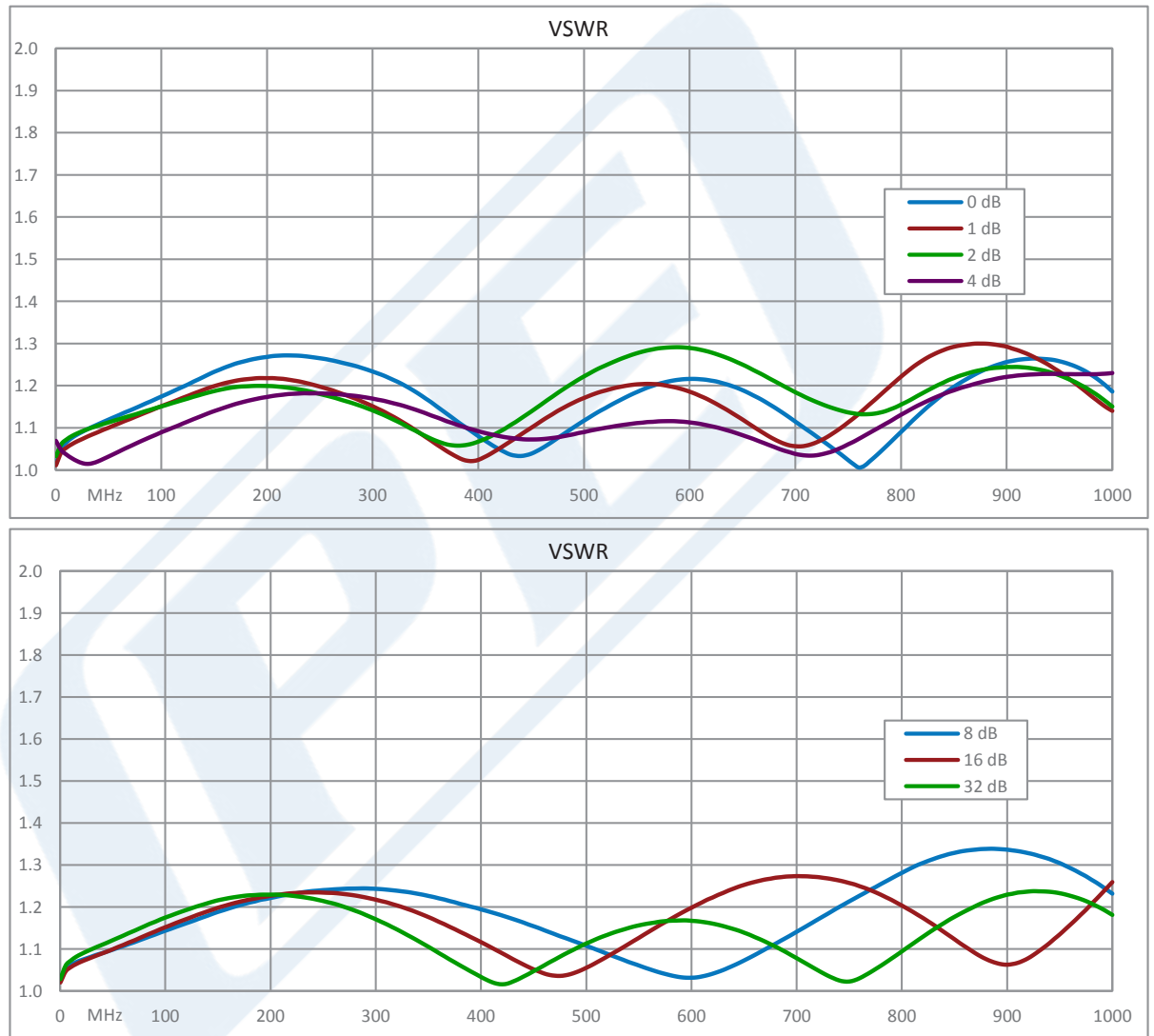


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Performance Data



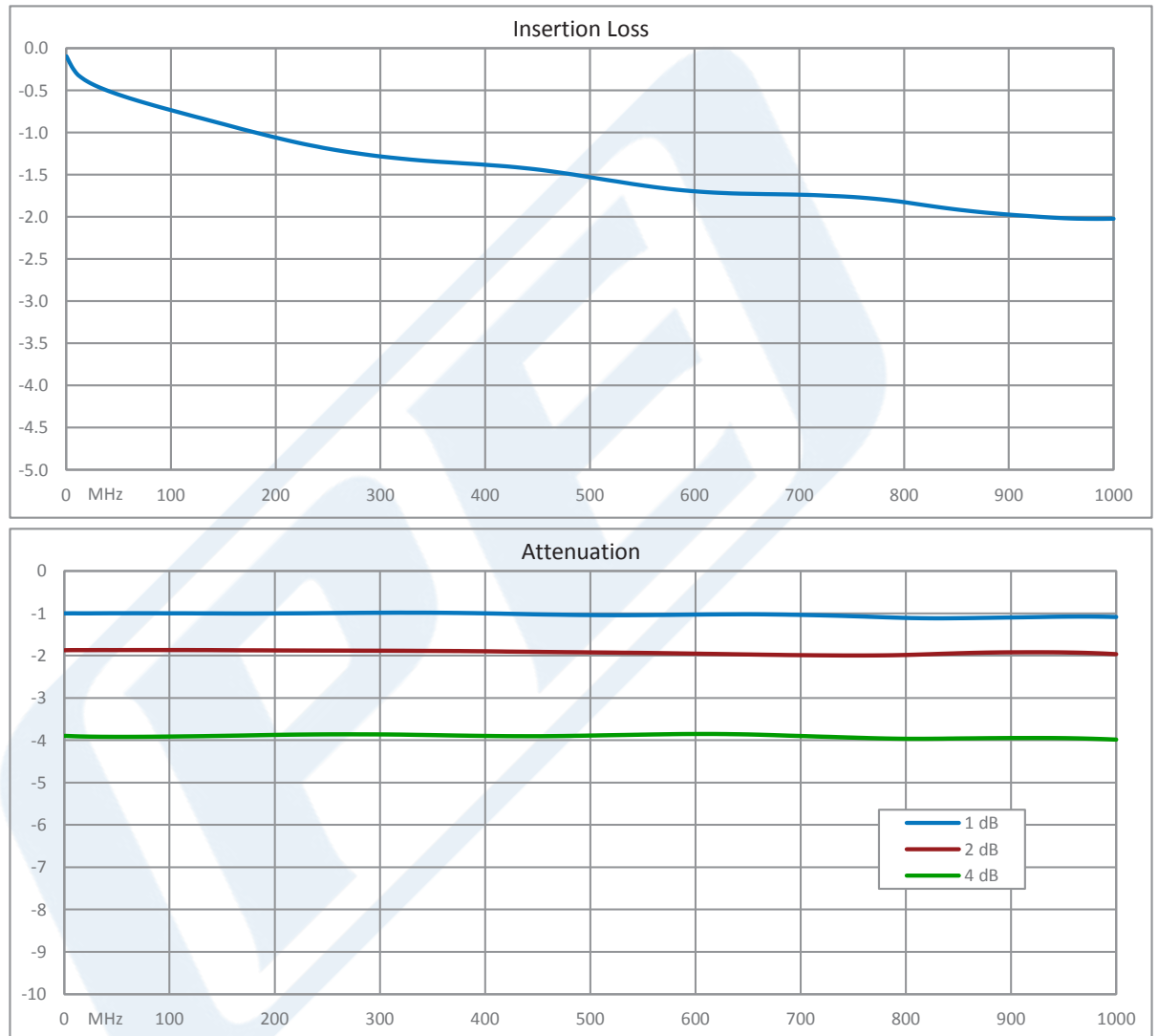
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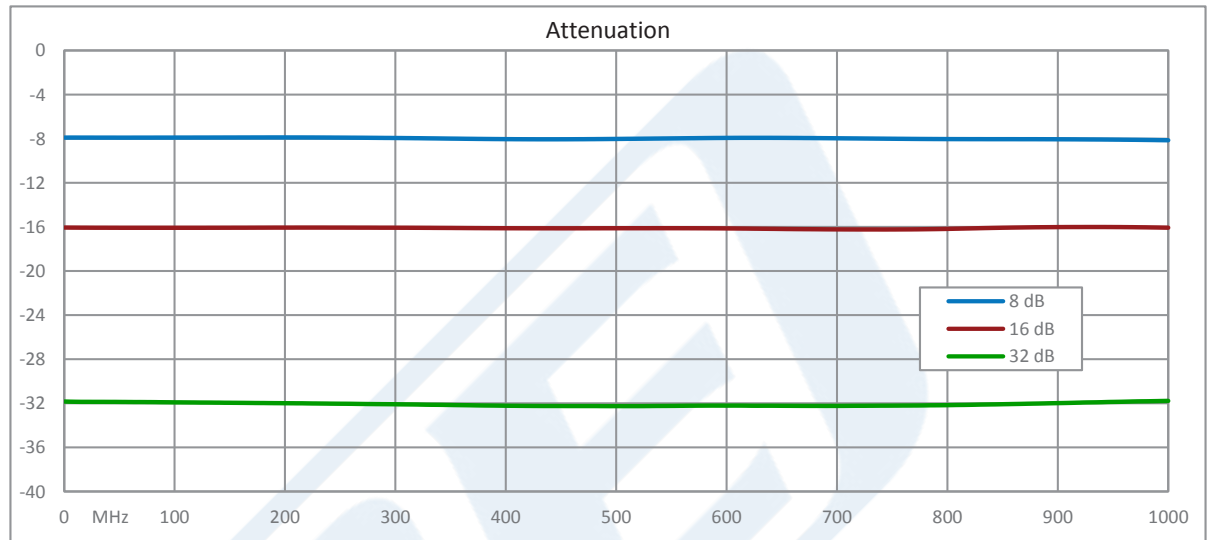
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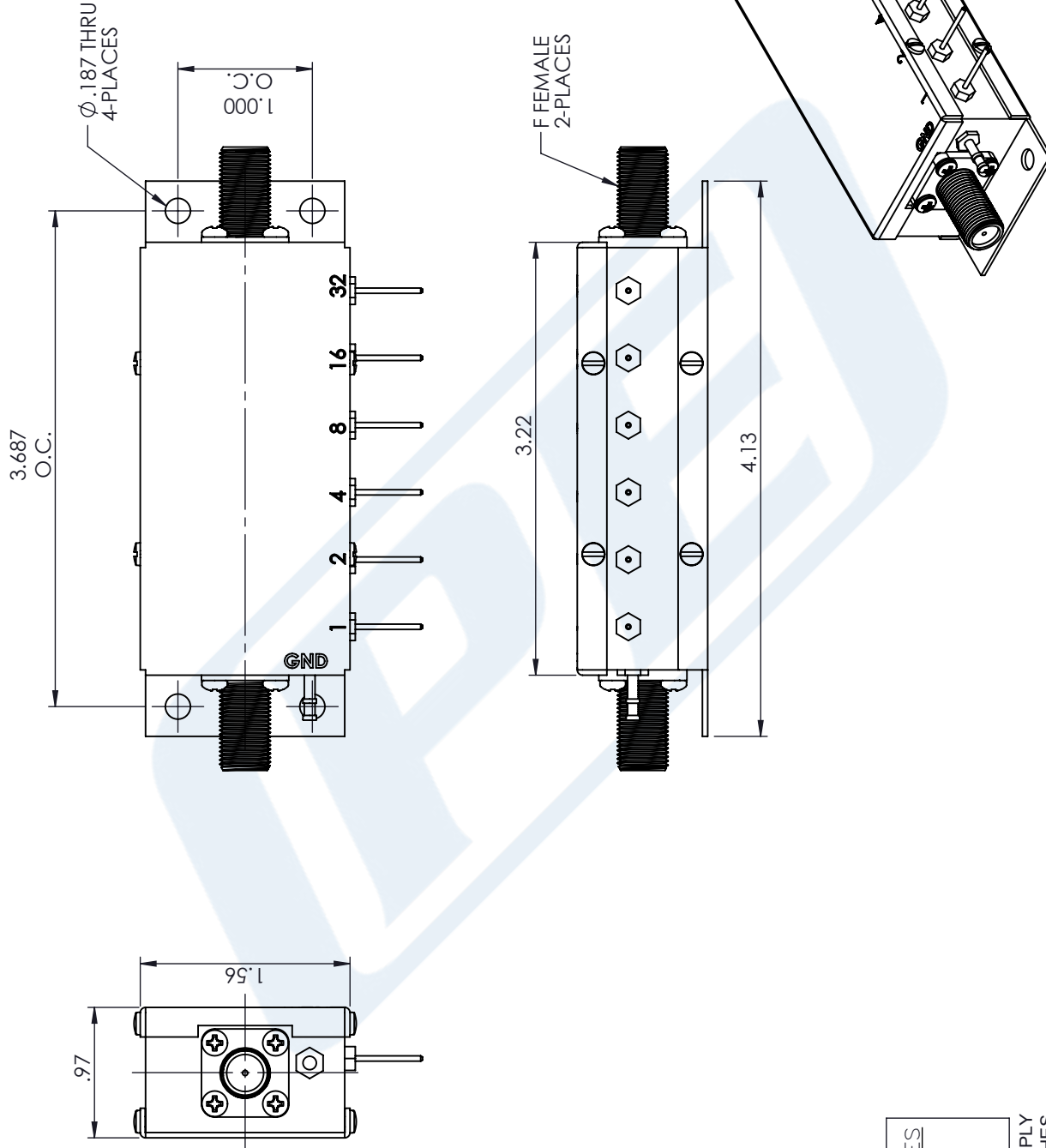
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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.

PE70A8003 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

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].

DWG TITLE
PE70A8003

CAGE CODE 53919

CAD FILE 061217

SCALE N/A

SIZE A

0157

PE PASTERNAK®
THE ENGINEER'S RF SOURCE
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