PASTERNACK®
THE ENGINEER'S RF SOURCE

8 Bit Programmable 60 dB Attenuator 0.03 GHz to 6.0 GHz 4.0 dB IL 20 dBm P1dB

TECHNICAL DATA SHEET PE70A5000

The PE70A5000 is a 8 Bit Programmable 60 dB Pin Diode Attenuator with Step Resolution as Low as 0.25 dB over the Operating Frequency Range from 0.03 GHz to 6 GHz.

Features

- 8 Bit Programmable 60 dB Pin Diode Attenuator
- 0.03 GHz to 6 GHz Frequency Range
- 60 dB Attenuation Range
- Step Resolution of 0.25 dB
- Insertion Loss 4 dB Max

Applications

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

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

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.03		6	GHz
Mean Attenuation Range	0		60	dB
Insertion Loss			4	dB
Return Loss			-8.5	dB
Attenuation Flatness				
@ 10 dB		±1		dB
@ 20 dB		±1.5		dB
@ 40 dB		±3		dB
@ 60 dB		±5		dB
Accuracy of Attenuation				
0 dB to 30 dB		±1		dB
30 dB to 50 dB		±1.3		dB
50 dB to 60 dB		±1.5		dB
Step Size	0.25			dB
Switching Time			50	µs
DC Power Supply @ 155 mA		12		Volts
DC Power Supply	10.8		13.2	Volts
Logic Input				
Logic "0" (Bit Off)	-0.3		0.8	Volts
Logic "1" (Bit On)	2		5	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 Programmable 60 dB Attenuator 0.03 GHz to 6.0 GHz 4.0 dB IL 20 dBm P1dB PE70A5000

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

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Mechanical Specifications

Size

Length	2 in [50.8 mm]
Width	1.8 in [45.72 mm]
Height	0.5 in [12.7 mm]

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
Storage Range	-65 to +125 deg C
Humidity	MIL-STD-202F, METHOD 103B COND. B
Shock	MIL-STD-202F, METHOD 213B COND. B
Vibration	MIL-STD-202F, METHOD 204D COND. B
Altitude	MIL-STD-202F, METHOD 105C COND. B
Temperature Cycle	MIL-STD-202F, METHOD 107

Compliance Certifications (visit www.Pasternack.com for current document)

RoHS Compliant

Plotted and Other Data

Notes:

- Values at +25 °C, sea level

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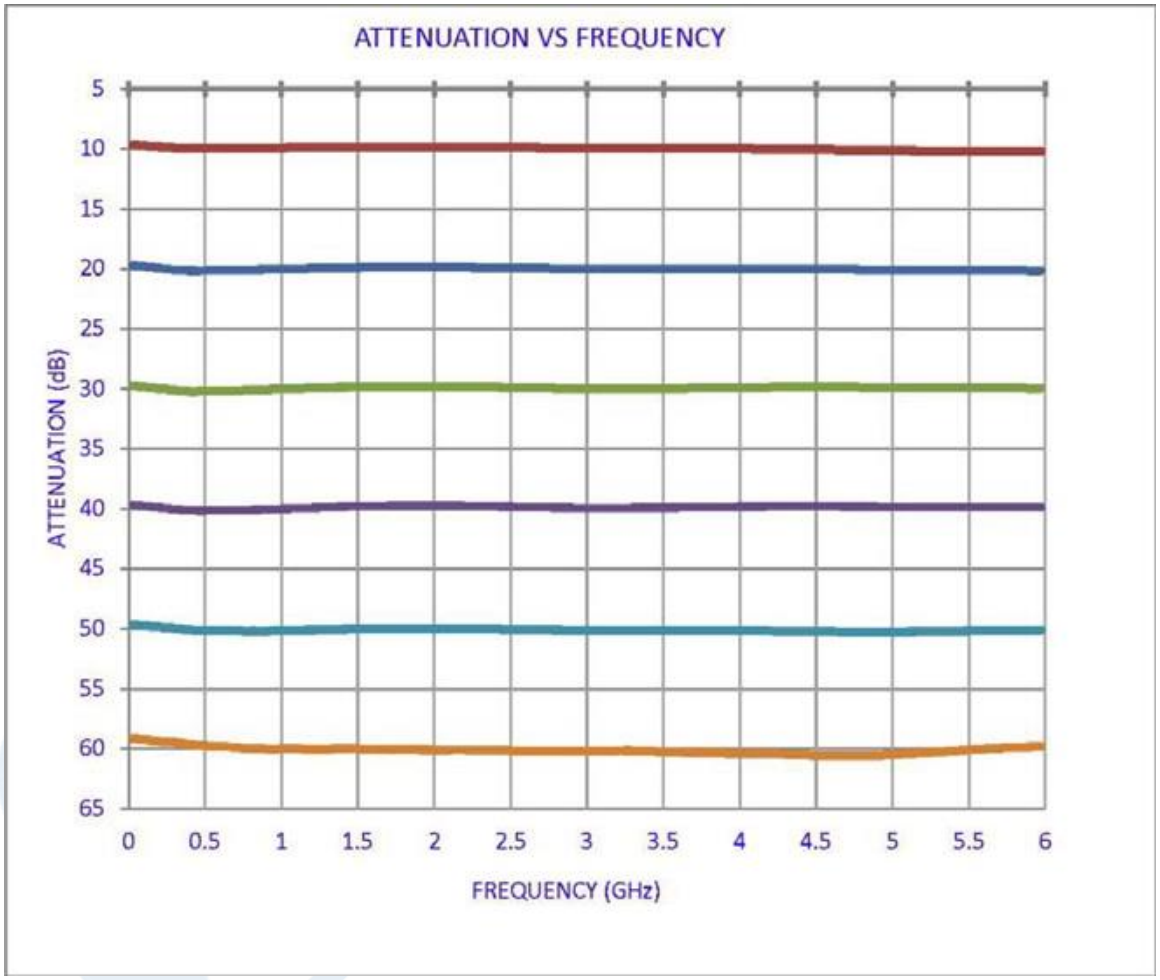
Performance Data



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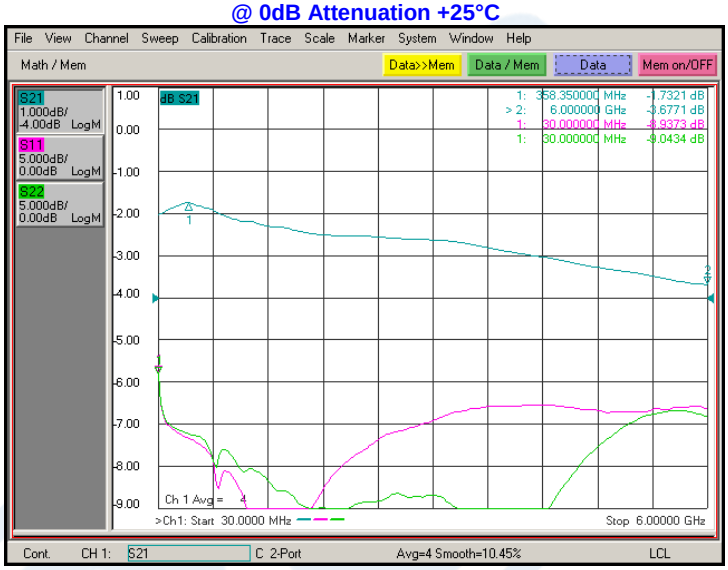
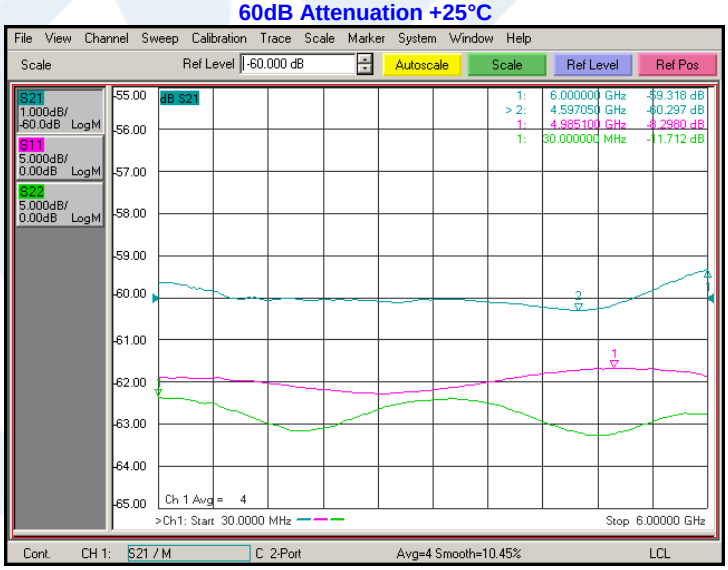
Insertion Loss and VSWR @ 0dB Attenuation +25°C



60dB Attenuation +25°C



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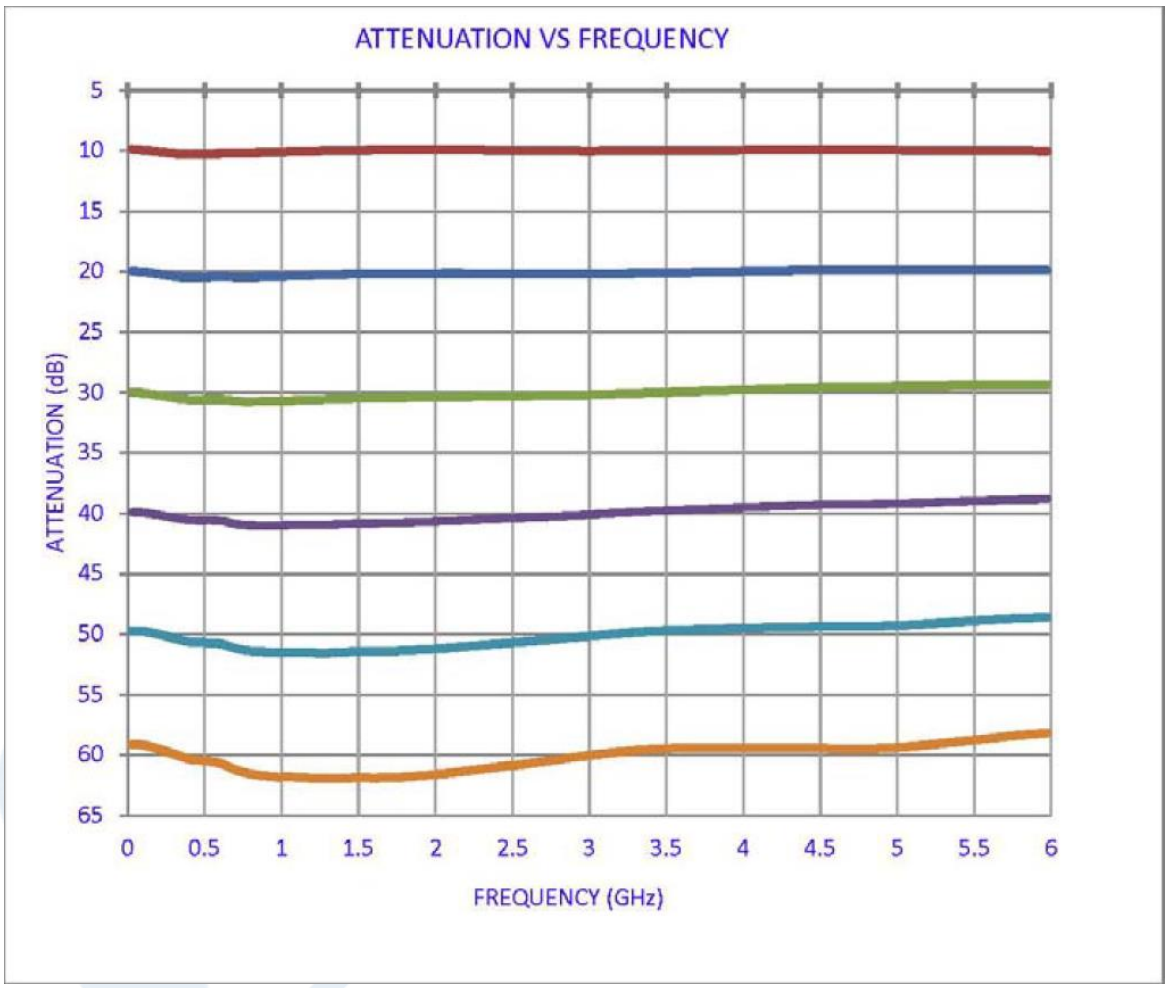

-40°C @ 5dBm

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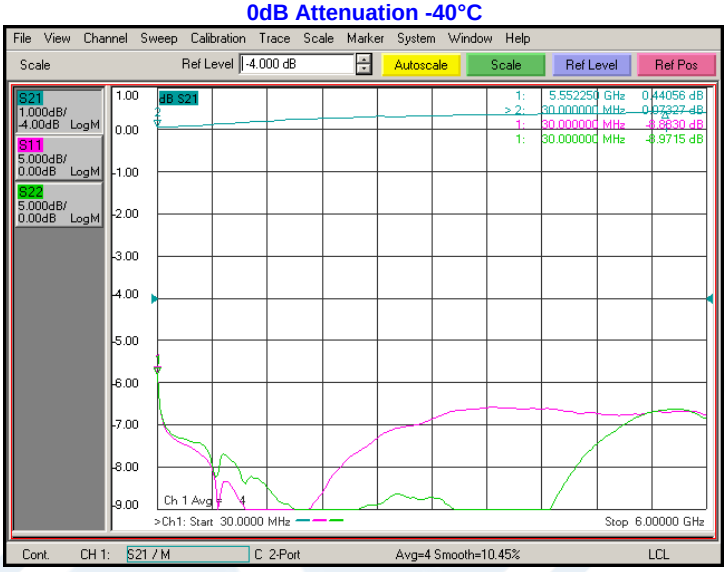
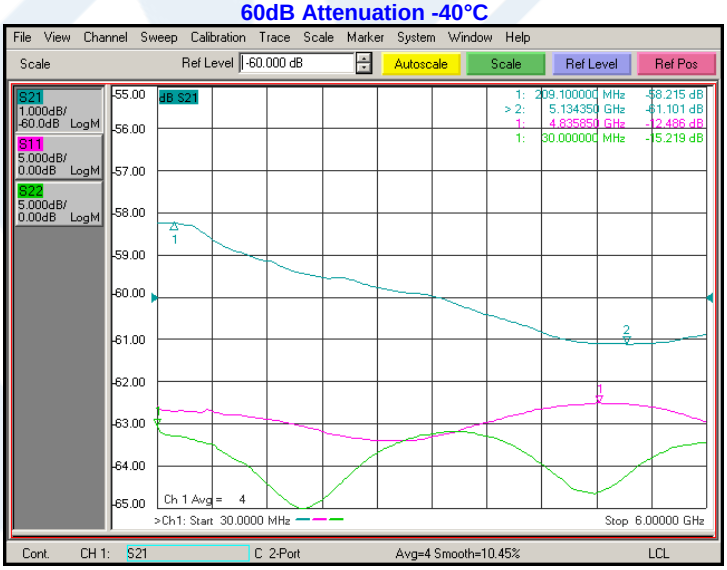
0dB Attenuation -40°C



60dB Attenuation -40°C



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8 Bit Programmable 60 dB Attenuator 0.03 GHz to 6.0 GHz 4.0 dB IL 20 dBm P1dB from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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URL: http://www.pasternack.com/60db-programmable-sma-female-sma-female-0-watts-attenuator-pe70a5000-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.

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PE70A5000 CAD Drawing

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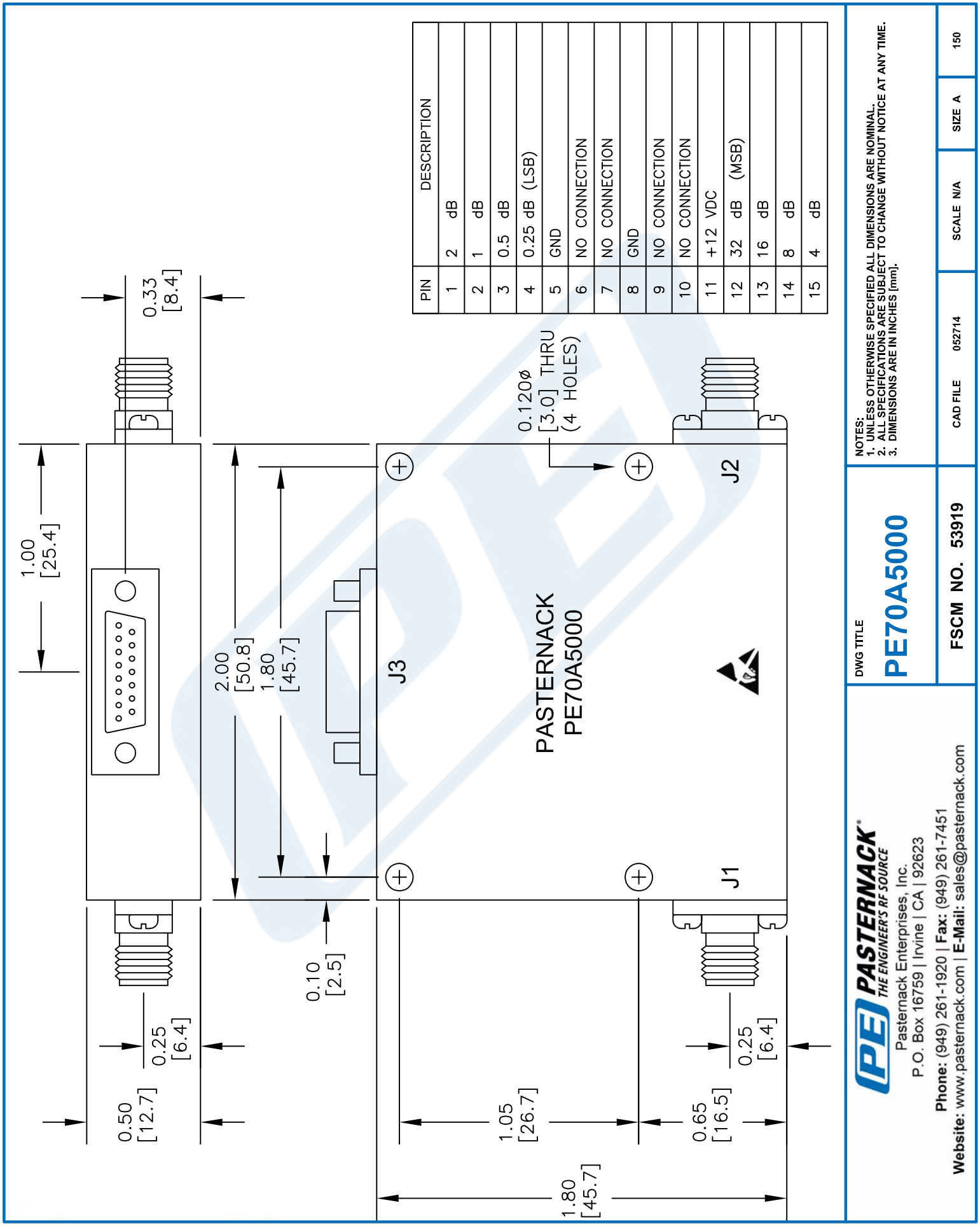

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