



1.5 to 70 dB Step Attenuator with a
1 dB Step SMA Female Interface Rated Up to
3 GHz and Up to 2 Watts in a Dial Design

RF Step Attenuators Technical Data Sheet

PE70A1038

Features

- 1 dB steps from 1.5 to 70 dB Attenuation
- Rotary Dial Control
- SMA Female Connectors
- -20°C to +85°C Operating Temperature
- ±1.5 dB Attenuation Accuracy Max

Applications

- Instrumentation
- Precision Measurements
- Prototyping and Characterization
- Production Systems

Description

The PE70A1038 is a Step Attenuator that has 70 dB of total attenuation with 1 dB step size and rotary dial design across a frequency range from DC to 3 GHz. The design is tried and true technology that offers exceptional performance characteristics that include 1.5 dB maximum insertion loss, and a maximum VSWR of 1.5:1 at 3 GHz. The design also features excellent attenuation accuracy with ±1.5 dB max at 3 GHz. The Aluminum alloy package has SMA Female connectors, and operates within the temperature range of -20°C to 85°C.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
Impedance		50		Ohms
Insertion Loss			1.5	dB
Attenuation Value		1.5 to 70		dB
Step Size		1		dB
Step Type		Dial		
Input Power (CW)			2	Watts
Input Power, Peak			100	Watts
VSWR			1.5:1	

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Range	DC to 1	1 to 2	2 to 3			GHz
Insertion Loss	0.6	1	1.5			dB
VSWR	1.3:1	1.4:1	1.5:1			
Attenuation Accuracy	0.3	0.8	1.5			dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.5 to 70 dB Step Attenuator with a 1 dB Step SMA Female Interface Rated Up to 3 GHz and Up to 2 Watts in a Dial Design PE70A1038](#)



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Mechanical Specifications

Size

Length	4.72 in [119.89 mm]
Width	1.18 in [29.97 mm]
Height	2.1 in [53.34 mm]
Weight	0.9 lbs [408.23 g]

Connectors

Description	Connector 1	Connector 2
Type	SMA Female	SMA Female

Environmental Specifications

Temperature

Operating Range	-20 to 85 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

1.5 to 70 dB Step Attenuator with a 1 dB Step SMA Female Interface Rated Up to 3 GHz and Up to 2 Watts in a Dial Design 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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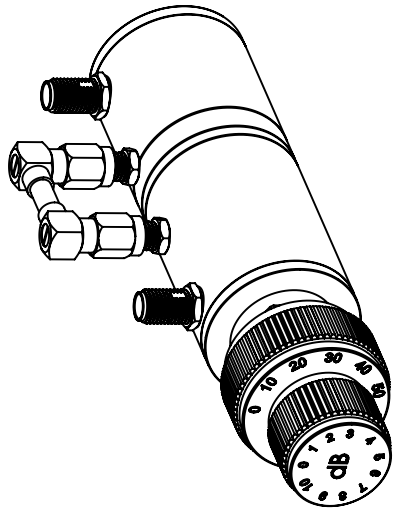
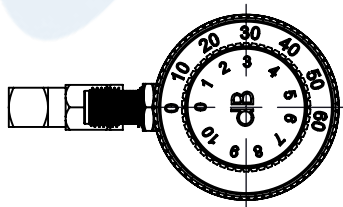
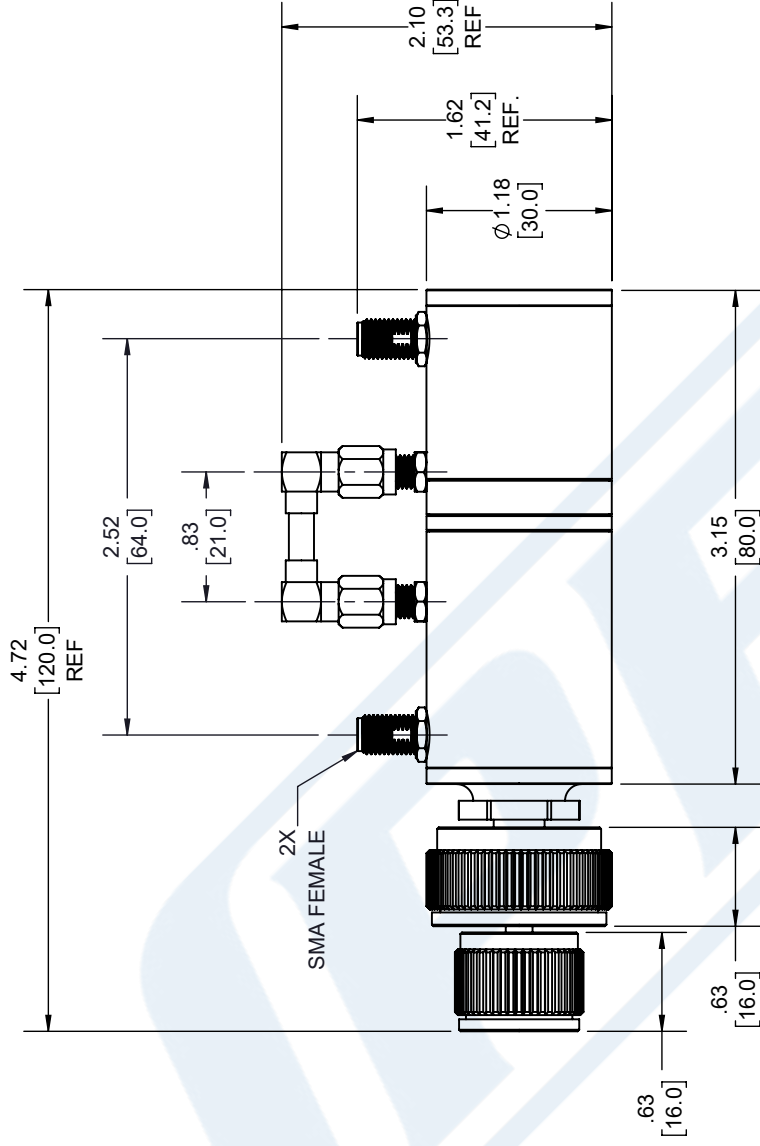
URL: <https://www.pasternack.com/70db-step-sma-female-sma-female-2-watts-attenuator-pe70a1038-p.aspx>

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PE70A1038 CAD Drawing

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	4/14/2022	S. PONG



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<p>ITEM NO. PE70A1038</p>	<p>REV A</p>

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