



## 0 to 100 dB Step Attenuator with a 1 dB Step N Female Interface Rated Up to 3 GHz and Up to 2 Watts in a Dial Design

### RF Step Attenuators Technical Data Sheet

**PE70A1033**

#### Features

- 1 dB steps from 0 to 100 dB Attenuation
- Rotary Dial Control
- N 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 PE70A1033 is a Step Attenuator that has 100 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 1.2 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 N 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			1.2	dB
Attenuation Value		0 to 100		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	1.2			dB
VSWR	1.5:1	1.5:1	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: [0 to 100 dB Step Attenuator with a 1 dB Step N Female Interface Rated Up to 3 GHz and Up to 2 Watts in a Dial Design PE70A1033](#)



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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	1 lbs [453.59 g]

### Connectors

Description	Connector 1	Connector 2
Type	N Female	N 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:

0 to 100 dB Step Attenuator with a 1 dB Step N 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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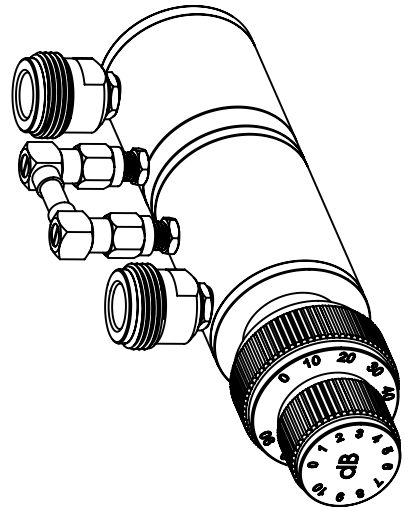
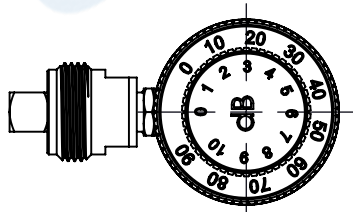
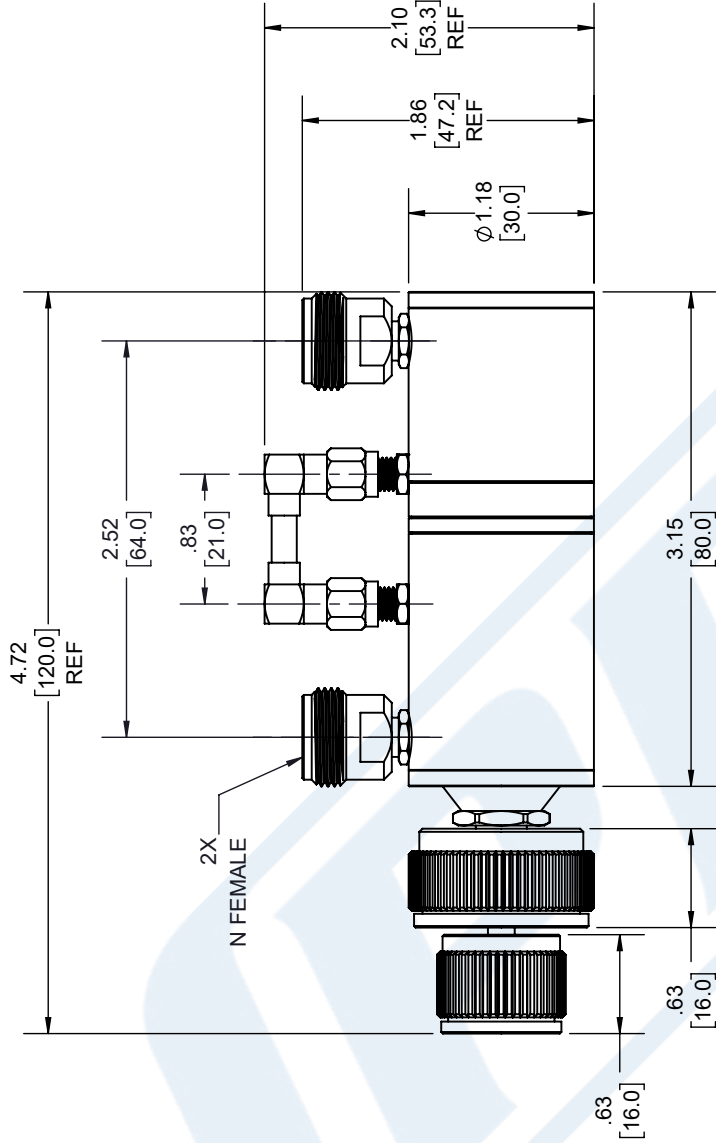
URL: <https://www.pasternack.com/100db-step-n-female-n-female-2-watts-attenuator-pe70a1033-p.aspx>

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# PE70A1033 CAD Drawing

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



UNLESS OTHERWISE SPECIFIED  
 LEADING DIMENSIONS ARE INCHES  
 DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:  
 .X = ±.2 [5.08] FRACTIONS ± 1/32  
 .XX = ±.02 [ .51] ANGLES ± 1°  
 .XXX = ±.005 [ .13] CABLE LENGTH (L), TOLERANCES:  
 L ≤ 12 [305] = +1 [25] / -0  
 12 [305] < L ≤ 60 [1524] = +2 [51] / -0  
 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0  
 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0  
 300 [7620] < L = +5% / -0

ALL DIMENSIONS SHOWN  
 ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

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ITEM NO. PE70A1033

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