



1.5 to 30 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

**PE70A1037**

### Features

- 1 dB steps from 1.5 to 30 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 PE70A1037 is a Step Attenuator that has 30 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 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 30		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			

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 30 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 PE70A1037](#)

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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 30 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.

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 30 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 PE70A1037](#)

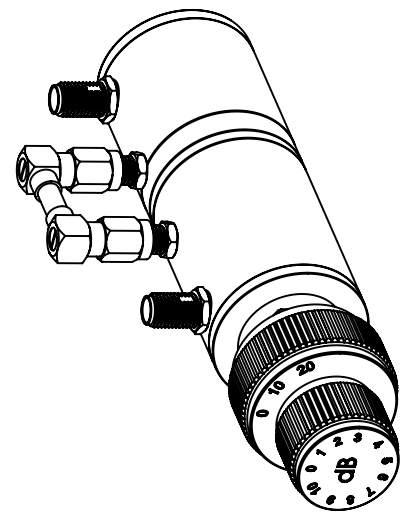
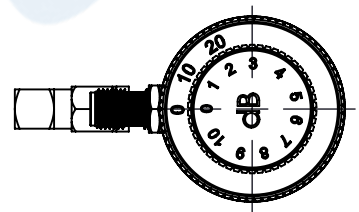
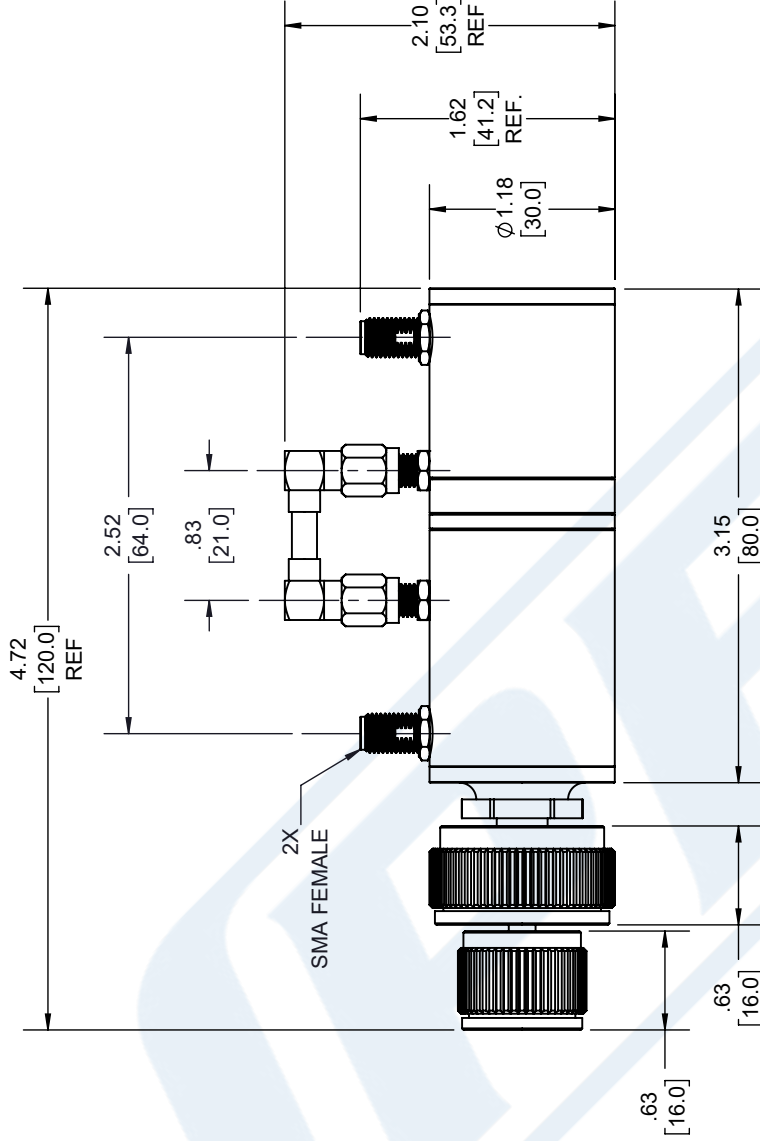
URL: <https://www.pasternack.com/30db-step-sma-female-sma-female-2-watts-attenuator-pe70a1037-p.aspx>

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# PE70A1037 CAD Drawing

1.5 to 30 dB Step Attenuator with a 1 dB Step SMA Female Interface  
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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
B	PCR SA3730SMA	12/10/2020	S.PONG



THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A

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an INFINITE brand

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

TOLERANCES:

FRACTIONS  
.X = ±.2 [5.08] ±.1/32  
.XX = ±.02 [.51] ±.1/32  
.XXX = ±.005 [.13] ANGLES ± 1°

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.

SIZE A CAGE CODE 53919 DRAWN BY K.DANG ITEM NO. PE70A1037

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