

## 0 to 69dB Rotary Step Attenuator, SMA Female to SMA Female With 1 dB Step Rated to 2 Watts Up to 18GHz



### PE7444-69

#### Features

- 1 dB steps from 0 to 69 dB Attenuation
- Rotary Dial Control
- SMA Female Connectors
- 0°C to +54°C Operating Temperature
- ±1.5 dB Typical Attenuation Accuracy

#### Applications

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

#### Description

The PE7444-69 is a Step Attenuator that has 69 dB of total attenuation with 1 dB step size and rotary dial design across a frequency range from DC to 18 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 1.75:1 at 18 GHz. The design also features excellent attenuation accuracy with ±1.5 dB typical at 18 GHz. The Aluminum package has SMA Female connectors, and operates within the temperature range of -0°C to 54°C.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
Impedance		50		Ohms
Insertion Loss			1.5	dB
Attenuation Value		0 to 69		dB
Step Size		1		dB
Step Type		Rotary		
Input Power (CW)			2	Watts
Input Power, Peak 5µs Pulse Width, 1% DutyCycle			200	Watts
VSWR			1.75:1	

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Range	DC to 18					GHz
Attenuation Accuracy	1.5					dB

#### Electrical Specification Notes:

Attenuation Accuracy specification is ±2 dB typ for any attenuation above 50dB.

#### Mechanical Specifications

##### Size

Length	6.417 in [162.99 mm]
Width	1.772 in [45.01 mm]
Height	1.89 in [48.01 mm]
Weight	0.05 lbs [22.68 g]

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**PE7444-69**

**Connectors**

Description	Connector 1	Connector 2
Type	SMA Female	SMA Female
Contact Material and Plating	Beryllium Copper, Gold	
Body Material and Plating	Stainless Steel	Aluminum

**Environmental Specifications**

**Temperature**

Operating Range 0 to 54 deg C

**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

0 to 69dB Rotary Step Attenuator, SMA Female to SMA Female With 1 dB Step Rated to 2 Watts Up to 18GHz 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.

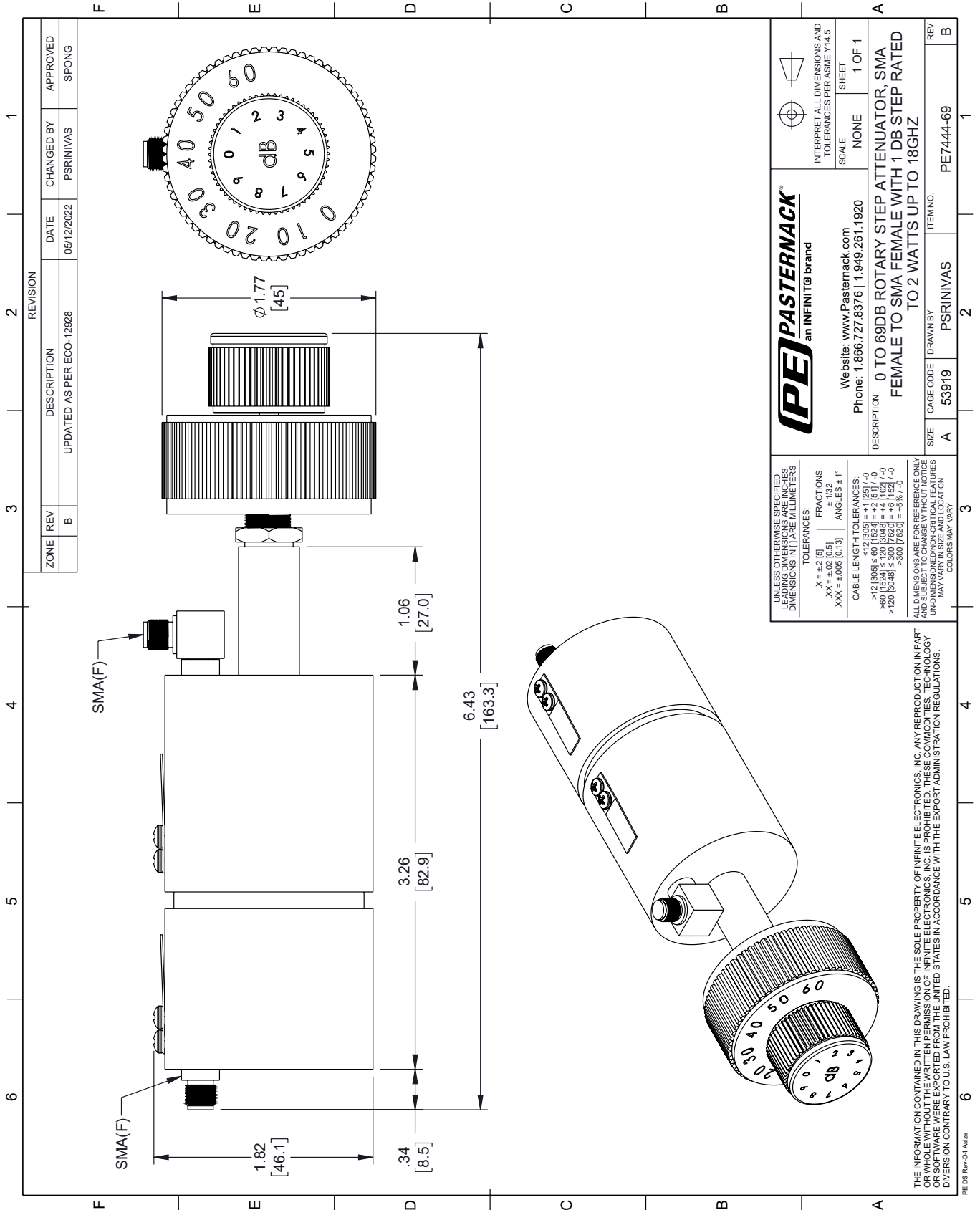
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [0 to 69dB Rotary Step Attenuator, SMA Female to SMA Female With 1 dB Step Rated to 2 Watts Up to 18GHz PE7444-69](#)

URL: <https://www.pasternack.com/69db-step-sma-female-sma-female-2-watts-attenuator-pe7444-69-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

# PE7444-69 CAD Drawing

0 to 69dB Rotary Step Attenuator, SMA Female to SMA Female With 1 dB Step Rated to 2 Watts Up to 18GHz



REVISION		DATE	CHANGED BY	APPROVED	
ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	B	UPDATED AS PER ECO-12928	05/12/2022	PSRINIVAS	SPONG

 Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920	INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
	DESCRIPTION: 0 TO 69DB ROTARY STEP ATTENUATOR, SMA FEMALE TO SMA FEMALE WITH 1 DB STEP RATED TO 2 WATTS UP TO 18GHZ
SIZE: A CAGE CODE: 53919 DRAWN BY: PSRINIVAS ITEM NO.: PE7444-69	REV: B

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND DIMENSIONS IN [ ] ARE MILLIMETERS.

TOLERANCES:  
 .X = ±.2 [5]  
 .XX = ±.02 [0.5]  
 .XXX = ±.005 [0.13]

FRACTIONS: ± 1/32  
 ANGLES: ± 1°

CABLE LENGTH TOLERANCES:  
 < 12 [305] ≤ 60 [1524] = ±.1 [2.5] / -0  
 > 60 [1524] ≤ 120 [3048] = ±.4 [10.2] / -0  
 > 120 [3048] ≤ 300 [7620] = ±.6 [15.2] / -0  
 > 300 [7620] = ±.8 [20.3] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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PE DS Rev-04 Add2