



# 0 to 9dB Rotary Step Attenuator, SMA Female to SMA Female With 1 dB Step Rated to 2 Watts Up to 18GHz

## RF Step Attenuators Technical Data Sheet

**PE7442-9**

### Features

- 1 dB steps from 0 to 9 dB Attenuation
- Rotary Dial Control
- SMA Female Connectors
- -20°C to +85°C Operating Temperature
- ±1 dB Typical Attenuation Accuracy

### Applications

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

### Description

The PE7442-9 is a Step Attenuator that has 9 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 1.2 dB maximum insertion loss, and a maximum VSWR of 1.6:1 at 18 GHz. The design also features excellent attenuation accuracy with ±1 dB typical at 18 GHz. The Aluminum 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		18	GHz
Impedance		50		Ohms
Insertion Loss			1.2	dB
Attenuation Value		0 to 9		dB
Step Size		1		dB
Step Type		Rotary		
Input Power (CW)			2	Watts
Input Power, Peak 5µs Pulse Width, 1% DutyCycle			200	Watts
VSWR			1.6:1	

### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Range	DC to 18					GHz
Attenuation Accuracy	1					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 9dB Rotary Step Attenuator, SMA Female to SMA Female With 1 dB Step Rated to 2 Watts Up to 18GHz PE7442-9](#)



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### Mechanical Specifications

#### Size

Length	3.819 in [97 mm]
Width	1.772 in [45.01 mm]
Height	1.89 in [48.01 mm]
Weight	0.485 lbs [219.99 g]

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

### Plotted and Other Data

Notes:

0 to 9dB 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 9dB Rotary Step Attenuator, SMA Female to SMA Female With 1 dB Step Rated to 2 Watts Up to 18GHz PE7442-9](#)

URL: <https://www.pasternack.com/90db-step-sma-female-sma-female-2-watts-attenuator-pe7442-9-p.aspx>

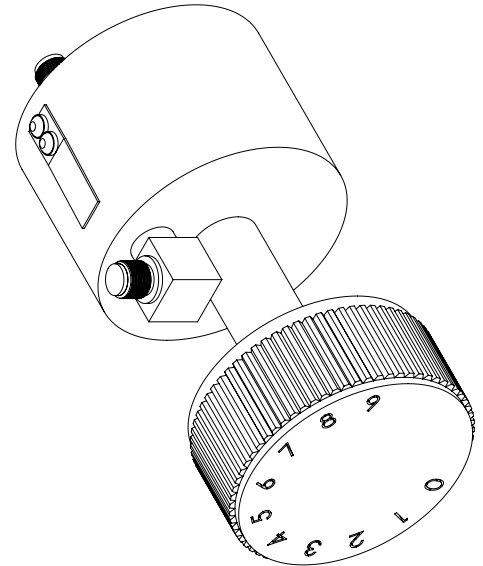
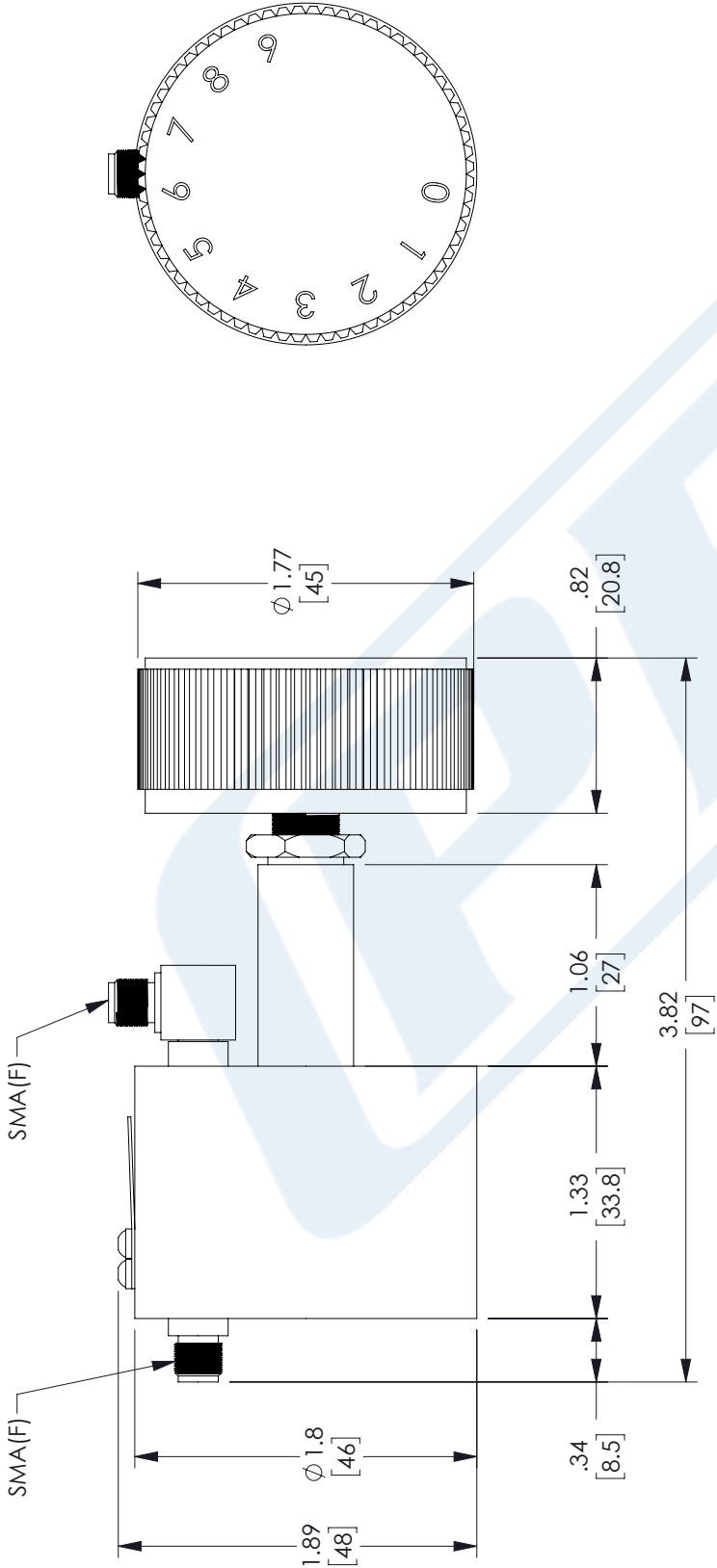
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such 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.

# PE7442-9 CAD Drawing

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### REVISIONS

REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	05/09/2022	SPONG



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

TOLERANCES:  
 .X = ±.2 [5.08] FRACTIONS ±.1/32  
 .XX = ±.15 [3.81] ±.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%L / -0

ALL DIMENSIONS SHOWN  
ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A

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ITEM NO. PE7442-9

SIZE A CAGE CODE 53919 DRAWN BY PSRINIVAS