



0 to 99dB 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

PE7444-99

Features

- 1 dB steps from 0 to 99 dB Attenuation
- Rotary Dial Control
- SMA Female Connectors
- 0°C to +54°C Operating Temperature
- ±2 dB Typical Attenuation Accuracy

Applications

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

Description

The PE7444-99 is a Step Attenuator that has 99 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 ±2 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 99 | | 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 | 2 | | | | | 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 99dB Rotary Step Attenuator, SMA Female to SMA Female With 1 dB Step Rated to 2 Watts Up to 18GHz PE7444-99](#)



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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 | 1.06 lbs [480.81 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 | 0 to 54 deg C |
|-----------------|---------------|

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

Plotted and Other Data

Notes:

0 to 99dB 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 99dB Rotary Step Attenuator, SMA Female to SMA Female With 1 dB Step Rated to 2 Watts Up to 18GHz PE7444-99](#)

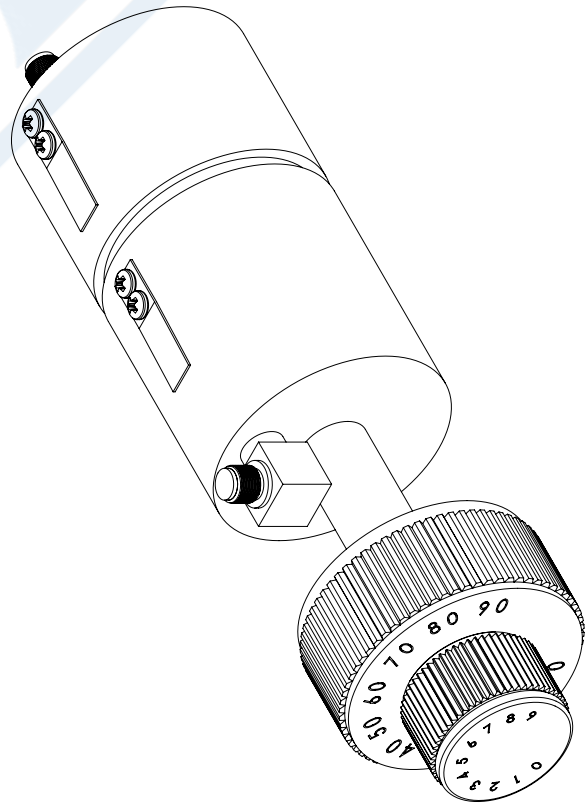
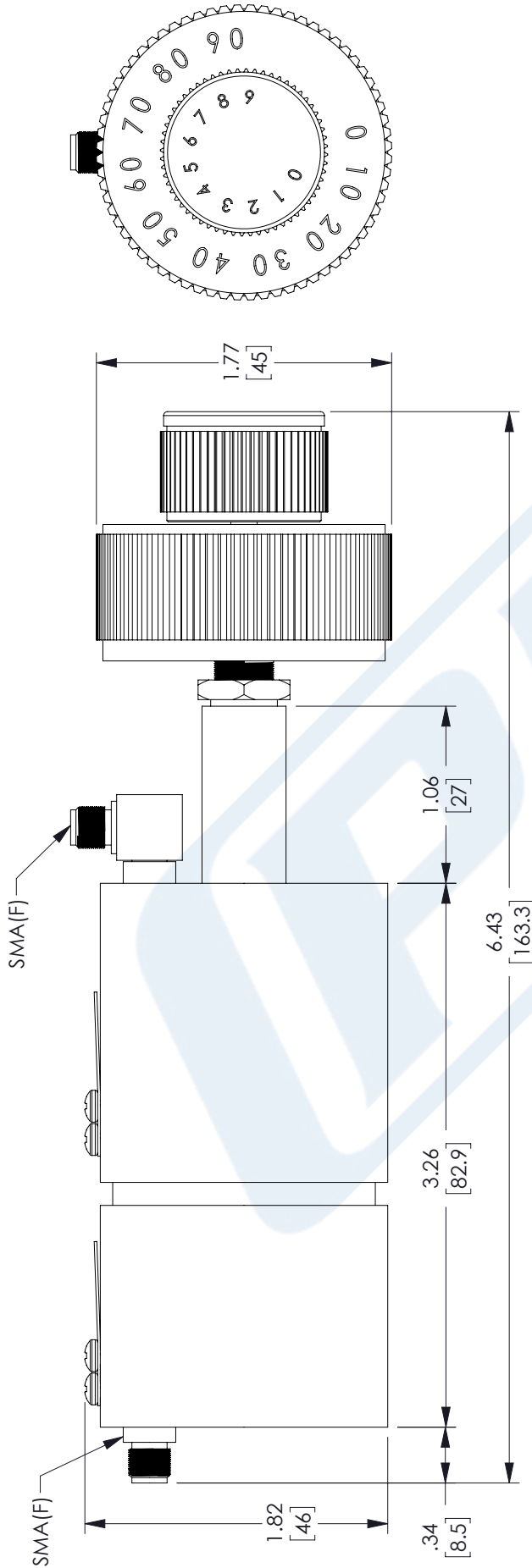
URL: <https://www.pasternack.com/99db-step-sma-female-sma-female-2-watts-attenuator-pe7444-99-p.aspx>

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.

PE7444-99 CAD Drawing

0 to 99dB Rotary Step Attenuator, SMA Female to SMA Female
With 1 dB Step Rated to 2 Watts Up to 18GHz

| REVISIONS | | | |
|-----------|-----------------|------------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 05/11/2022 | SPONG |



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

TOLERANCES:
 .X = ±.2 [5.08] FRACTIONS ±.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%L / -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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