

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



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 |

Electrical Specification Notes:

Attenuation Accuracy specification is ±3.5% dB typ for any attenuation above 70dB.

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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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>

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PE7444-99 CAD Drawing

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