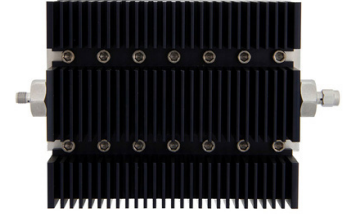


## 6 dB Fixed Attenuator, SMA Female To SMA Male Directional Black Anodized Aluminum Heatsink Body Rated To 100 Watts Up To 6 GHz



### PE7221-6

#### Features

- 100W average power and 2,000W peak power handling capability
- Operate to 6 GHz
- Temperature range of -55 to +125 degrees C
- 42 in-series and between series combinations
- 7/16 DIN, SMA, N, TNC Male and Female connectors are available
- Other connector combinations available upon request

#### Applications

#### Description

Pasternack carries a wide range of fixed attenuators with a broad selection of attenuation levels, frequency ranges, and power dissipation ranges. RF microwave attenuators (also known as RF pads) lower the amplitude of a signal (attenuate) a known amount and can be used in a wide variety of applications. These attenuator pads are used when a signal needs to be reduced to protect measurement equipment or other circuitry, to extend the range of power meters and amplifiers, and to impedance match circuits by reducing the VSWR seen by adjacent components. RF attenuators can prevent signal overload in amplifiers, receivers and detectors, adjusting the signal level to a range that is optimal.

Few RF components are as commonly used as fixed coaxial attenuators, and Pasternack carries one of the largest in-stock varieties and ships them same day. The 6 dB Fixed Attenuator PE7221-6 is rated to 100 Watts and operates from DC to 6 GHz. The versatile coaxial package uses SMA female to SMA male connectors and is also REACH and RoHS compliant. The Black Anodized Aluminum Heatsink body allows for efficient heat dissipation under high power usage conditions. Pasternack Enterprises line of 100W Attenuators operate from DC to 6 GHz, and are available in 42 different 7/16 DIN, N, SMA and TNC in-series and between-series connector combinations. Our 100W Attenuators are manufactured with Passivated Stainless Steel SMA, TNC and N connectors, and Silver Plated Brass 7/16 DIN connectors. Pasternack 100W Attenuators come in 3 dB, 6 dB, 10 dB, 20 dB, 30 dB, 40 dB, 60 dB values and will operate from -55 to +125 degrees C. Additional connector combinations are available beyond the 42 standard designs, upon request.

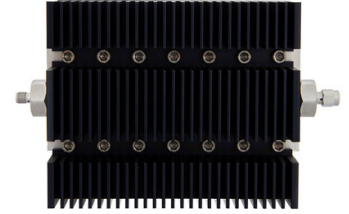
#### Electrical Specifications

| Description         | Minimum | Typical | Maximum | Units |
|---------------------|---------|---------|---------|-------|
| Frequency Range     | DC      |         | 6       | GHz   |
| Impedance           |         | 50      |         | Ohms  |
| Nominal Attenuation |         | 6       |         | dB    |
| VSWR                |         |         | 1.45:1  |       |
| Input Power, CW     |         |         | 100     | Watts |

#### Specifications by Frequency

| Description               | F1      | F2     | F3     | F4 | F5 | Units |
|---------------------------|---------|--------|--------|----|----|-------|
| Frequency Range           | DC to 2 | 2 to 4 | 4 to 6 |    |    | GHz   |
| VSWR, Max                 | 1.2:1   | 1.35:1 | 1.45:1 |    |    |       |
| Attenuation Accuracy, Typ | 0.75    | 0.75   | 1      |    |    | dB    |

6 dB Fixed Attenuator, SMA Female To SMA Male  
Directional Black Anodized Aluminum Heatsink  
Body Rated To 100 Watts Up To 6 GHz



**PE7221-6**

**Mechanical Specifications**

**Size**

|                           |                                  |
|---------------------------|----------------------------------|
| Length                    | 4.9 in [124.46 mm]               |
| Width/Diameter            | 3.8 in [96.52 mm]                |
| Height                    | 2.7 in [68.58 mm]                |
| Weight                    | 2.748 lbs [1.25 kg]              |
| Body Material and Plating | Black Anodized Aluminum Heatsink |

**Configuration**

|        |                    |
|--------|--------------------|
| Design | Fixed, Directional |
|--------|--------------------|

**Connectors**

| Description                       | Connector 1                 | Connector 2                 |
|-----------------------------------|-----------------------------|-----------------------------|
| Type                              | SMA Female                  | SMA Male                    |
| Contact Material and Plating      | Beryllium Copper, Gold      | Beryllium Copper, Gold      |
| Coupling Nut Material and Plating |                             | Stainless Steel, Passivated |
| Body Material and Plating         | Stainless Steel, Passivated | Stainless Steel, Passivated |

**Environmental Specifications**

**Temperature**

|                 |                   |
|-----------------|-------------------|
| Operating Range | -55 to +125 deg C |
|-----------------|-------------------|

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

**Plotted and Other Data**

Notes:

**Typical Performance Data**

6 dB Fixed Attenuator, SMA Female To SMA Male Directional Black Anodized Aluminum Heatsink Body Rated To 100 Watts Up To 6 GHz 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: [6 dB Fixed Attenuator, SMA Female To SMA Male Directional Black Anodized Aluminum Heatsink Body Rated To 100 Watts Up To 6 GHz PE7221-6](#)

URL: <https://www.pasternack.com/6db-fixed-sma-female-sma-male-100-watts-attenuator-pe7221-6-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.