



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

**RF Fixed Attenuators Technical Data Sheet**

**PE7227-20**

**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

**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 20 dB Fixed Attenuator PE7227-20 is rated to 100 Watts and operates from DC to 6 GHz. The versatile coaxial package uses SMA male to SMA female 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 |         | 20      |         | dB    |
| VSWR                |         |         | 1.45:1  |       |
| Input Power, CW     |         |         | 100     | Watts |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [20 dB Fixed Attenuator, SMA Male to SMA Female Directional Black Anodized Aluminum Heatsink Body Rated to 100 Watts Up to 6 GHz PE7227-20](#)



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## Specifications by Frequency

| Description               | F1      | F2     | F3     | F4 | F5 | Units |
|---------------------------|---------|--------|--------|----|----|-------|
| 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 | 1       | 1      | 1.25   |    |    | dB    |

## 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                    | 3 lbs [1.36 kg]                  |
| Body Material and Plating | Black Anodized Aluminum Heatsink |

## Configuration

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

## Connectors

| Description                       | Connector 1                 | Connector 2                 |
|-----------------------------------|-----------------------------|-----------------------------|
| Type                              | SMA Male                    | SMA Female                  |
| 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:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [20 dB Fixed Attenuator, SMA Male to SMA Female Directional Black Anodized Aluminum Heatsink Body Rated to 100 Watts Up to 6 GHz PE7227-20](#)



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20 dB Fixed Attenuator, SMA Male to SMA Female 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.

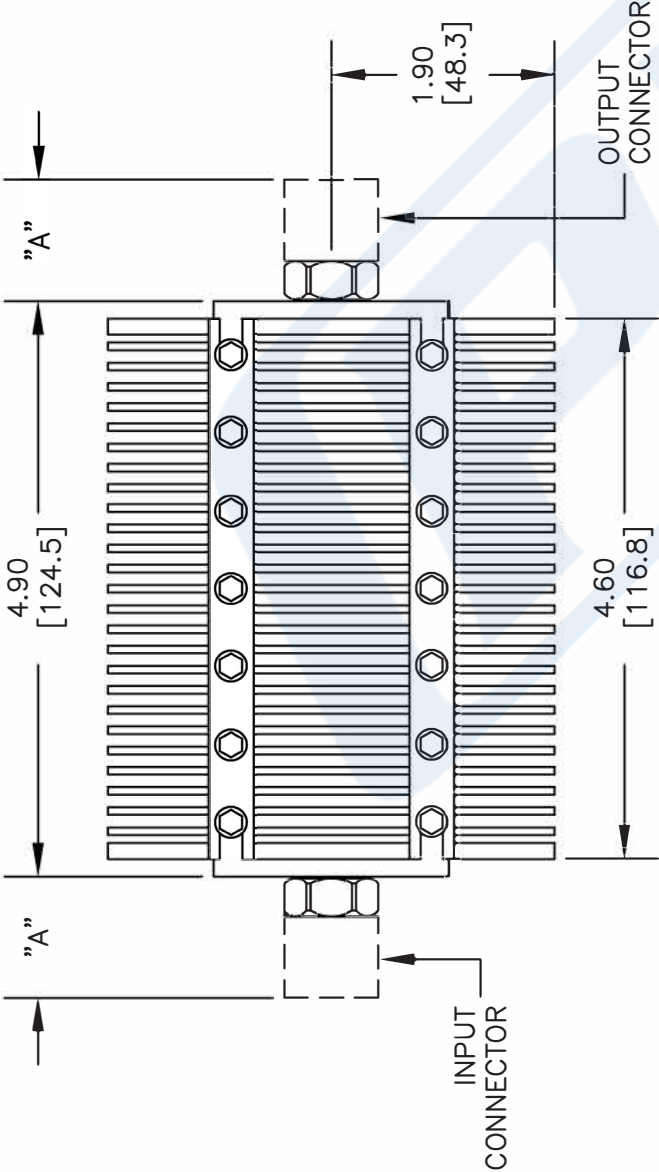
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [20 dB Fixed Attenuator, SMA Male to SMA Female Directional Black Anodized Aluminum Heatsink Body Rated to 100 Watts Up to 6 GHz PE7227-20](https://www.pasternack.com/20db-fixed-sma-male-sma-female-100-watts-attenuator-pe7227-20-p.aspx)

URL: <https://www.pasternack.com/20db-fixed-sma-male-sma-female-100-watts-attenuator-pe7227-20-p.aspx>

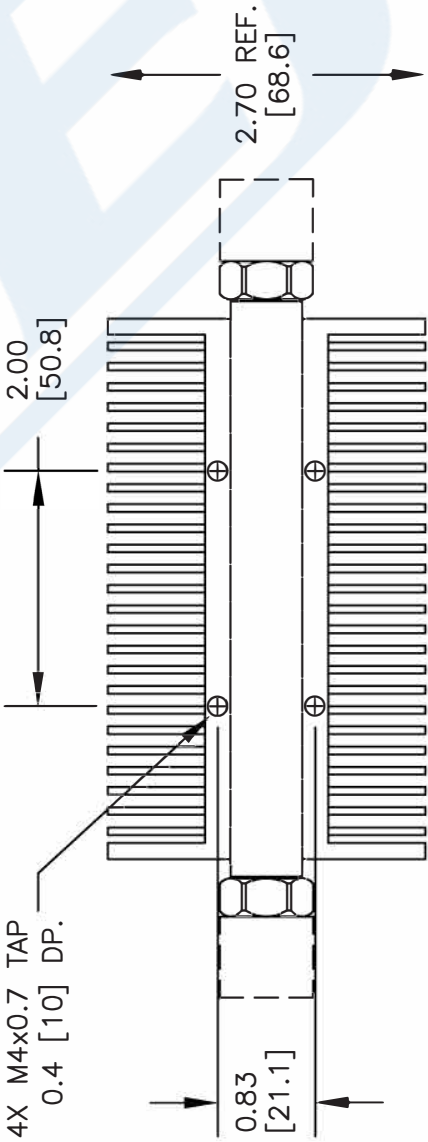
PE7227-20 CAD Drawing

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

| TABLE OF INFORMATION |                   |  |
|----------------------|-------------------|--|
| CONNECTOR<br>TYPE    | DIM "A"<br>(REF.) |  |
| SMA MALE             | .91               |  |
| SMA FEMALE           | .77               |  |
| TNC MALE             | 1.10              |  |
| TNC FEMALE           | 1.19              |  |
| N FEMALE             | 1.26              |  |
| N MALE               | 1.22              |  |
| 7/16 MALE            | 1.40              |  |
| 7/16 FEMALE          | 1.45              |  |



TOP VIEW



SIDE VIEW

DWG TITLE

PE72xx-yy

NOTES:  
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
3. DIMENSIONS ARE IN INCHES [mm].

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FSCM NO. 53919

CAD FILE 091412

SCALE N/A

SIZE A

2233