

## 9 dB Fixed Attenuator, SMA Male to SMA Female Brass Tri-Metal Body Rated to 1 Watt Up to 2 GHz



### PE7161-9

#### Features

- Bidirectional
- DC to 2 GHz Frequency Range
- Attenuation  $9 \pm 0.6$  dB
- Max Power 1 Watts (CW)
- VSWR < 1.2:1

#### Applications

- Instrumentation
- Precision measurements
- Prototyping and characterization
- Production systems

#### 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 9 dB Fixed Attenuator PE7161-9 is rated to 1 Watt and operates from DC to 2 GHz. The versatile coaxial package uses SMA male to SMA female connectors and is also REACH and RoHS compliant.

#### Electrical Specifications

| Description          | Minimum | Typical | Maximum | Units |
|----------------------|---------|---------|---------|-------|
| Frequency Range      | DC      |         | 2       | GHz   |
| Impedance            |         | 50      |         | Ohms  |
| Nominal Attenuation  |         | 9       |         | dB    |
| Attenuation Accuracy |         | 0.6     |         | dB    |
| VSWR                 |         |         | 1.2:1   |       |
| Input Power, CW      |         |         | 1       | Watt  |

#### Mechanical Specifications

##### Size

|                           |                     |
|---------------------------|---------------------|
| Length                    | 0.86 in [21.84 mm]  |
| Width/Diameter            | 0.312 in [7.92 mm]  |
| Height                    | 0 in [0 mm]         |
| Weight                    | 0.0133 lbs [6.03 g] |
| Body Material and Plating | Brass, Tri-Metal    |

##### Configuration

|               |                      |
|---------------|----------------------|
| Design        | Fixed, Bidirectional |
| Package Style | Connectorized Module |

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### Connectors

| Description                       | Connector 1            | Connector 2            |
|-----------------------------------|------------------------|------------------------|
| Type                              | SMA Male               | SMA Female             |
| Connector Specification           | MIL-STD-348            | MIL-STD-348            |
| Contact Material and Plating      | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Coupling Nut Material and Plating | Brass, Tri-Metal       |                        |
| Hex Size                          | 5/16 in.               |                        |
| Torque                            | 5 in-lbs 0.57 Nm       |                        |
| Body Material and Plating         | Brass, Tri-Metal       | Brass, Tri-Metal       |

### Environmental Specifications

#### Temperature

Operating Range -20 to +85 deg C

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

### Plotted and Other Data

Notes:

### Typical Performance Data

9 dB Fixed Attenuator, SMA Male to SMA Female Brass Tri-Metal Body Rated to 1 Watt Up to 2 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: [9 dB Fixed Attenuator, SMA Male to SMA Female Brass Tri-Metal Body Rated to 1 Watt Up to 2 GHz PE7161-9](#)

URL: <https://www.pasternack.com/9db-fixed-sma-female-sma-male-1-watt-attenuator-pe7161-9-p.aspx>

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