



20 dB Fixed Attenuator, BNC Male to BNC Female  
Brass Nickel Body Rated to 2 Watts Up to 4 GHz

## RF Fixed Attenuators Technical Data Sheet

PE7049-20

### Features

- Bidirectional
- DC to 4 GHz Frequency Range
- Attenuation 20±0.6 dB
- Max Power 2 Watts (CW)
- VSWR < 1.25:1

### 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 20 dB Fixed Attenuator PE7049-20 is rated to 2 Watts and operates from DC to 4 GHz. The versatile coaxial package uses BNC male to BNC female connectors and is also REACH and RoHS compliant.

### Electrical Specifications

| Description                                           | Minimum | Typical | Maximum | Units |
|-------------------------------------------------------|---------|---------|---------|-------|
| Frequency Range                                       | DC      |         | 4       | GHz   |
| Impedance                                             |         | 50      |         | Ohms  |
| Nominal Attenuation                                   |         | 20      |         | dB    |
| Attenuation Accuracy                                  |         | ±0.6    |         | dB    |
| VSWR                                                  |         |         | 1.25:1  |       |
| Input Power, CW<br>derated linearly to 0.5W at +125°C |         |         | 2       | Watts |
| Input Power, Peak<br>5µs pulse, 0.05% duty cycle      |         |         | 250     | 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, BNC Male to BNC Female Brass Nickel Body Rated to 2 Watts Up to 4 GHz PE7049-20](#)



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### Mechanical Specifications

#### Size

Length 1.36 in [34.54 mm]  
Width/Diameter 0.58 in [14.73 mm]

Weight 0.041 lbs [18.6 g]

Body Material and Plating Brass, Nickel

#### Configuration

Design Fixed, Bidirectional  
Package Style Connectorized Module

#### Connectors

| Description                       | Connector 1            | Connector 2            |
|-----------------------------------|------------------------|------------------------|
| Type                              | BNC Male               | BNC 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, Nickel          |                        |
| Body Material and Plating         | Brass, Nickel          | Brass, Nickel          |

### Environmental Specifications

#### Temperature

Operating Range -65 to +125 deg C

### Compliance Certifications (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

RoHS Compliant

REACH Compliant 12/17/2015

### Plotted and Other Data

Notes:

20 dB Fixed Attenuator, BNC Male to BNC Female Brass Nickel Body Rated to 2 Watts Up to 4 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

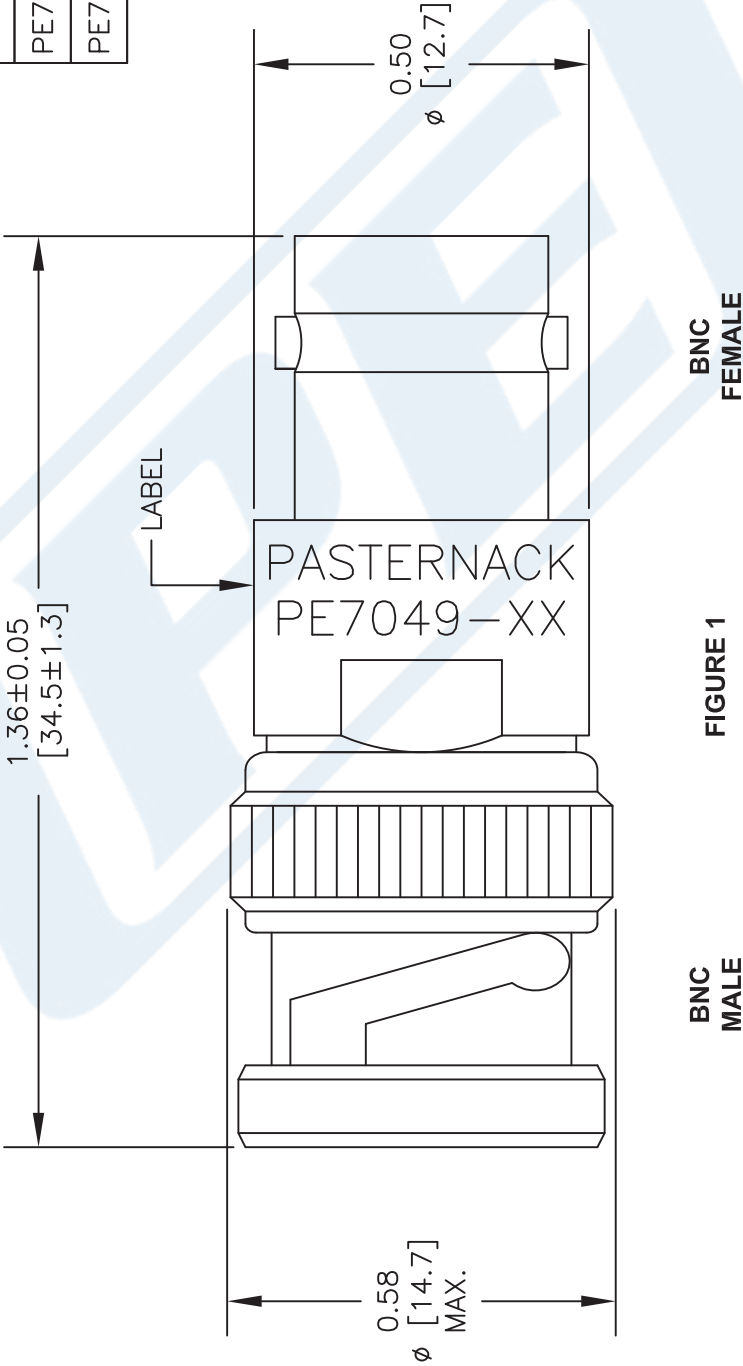
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URL: <http://www.pasternack.com/20db-fixed-bnc-male-bnc-female-2-watts-attenuator-pe7049-20-p.aspx>

PE7049-20 CAD Drawing

20 dB Fixed Attenuator, BNC Male to BNC Female Brass  
Nickel Body Rated to 2 Watts Up to 4 GHz

| P/N       | ATTEN. | FIGURE |
|-----------|--------|--------|
| PE7049-1  | 1 dB   | 1      |
| PE7049-2  | 2 dB   | 1      |
| PE7049-3  | 3 dB   | 1      |
| PE7049-6  | 6 dB   | 1      |
| PE7049-10 | 10 dB  | 1      |
| PE7049-20 | 20 dB  | 1      |
| PE7049-30 | 30 dB  | 1      |



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].

DWG TITLE  
**PE7049**

FSCM NO. 53919

CAD FILE 022916

SCALE N/A

SIZE A

3045

**PE PASTERNAK®**  
THE ENGINEER'S RF SOURCE

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