



20 dB Fixed Attenuator, 75 Ohm BNC Male to 75 Ohm BNC Female Brass Nickel Body Rated to 1 Watt Up to 1,000 MHz

## RF Fixed Attenuators Technical Data Sheet

PE7009-20

### Features

- Bidirectional
- DC to 1 GHz Frequency Range
- Attenuation 20±1 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 20 dB Fixed Attenuator PE7009-20 is rated to 1 Watt and operates from DC to 1,000 MHz. 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		1,000	MHz
Impedance		75		Ohms
Nominal Attenuation		20		dB
Attenuation Accuracy		±1		dB
VSWR			1.2:1	
Input Power, CW			1	Watts

### Mechanical Specifications

#### Size

Length	1.8 in [45.72 mm]
Width/Diameter	0.59 in [14.99 mm]
Weight	0.034 lbs [15.42 g]
Body Material and Plating	Brass, Nickel

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, 75 Ohm BNC Male to 75 Ohm BNC Female Brass Nickel Body Rated to 1 Watt Up to 1,000 MHz PE7009-20](#)



20 dB Fixed Attenuator, 75 Ohm BNC Male to 75 Ohm BNC Female Brass Nickel Body Rated to 1 Watt Up to 1,000 MHz

## RF Fixed Attenuators Technical Data Sheet

PE7009-20

### Configuration

Design Fixed, Bidirectional  
 Package Style Connectorized Module

### Connectors

Description	Connector 1	Connector 2
Type	BNC Male	BNC Female
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Dielectric Type	Teflon	Teflon
Coupling Nut Material and Plating	Brass, Nickel	
Body Material and Plating	Brass, Nickel	Brass, Nickel

### Environmental Specifications

#### Temperature

Operating Range -30 to +70 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:

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, 75 Ohm BNC Male to 75 Ohm BNC Female Brass Nickel Body Rated to 1 Watt Up to 1,000 MHz PE7009-20](#)

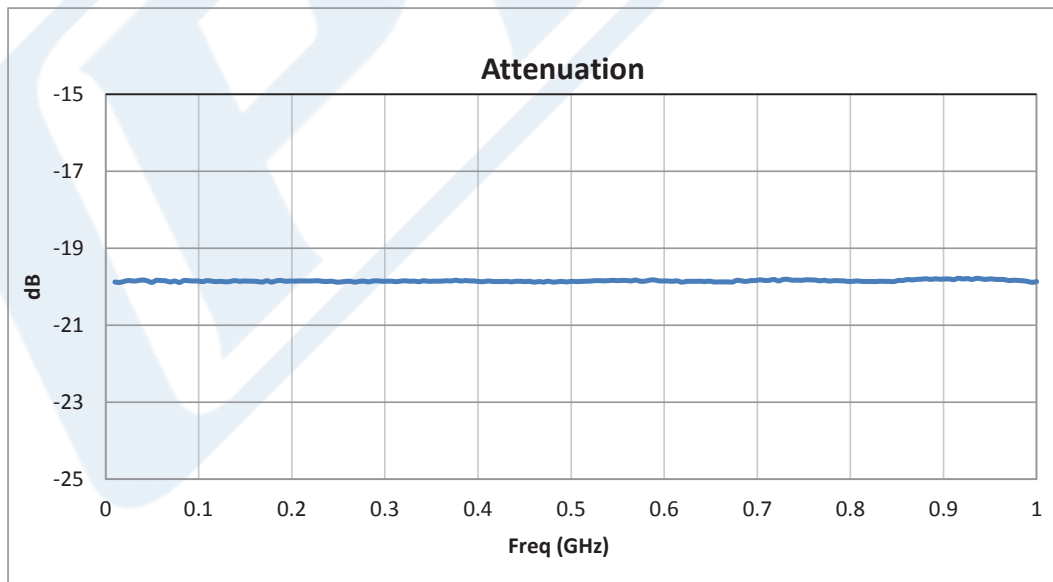
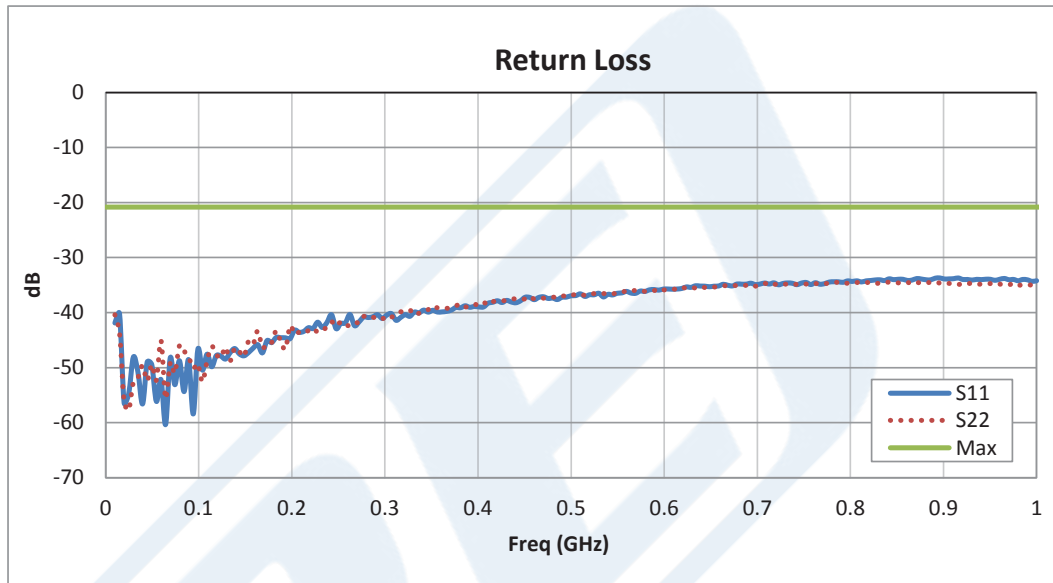


20 dB Fixed Attenuator, 75 Ohm BNC Male to 75 Ohm BNC Female Brass Nickel Body Rated to 1 Watt Up to 1,000 MHz

RF Fixed Attenuators Technical Data Sheet

PE7009-20

Typical Performance Data



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, 75 Ohm BNC Male to 75 Ohm BNC Female Brass Nickel Body Rated to 1 Watt Up to 1,000 MHz PE7009-20](#)





20 dB Fixed Attenuator, 75 Ohm BNC Male to 75 Ohm BNC Female Brass Nickel Body Rated to 1 Watt Up to 1,000 MHz

## RF Fixed Attenuators Technical Data Sheet

PE7009-20

20 dB Fixed Attenuator, 75 Ohm BNC Male to 75 Ohm BNC Female Brass Nickel Body Rated to 1 Watt Up to 1,000 MHz 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.

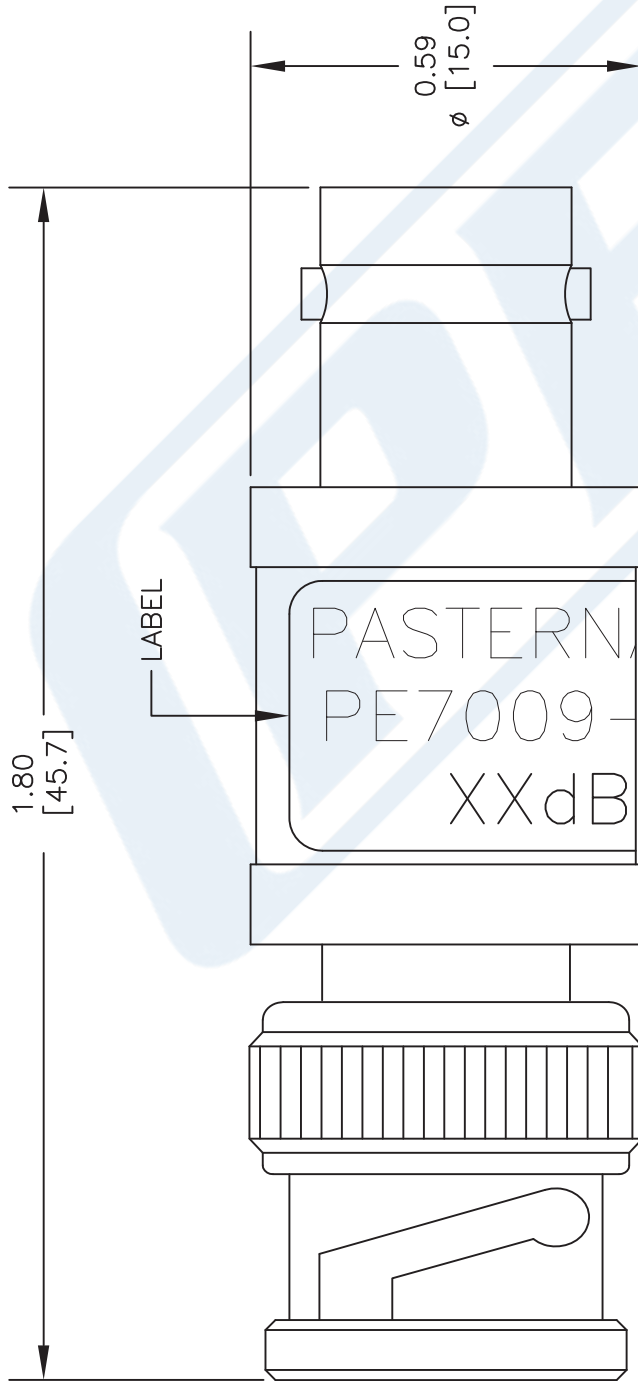
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [20 dB Fixed Attenuator, 75 Ohm BNC Male to 75 Ohm BNC Female Brass Nickel Body Rated to 1 Watt Up to 1,000 MHz PE7009-20](http://www.pasternack.com/20db-fixed-bnc-female-bnc-male-1-watt-attenuator-pe7009-20-p.aspx)

URL: <http://www.pasternack.com/20db-fixed-bnc-female-bnc-male-1-watt-attenuator-pe7009-20-p.aspx>

# PE7009-20 CAD Drawing

20 dB Fixed Attenuator, 75 Ohm BNC Male to 75 Ohm BNC Female  
 Brass Nickel Body Rated to 1 Watt Up to 1,000 MHz

P/N	ATTEN.	FIGURE
PE7009-1	1 dB	1
PE7009-2	2 dB	1
PE7009-3	3 dB	1
PE7009-6	6 dB	1
PE7009-10	10 dB	1
PE7009-20	20 dB	1
PE7009-30	30 dB	1



BNC FEMALE

FIGURE 1

BNC MALE

**STANDARD TOLERANCES**  
 .X ±0.2  
 .XX ±0.1  
 .XXX ±0.05

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

PASTERNAK  
 PE7009-XX  
 XXdB

**PART LABEL**

DWG TITLE

**PE7009**

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].

**(PE) PASTERNAK®**  
 THE ENGINEER'S RF SOURCE  
 Pasternack Enterprises, Inc.  
 P.O. Box 16759 | Irvine | CA | 92623  
**Phone:** (949) 261-1920 | **Fax:** (949) 261-7451  
**Website:** www.pasternack.com | **E-Mail:** sales@pasternack.com

FSCM NO. 53919

CAD FILE 022516

SCALE N/A

SIZE A

3045