



## 20 dB Fixed Attenuator, N Male to N Female Aluminum Body Rated to 5 Watts Up to 3 GHz

### RF Fixed Attenuators Technical Data Sheet

PE7390-20

#### Features

- Bidirectional
- DC to 3 GHz Frequency Range
- Attenuation 20±0.5 dB
- Max Power 5 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 PE7390-20 is rated to 5 Watts and operates from DC to 3 GHz. The versatile coaxial package uses N male to N female connectors and is also REACH and RoHS compliant.

#### Electrical Specifications

| Description                                       | Minimum | Typical | Maximum | Units |
|---|---------|---------|---------|-------|
| Frequency Range                                   | DC      |         | 3       | GHz   |
| Impedance   |         | 50      |         | Ohms  |
| Nominal Attenuation                               |         | 20      |         | dB    |
| Attenuation Accuracy                              |         | ±0.5    |         | dB    |
| VSWR  |         |         | 1.2:1   |       |
| Passive Intermodulation                           |         |         | -100    | dBc   |
| Input Power, CW<br>derated linearly to .5W @125°C |         |         | 5       | Watts |
| Input Power, Peak<br>5µs pulse, .5% duty cycle    |         |         | 500     | Watts |

#### Electrical Specification Notes:

Passive intermodulation specified at 910MHz with two input signals at 935MHz and 960MHz with average carrier power levels of +33dBm each.

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, N Male to N Female Aluminum Body Rated to 5 Watts Up to 3 GHz PE7390-20](#)



20 dB Fixed Attenuator, N Male to N Female  
Aluminum Body Rated to 5 Watts Up to 3 GHz

## RF Fixed Attenuators Technical Data Sheet

PE7390-20

### Mechanical Specifications

#### Size

|                           |                     |
|---------------------------|---------------------|
| Length                    | 2.76 in [70.1 mm]   |
| Width/Diameter            | 0.79 in [20.07 mm]  |
| Weight                    | 0.154 lbs [69.85 g] |
| Body Material and Plating | Aluminum            |

#### Configuration

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

#### Connectors

| Description                          | Connector 1   | Connector 2            |
|--------------------------------------|---------------|------------------------|
| Type                                 | N Male        | N Female               |
| Contact Material and Plating         | Brass, Gold   | Beryllium Copper, Gold |
| Outer Conductor Material and Plating | Brass, Nickel | Brass, Nickel          |
| Body Material and Plating            | Brass, Nickel | Brass, Nickel          |

### Environmental Specifications

#### Temperature

|                 |                   |
|-----------------|-------------------|
| Operating Range | -55 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:

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, N Male to N Female Aluminum Body Rated to 5 Watts Up to 3 GHz PE7390-20](#)

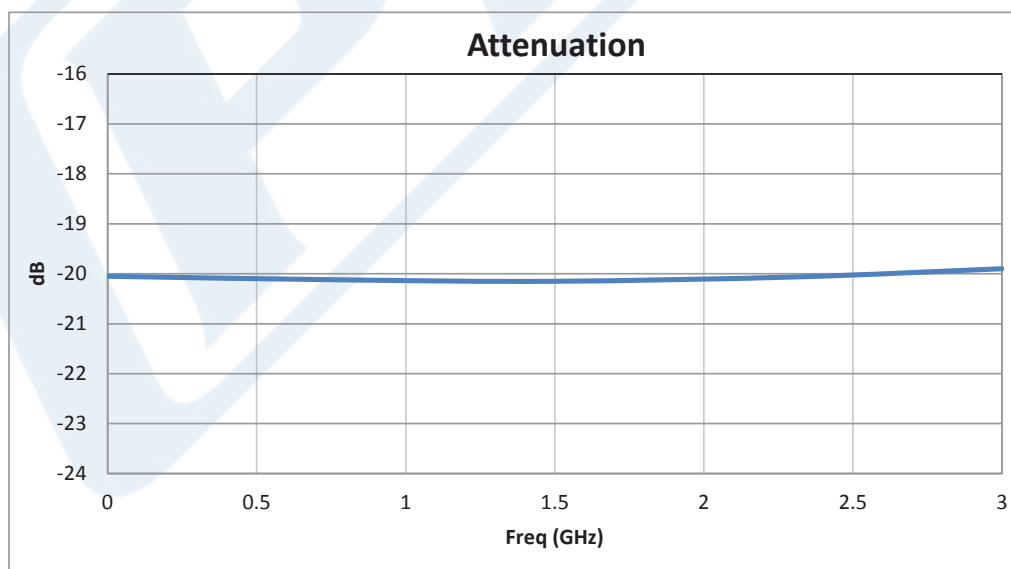
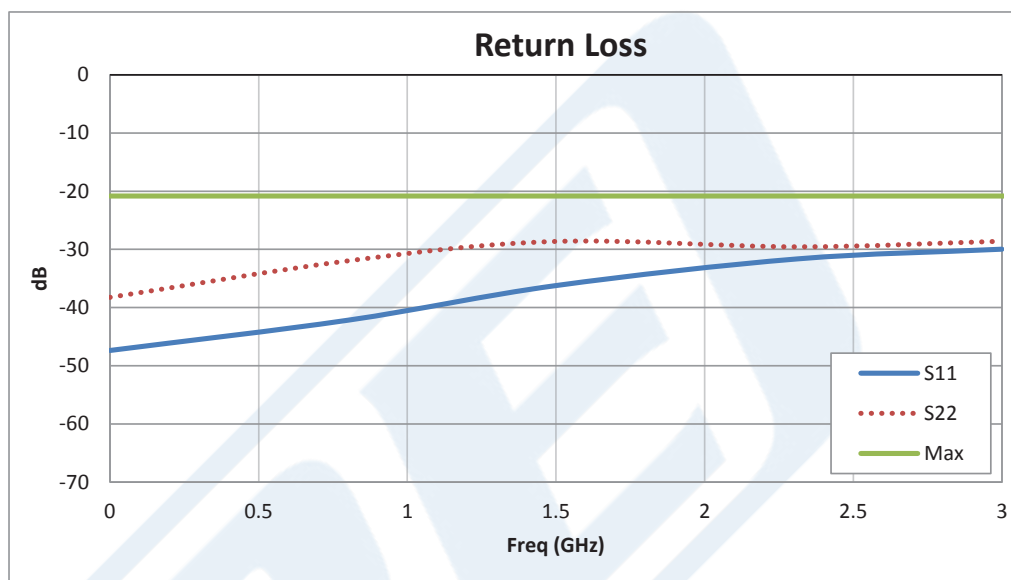


20 dB Fixed Attenuator, N Male to N Female  
Aluminum Body Rated to 5 Watts Up to 3 GHz

## RF Fixed Attenuators Technical Data Sheet

PE7390-20

### 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, N Male to N Female Aluminum Body Rated to 5 Watts Up to 3 GHz PE7390-20](#)



20 dB Fixed Attenuator, N Male to N Female  
Aluminum Body Rated to 5 Watts Up to 3 GHz

## RF Fixed Attenuators Technical Data Sheet

PE7390-20

20 dB Fixed Attenuator, N Male to N Female Aluminum Body Rated to 5 Watts Up to 3 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.

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, N Male to N Female Aluminum Body Rated to 5 Watts Up to 3 GHz PE7390-20](http://www.pasternack.com/20db-fixed-n-male-n-female-5-watts-attenuator-pe7390-20-p.aspx)

URL: <http://www.pasternack.com/20db-fixed-n-male-n-female-5-watts-attenuator-pe7390-20-p.aspx>

PE7390-20 CAD Drawing

20 dB Fixed Attenuator, N Male to N Female Aluminum Body Rated to 5 Watts Up to 3 GHz

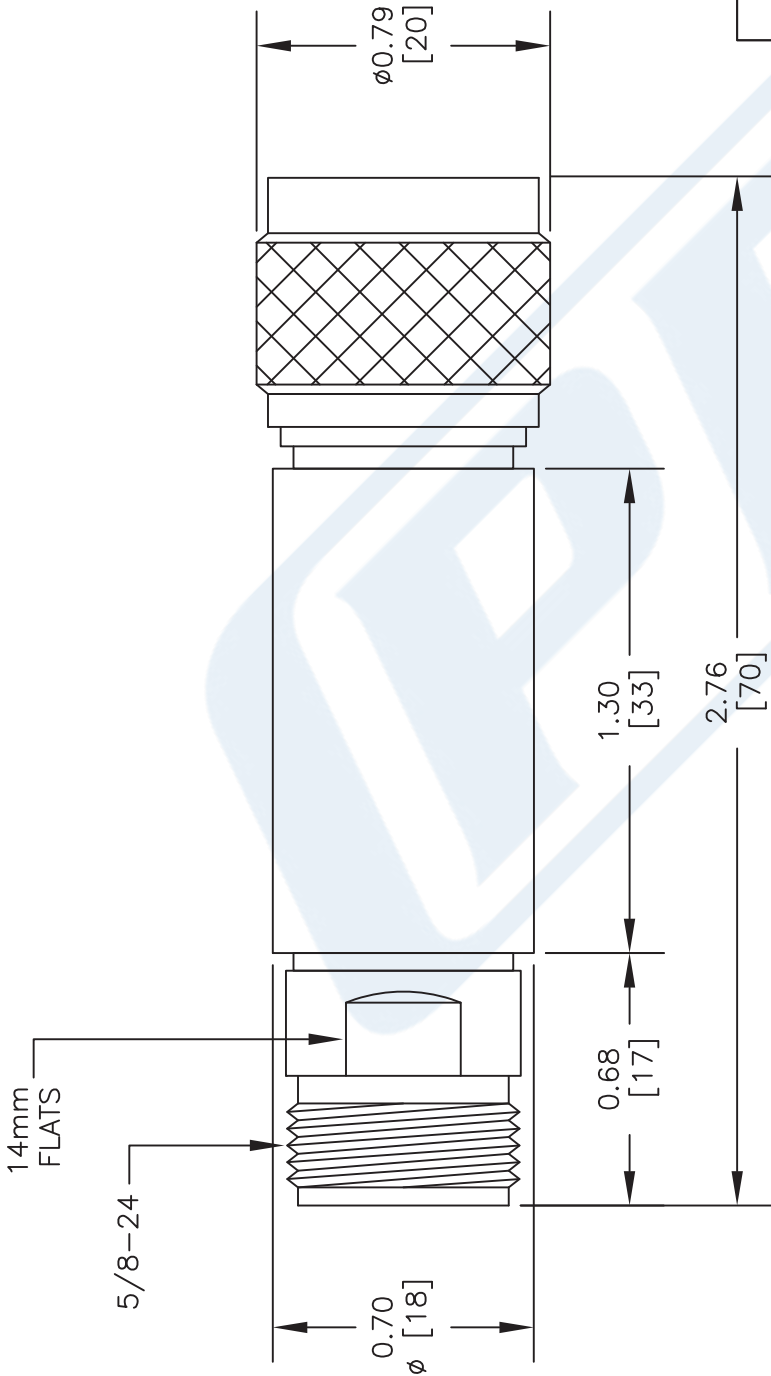


FIGURE 1

| P/N       | ATTEN. | FIGURE |
|-----------|--------|--------|
| PE7390-1  | 1 dB   | 1      |
| PE7390-2  | 2 dB   | 1      |
| PE7390-3  | 3 dB   | 1      |
| PE7390-6  | 6 dB   | 1      |
| PE7390-10 | 10 dB  | 1      |
| PE7390-15 | 15 dB  | 1      |
| PE7390-20 | 20 dB  | 1      |
| PE7390-30 | 30 dB  | 1      |

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

\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES

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

**PE7390**

FSCM NO. 53919

CAD FILE 020916

SCALE N/A

SIZE A

3045

**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