



20 dB Fixed Attenuator, 7/16 DIN Male to
 7/16 DIN Female Black Anodized Aluminum Heatsink
 Body Rated to 10 Watts Up to 7.5 GHz

RF Fixed Attenuators Technical Data Sheet

PE7040-20

Features

- Bidirectional
- DC to 7.5 GHz Frequency Range
- Attenuation 20±0.8 dB
- Max Power 10 Watts (CW)
- VSWR < 1.45:1

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 PE7040-20 is rated to 10 Watts and operates from DC to 7.5 GHz. The versatile coaxial package uses 7/16 DIN male to 7/16 DIN 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.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|---|---------|---------|---------|-------|
| Frequency Range | DC | | 7.5 | GHz |
| Impedance | | 50 | | Ohms |
| Nominal Attenuation | | 20 | | dB |
| Attenuation Accuracy | | ±0.8 | | dB |
| VSWR | | | 1.45:1 | |
| Input Power, CW derated linearly to 2W at +125°C | | | 10 | Watts |
| Input Power, Peak 5µs pulse, 0.05% duty cycle | | | 500 | 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, 7/16 DIN Male to 7/16 DIN Female Black Anodized Aluminum Heatsink Body Rated to 10 Watts Up to 7.5 GHz PE7040-20](#)



20 dB Fixed Attenuator, 7/16 DIN Male to
7/16 DIN Female Black Anodized Aluminum Heatsink
Body Rated to 10 Watts Up to 7.5 GHz

RF Fixed Attenuators Technical Data Sheet

PE7040-20

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-------------|---------|----------|----|----|----|-------|
| Range | DC to 4 | 4 to 7.5 | | | | GHz |
| VSWR, Max | 1.25:1 | 1.45:1 | | | | |

Mechanical Specifications

Size

| | |
|---------------------------|----------------------------------|
| Length | 3.48 in [88.39 mm] |
| Width/Diameter | 1.25 in [31.75 mm] |
| Weight | 0.563 lbs [255.37 g] |
| Body Material and Plating | Black Anodized Aluminum Heatsink |

Configuration

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

Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------|------------------------|------------------|
| Type | 7/16 DIN Male | 7/16 DIN Female |
| Contact Material and Plating | Beryllium Copper | Beryllium Copper |
| Hex Size | 1 1/4 in. | |
| Torque | 18.417 ft-lbs 24.97 Nm | |
| Body Material and Plating | Brass | Brass |

Environmental Specifications

Temperature

| | |
|-----------------|-------------------|
| Operating Range | -65 to +125 deg C |
|-----------------|-------------------|

Compliance Certifications (visit 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, 7/16 DIN Male to 7/16 DIN Female Black Anodized Aluminum Heatsink Body Rated to 10 Watts Up to 7.5 GHz PE7040-20](#)



20 dB Fixed Attenuator, 7/16 DIN Male to
7/16 DIN Female Black Anodized Aluminum Heatsink
Body Rated to 10 Watts Up to 7.5 GHz

RF Fixed Attenuators Technical Data Sheet

PE7040-20

20 dB Fixed Attenuator, 7/16 DIN Male to 7/16 DIN Female Black Anodized Aluminum Heatsink Body Rated to 10 Watts Up to 7.5 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, 7/16 DIN Male to 7/16 DIN Female Black Anodized Aluminum Heatsink Body Rated to 10 Watts Up to 7.5 GHz PE7040-20](http://www.pasternack.com/20db-fixed-7-16-male-7-16-female-10-watts-attenuator-pe7040-20-p.aspx)

URL: <http://www.pasternack.com/20db-fixed-7-16-male-7-16-female-10-watts-attenuator-pe7040-20-p.aspx>

PE7040-20 CAD Drawing

20 dB Fixed Attenuator, 7/16 DIN Male to 7/16 DIN Female Black Anodized Aluminum Heatsink Body Rated to 10 Watts Up to 7.5 GHz

| P/N | ATTEN. | FIGURE |
|-----------|--------|--------|
| PE7040-1 | 1 dB | 1 |
| PE7040-2 | 2 dB | 1 |
| PE7040-3 | 3 dB | 1 |
| PE7040-6 | 6 dB | 1 |
| PE7040-10 | 10 dB | 1 |
| PE7040-20 | 20 dB | 1 |
| PE7040-30 | 30 dB | 2 |
| PE7040-40 | 40 dB | 2 |

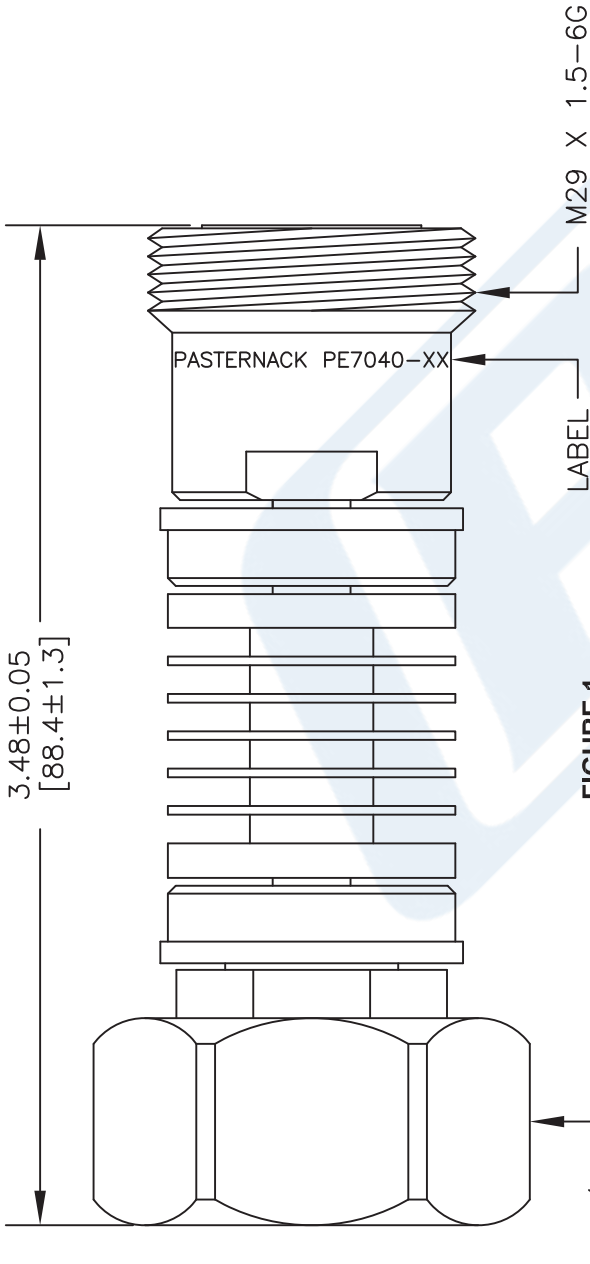


FIGURE 1

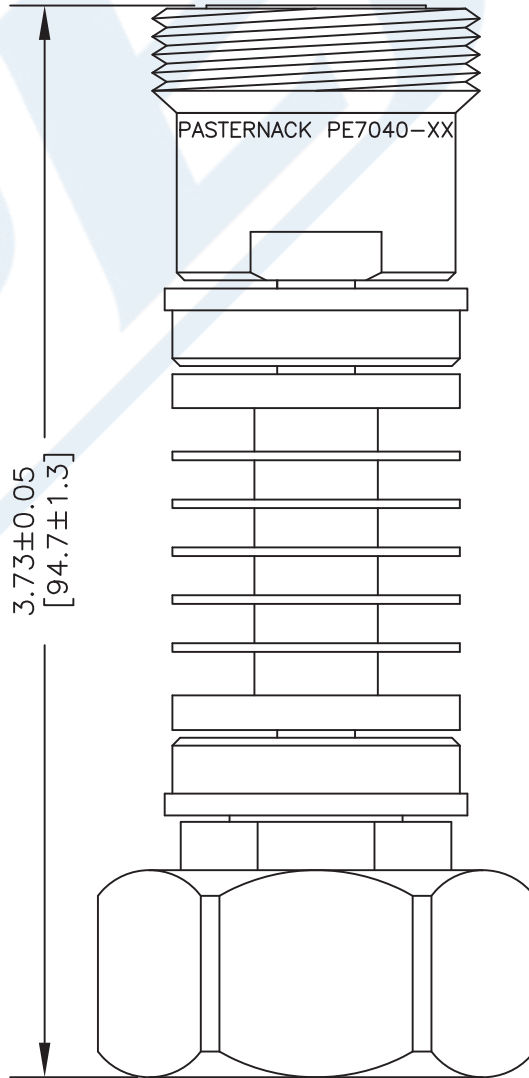


FIGURE 2

7/16 DIN FEMALE

DWG TITLE

PE7040

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 022616

SCALE N/A

SIZE A

3045