



RF Fixed Attenuators Technical Data Sheet

PE7088-12

Features

- Bidirectional
- DC to 40 GHz Frequency Range
- Attenuation 12±1 dB

- Max Power 1 Watts (CW)
- VSWR < 1.4:1

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 12 dB Fixed Attenuator PE7088-12 is rated to 1 Watt and operates from DC to 40 GHz. The versatile coaxial package uses 2.92mm male to 2.92mm female connectors and is also REACH and RoHS compliant.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units | |
|---------------------|---------|---------|---------|-------|--|
| Frequency Range | DC | | 40 | GHz | |
| Impedance | | 50 | | Ohms | |
| Nominal Attenuation | | 12 | | dB | |
| VSWR | | | 1.4:1 | | |
| Input Power, CW | | | 1 | Watts | |

derated linearly to .1W at +125°C

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|---------------------------|----------|------------|------------|----|----|-------|
| Range | DC to 18 | 18 to 26.5 | 26.5 to 40 | | | GHz |
| VSWR, Max | 1.3:1 | 1.4:1 | 1.4:1 | | | |
| Attenuation Accuracy, Typ | ±0.6 | ±0.6 | ±1 | | | dB |
| | | | | | | |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 12 dB Fixed Attenuator, 2.92mm Male to 2.92mm Female Passivated Stainless Steel Body Rated to 1 Watt Up to 40 GHz PE7088-12

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 **Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451

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Mechanical Specifications

Size

 Length
 0.87 in [22.1 mm]

 Width/Diameter
 0.312 in [7.92 mm]

 Weight
 0.013 lbs [5.9 g]

Body Material and Plating Passivated Stainless Steel

Configuration

Design Fixed, Bidirectional
Package Style Connectorized Module

Connectors

| Description | Connector 1 | Connector 2 | | | | |
|-----------------------------------|----------------------------|----------------------------|--|--|--|--|
| Туре | 2.92mm Male | 2.92mm Female | | | | |
| Contact Material and Plating | Beryllium Copper, Gold | Beryllium Copper, Gold | | | | |
| Contact Plating Specification | MIL-PRF-39012 | MIL-PRF-39012 | | | | |
| Coupling Nut Material and Plating | Passivated Stainless Steel | | | | | |
| Hex Size | 5/16 Inch | | | | | |
| Torque | 8 in-lbs 0.9 Nm | | | | | |
| Body Material and Plating | Passivated Stainless Steel | Passivated Stainless Steel | | | | |
| | | | | | | |

Mechanical Specification Notes:

The connectors use high temperature plastic bead dielectric.

Environmental Specifications

Temperature

Operating Range -55 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:

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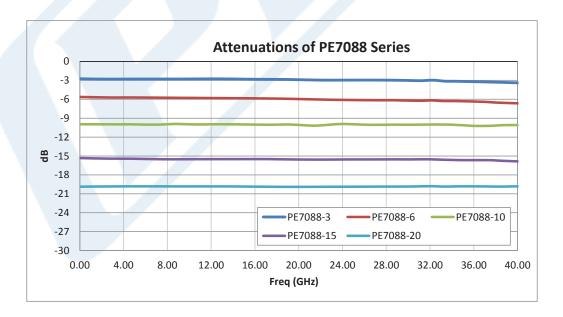


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Typical Performance Data





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12 dB Fixed Attenuator, 2.92mm Male to 2.92mm Female Passivated Stainless Steel Body Rated to 1 Watt Up to 40 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/12db-fixed-2.92mm-male-2.92mm-female-1-watt-attenuator-pe7088-12-p.aspx

PE7088-12 REV 4.1

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PE7088-12 CAD Drawing
12 dB Fixed Attenuator, 2.92mm Male to 2.92mm Female Passivated Stainless Steel Body Rated to 1 Watt Up to 40 GHz

| | Stainless Steel Body Rated to 1 Watt Up to 40 GHz | | | | | | | | | | | | | | | | | | | |
|--------|---|----------|----------|----------|---------------------|----------|----------|----------|----------|----------|-----------|---|---|-----------|-----------|------|---------------------------|---|--|--|
| ATTEN. | ф | ВВ | ф | dB | dB | dB | dB | dВ | ф | dB | dB | dB | dB | dB | dB | | | | T ANY TIME. | 3045 |
| AT | 0 | _ | 2 | 3 | 4 | 2 | 9 | _ | 00 | 6 | 10 | 12 | 15 | 20 | 30 | | | | IINAL. NOTICE A | SIZE A |
| N/A | PE7088-0 | PE7088-1 | PE7088-2 | PE7088-3 | PE7088-4 | PE7088-5 | PE7088-6 | PE7088-7 | PE7088-8 | PE7088-9 | PE7088-10 | PE7088-12 | PE7088-15 | PE7088-20 | PE7088-30 | | | | LL DIMENSIONS ARE NOM ST TO CHANGE WITHOUT: | SCALE N/A |
| | | | | | <u> </u> | | | | | | | | | | | | | | 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]. | CAD FILE 022916 |
| | 9/32 FLATS [7.1] | | | | | | | | | | | рмс тпл.E РЕ7088 | FSCM NO. 53919 | | | | | | | |
| | | | | LABEL | PE/U88-XX "YYWW" | | | | | | | | 2.92mm | FEMAL | | | | | | 1 rnack.com |
| | 0.87±0.05 [22.1±1.3] | | | | | | | | | | | PASTERNACK THE ENGINEER'S RF SOURCE Pasternack Enterprises, Inc. P.O. Box 16759 Irvine CA 92623 |) Fax: (949) 261-745 E-Mail: sales@paste | | | | | | | |
| | | _ | \ | | | | | | | | | | 2.92mm | MALE | | D AD | .XX ±0.010 .XXX ±0.005 | *STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES | PAL THE EW Pasternack Er P.O. Box 16759 | Phone: (949) 261-1920 Fax: (949) 261-7451 Website: www.pasternack.com E-Mail: sales@pasternack.com |