

## 2 dB Fixed Attenuator, 2.4mm Male to 2.4mm Female Passivated Stainless Steel Body Rated to 1 Watt Up to 50 GHz



### PE7089-2

#### Features

- Bidirectional
- DC to 50 GHz Frequency Range
- Attenuation 2dB Typical
- Max Power 1 Watts (CW)
- VSWR < 1.75:1

#### 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 2 dB Fixed Attenuator PE7089-2 is rated to 1 Watt and operates from DC to 50 GHz. The versatile coaxial package uses 2.4mm male to 2.4mm female connectors and is also REACH and RoHS compliant.

#### Electrical Specifications

| Description                                    | Minimum | Typical | Maximum | Units |
|------------------------------------------------|---------|---------|---------|-------|
| Frequency Range                                | DC      |         | 50      | GHz   |
| Impedance                                      |         | 50      |         | Ohms  |
| Nominal Attenuation                            |         | 2       |         | dB    |
| VSWR                                           |         |         | 1.75:1  |       |
| Input Power, CW                                |         |         | 1       | Watt  |
| derated linearly from 1W @ 25°C to .1W @ 100°C |         |         |         |       |

#### Specifications by Frequency

| Description               | F1         | F2         | F3       | F4 | F5 | Units |
|---------------------------|------------|------------|----------|----|----|-------|
| Frequency Range           | DC to 26.5 | 26.5 to 40 | 40 to 50 |    |    | GHz   |
| VSWR, Max                 | 1.35:1     | 1.6:1      | 1.75:1   |    |    |       |
| Attenuation Accuracy, Max | ±0.5       | ±1         | ±1.5     |    |    | dB    |

#### Mechanical Specifications

##### Size

|                           |                            |
|---------------------------|----------------------------|
| Length                    | 0.87 in [22.1 mm]          |
| Width/Diameter            | 0.312 in [7.92 mm]         |
| Height                    | 0.312 in [7.92 mm]         |
| Weight                    | 0.0152 lbs [6.89 g]        |
| Body Material and Plating | Passivated Stainless Steel |

2 dB Fixed Attenuator, 2.4mm Male to  
2.4mm Female Passivated Stainless Steel  
Body Rated to 1 Watt Up to 50 GHz



**PE7089-2**

**Configuration**

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

**Connectors**

| Description                       | Connector 1                | Connector 2                |
|-----------------------------------|----------------------------|----------------------------|
| Type                              | 2.4mm Male                 | 2.4mm 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 |                            |
| 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 +100 deg C |
| Storage Range   | -55 to +100 deg C |

**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

**Typical Performance Data**

2 dB Fixed Attenuator, 2.4mm Male to 2.4mm Female Passivated Stainless Steel Body Rated to 1 Watt Up to 50 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% 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: [2 dB Fixed Attenuator, 2.4mm Male to 2.4mm Female Passivated Stainless Steel Body Rated to 1 Watt Up to 50 GHz PE7089-2](#)

URL: <https://www.pasternack.com/2db-fixed-2.4mm-male-2.4mm-female-1-watt-attenuator-pe7089-2-p.aspx>

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. Pasternack Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE7089-2 CAD Drawing

2 dB Fixed Attenuator, 2.4mm Male to 2.4mm Female Passivated

Stainless Steel Body Rated to 1 Watt Up to 50 GHz

