

## 10dB DC Bias Attenuator, TNC Male to TNC Female Brass Tri-Metal Body Rated to 2 Watts from 100MHz to 3 GHz



### PE7449-10

#### Features

- 0.1GHz to 3GHz Frequency Range
- Input Power 2 Watts (CW)
- 50ohm impedance
- Attenuation 10±2.5dB
- DC Bias Current 100mA Max
- VSWR < 1.35:1

#### Applications

- Instrumentation
- Prototyping and characterization
- RF test systems
- Radar 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 PE7449-10 is a 10 dB DC passing Fixed Attenuator that operates from 100 MHz to 3 GHz and is rated to 2 Watts and 0.1A DC current. PE7449-10 would only attenuate RF signal without reducing the DC current passing through the part. The versatile coaxial package uses TNC male to TNC female connectors.

#### Electrical Specifications

| Description             | Min | Typ  | Max    | Units |
|-------------------------|-----|------|--------|-------|
| Frequency Range         | 0.1 |      | 3      | GHz   |
| Impedance               |     | 50   |        | Ohms  |
| Attenuation Value       |     | 10   |        | dB    |
| Attenuation Accuracy    |     | ±2.5 |        | dB    |
| Input Power (CW)        |     |      | 2      | Watts |
| VSWR                    |     |      | 1.35:1 |       |
| Maximum DC Bias Voltage |     |      | 100    | Volts |
| Maximum DC Bias Current |     |      | 0.1    | A     |

#### Mechanical Specifications

##### Temperature

Operating Range, deg C -50 to +80

##### Size

Length, in [mm] 2.319 [58.9]  
Width, in [mm] 0.63 [16]  
Height, in [mm] 0.63 [16]  
Weight, lbs [g] 0.09 [40.82]

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#### Configuration:

|                           |                  |
|---------------------------|------------------|
| Design                    | DC Bias          |
| Body Material and Plating | Brass, Tri-Metal |

#### Connectors

| Description                   | Connector 1            | Connector 2 |
|-------------------------------|------------------------|-------------|
| Type                          | TNC Male               | TNC Female  |
| Impedance                     | 50 Ohms                |             |
| Contact Material & Plating    | Beryllium Copper, Gold |             |
| Outer Cond Material & Plating | Beryllium Copper, Gold |             |

#### Plotted and Other Data

Notes:  
Values at 25 °C, sea level  
Attenuation accuracy is Typical

#### Typical Performance Data

10dB DC Bias Attenuator, TNC Male to TNC Female Brass Tri-Metal Body Rated to 2 Watts from 100MHz to 3 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% 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: [10dB DC Bias Attenuator, TNC Male to TNC Female Brass Tri-Metal Body Rated to 2 Watts from 100MHz to 3 GHz PE7449-10](https://www.pasternack.com/10db-dc-bias-tnc-male-tnc-female-2-watts-attenuator-pe7449-10-p.aspx)

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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.

PE7449-10 CAD Drawing

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