

## 50 dB Fixed Attenuator, TNC Male To TNC Male Directional Black Aluminum Heatsink Body Rated To 300 Watts Up To 3 GHz



### PE7413-50

#### Features

- 300W average power and 2,500W peak power handling capability
- Operates to 3 GHz
- Temperature range of -55 to +125 degrees C
- 16 in-series combinations
- 7/16 DIN, SMA, N, TNC Male and Female connectors are available
- Other connector combinations available upon request

#### Applications

#### 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 50 dB Fixed Attenuator PE7413-50 is rated to 300 Watts and operates from DC to 3 GHz. The versatile coaxial package uses TNC male connectors and is also REACH and RoHS compliant. The Black Aluminum Heatsink body allows for efficient heat dissipation under high power usage conditions. Pasternack Enterprises' line of 300W Attenuators operate from DC to 3 GHz, and are available in 16 different 7/16 DIN, N, SMA and TNC in-series combinations. Our 300W Attenuators are manufactured with Passivated Stainless Steel SMA, TNC and N connectors, and Silver Plated Brass 7/16 DIN connectors. Pasternack 300W Attenuators come in 3 dB, 6 dB, 10 dB, 20 dB, 30 dB, 40 dB, & 50 dB values and will operate from -55 to +125 degrees C. Additional between-series connector combinations are available upon request.

#### Electrical Specifications

| Description         | Minimum | Typical | Maximum | Units  |
|---------------------|---------|---------|---------|--------|
| Frequency Range     | DC      |         | 3       | GHz    |
| Impedance           |         | 50      |         | Ohms   |
| Nominal Attenuation |         | 50      |         | dB     |
| VSWR                |         |         | 1.4:1   |        |
| Input Power, CW     |         |         | 300     | Watts  |
| Input Power, Peak   |         |         | 2.5     | kWatts |

#### Specifications by Frequency

| Description               | F1        | F2       | F3 | F4 | F5 | Units |
|---------------------------|-----------|----------|----|----|----|-------|
| Frequency Range           | DC to 1.5 | 1.5 to 3 |    |    |    | GHz   |
| VSWR, Max                 | 1.2:1     | 1.4:1    |    |    |    |       |
| Attenuation Accuracy, Typ | 1.25      | 1.5      |    |    |    | dB    |

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Male Directional Black Aluminum Heatsink  
Body Rated To 300 Watts Up To 3 GHz



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### Mechanical Specifications

#### Size

|                           |                         |
|---------------------------|-------------------------|
| Length                    | 5.6 in [142.24 mm]      |
| Width/Diameter            | 6.2 in [157.48 mm]      |
| Height                    | 6.3 in [160.02 mm]      |
| Weight                    | 4 lbs [1.81 kg]         |
| Body Material and Plating | Black Aluminum Heatsink |

#### Configuration

|        |                    |
|--------|--------------------|
| Design | Fixed, Directional |
|--------|--------------------|

### Connectors

| Description                       | Connector 1                | Connector 2                |
|-----------------------------------|----------------------------|----------------------------|
| Type                              | TNC Male                   | TNC Male                   |
| Contact Material and Plating      | Beryllium Copper, Gold     | Beryllium Copper, Gold     |
| Coupling Nut Material and Plating | Passivated Stainless Steel | Passivated Stainless Steel |
| Body Material and Plating         | Passivated Stainless Steel | Passivated Stainless Steel |

### Environmental Specifications

#### Temperature

|                 |                   |
|-----------------|-------------------|
| Operating Range | -55 to +125 deg C |
|-----------------|-------------------|

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

### Plotted and Other Data

Notes:

### Typical Performance Data

50 dB Fixed Attenuator, TNC Male To TNC Male Directional Black Aluminum Heatsink Body Rated To 300 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 99.4% 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: [50 dB Fixed Attenuator, TNC Male To TNC Male Directional Black Aluminum Heatsink Body Rated To 300 Watts Up To 3 GHz PE7413-50](#)

URL: <https://www.pasternack.com/50db-fixed-tnc-male-tnc-male-300-watts-attenuator-pe7413-50-p.aspx>

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