

## 1 dB Fixed Attenuator, N Male to N Female Black Anodized Aluminum Heatsink Body Rated to 10 Watts Up to 18 GHz



### PE7015-1

#### Features

- Bidirectional
- DC to 18 GHz Frequency Range
- Attenuation  $1 \pm 0.5$  dB
- Max Power 10 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 1 dB Fixed Attenuator PE7015-1 is rated to 10 Watts and operates from DC to 18 GHz. The versatile coaxial package uses type N male to type N 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      |         | 18      | GHz   |
| Impedance                                      |         | 50      |         | Ohms  |
| Nominal Attenuation                            |         | 1       |         | dB    |
| Attenuation Accuracy                           |         | 0.5     |         | dB    |
| VSWR                                           |         |         | 1.4:1   |       |
| Input Power, CW                                |         |         | 10      | Watts |
| derated linearly from 10W @ 25°C to 2W @ 125°C |         |         |         |       |
| Input Power, Peak                              |         |         | 500     | Watts |
| 5μs pulse, 0.05% duty cycle                    |         |         |         |       |

#### Mechanical Specifications

##### Size

|                           |                                  |
|---------------------------|----------------------------------|
| Length                    | 2.41 in [61.21 mm]               |
| Width/Diameter            | 1 in [25.4 mm]                   |
| Height                    | 0 in [0 mm]                      |
| Weight                    | 0.0893 lbs [40.51 g]             |
| Body Material and Plating | Black Anodized Aluminum Heatsink |

##### Configuration

|        |                      |
|--------|----------------------|
| Design | Fixed, Bidirectional |
|--------|----------------------|

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|               |                      |
|---------------|----------------------|
| Package Style | Connectorized Module |
|---------------|----------------------|

#### Connectors

| Description                  | Connector 1                | Connector 2                |
|------------------------------|----------------------------|----------------------------|
| Type                         | N Male                     | N Female                   |
| Connector Specification      | MIL-STD-348                | MIL-STD-348                |
| Contact Material and Plating | Beryllium Copper, Gold     | Beryllium Copper, Gold     |
| Body Material and Plating    | Passivated Stainless Steel | Passivated Stainless Steel |

#### Environmental Specifications

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

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

#### Plotted and Other Data

Notes:

#### Typical Performance Data

1 dB Fixed Attenuator, N Male to N Female Black Anodized Aluminum Heatsink Body Rated to 10 Watts Up to 18 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.

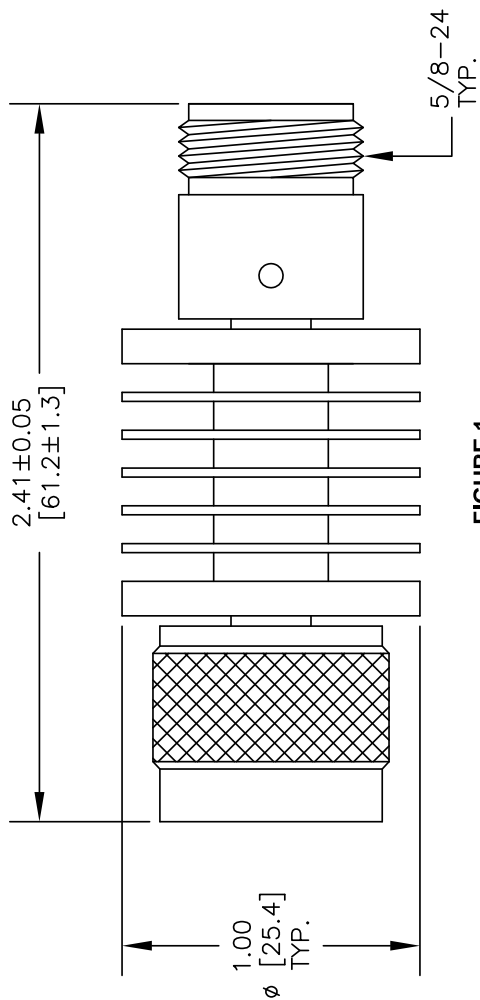
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1 dB Fixed Attenuator, N Male to N Female Black Anodized Aluminum Heatsink Body Rated to 10 Watts Up to 18 GHz PE7015-1](#)

URL: <https://www.pasternack.com/1db-fixed-n-female-n-male-10-watts-attenuator-pe7015-1-p.aspx>

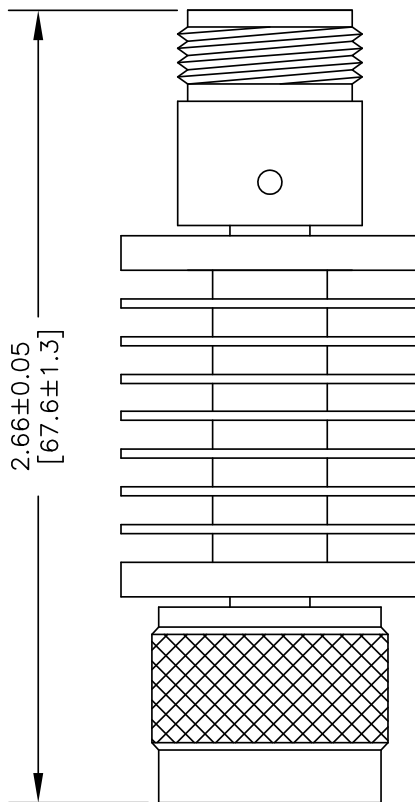
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| P/N       | ATTEN. | FIGURE |
|-----------|--------|--------|
| PE7015-1  | 1 dB   | 1      |
| PE7015-2  | 2 dB   | 1      |
| PE7015-3  | 3 dB   | 1      |
| PE7015-6  | 6 dB   | 1      |
| PE7015-10 | 10 dB  | 1      |
| PE7015-20 | 20 dB  | 1      |
| PE7015-30 | 30 dB  | 2      |
| PE7015-40 | 40 dB  | 2      |



## FIGURE 1



**N FEMALE**

## FIGURE 2

| <u>STANDARD TOLERANCES</u> |       |
|----------------------------|-------|
| .X                         | ±0.2  |
| .XX                        | ±0.1  |
| .XXX                       | ±0.05 |

**\*\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES**

**PE** **PASTERNAK®**  
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**DWG TITLE**

**PE7015**

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].

FSCM NO. 53919

022516

SCALE N/A

**SIZE A**

3045