



1 dB Fixed Attenuator, TNC Male to TNC Female  
Brass Nickel Body Rated to 1 Watt Up to 2 GHz

RF Fixed Attenuators Technical Data Sheet

PE7003-1

**Features**

- Bidirectional
- DC to 2 GHz Frequency Range
- Attenuation 1±0.3 dB
- Max Power 1 Watts (CW)
- VSWR < 1.2:1

**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 PE7003-1 is rated to 1 Watt and operates from DC to 2 GHz. The versatile coaxial package uses TNC male to TNC female connectors and is also REACH and RoHS compliant.

**Electrical Specifications**

| Description          | Minimum | Typical | Maximum | Units |
|----------------------|---------|---------|---------|-------|
| Frequency Range      | DC      |         | 2       | GHz   |
| Impedance            |         | 50      |         | Ohms  |
| Nominal Attenuation  |         | 1       |         | dB    |
| Attenuation Accuracy |         | 0.3     |         | dB    |
| VSWR                 |         |         | 1.2:1   |       |
| Input Power, CW      |         |         | 1       | Watt  |

**Mechanical Specifications**

| Size                      |                      |
|---------------------------|----------------------|
| Length                    | 1.84 in [46.74 mm]   |
| Width/Diameter            | 0.59 in [14.99 mm]   |
| Weight                    | 0.0727 lbs [32.98 g] |
| Body Material and Plating | Brass, Nickel        |

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, TNC Male to TNC Female Brass Nickel Body Rated to 1 Watt Up to 2 GHz PE7003-1](#)



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**Configuration**

Design Fixed, Bidirectional  
Package Style Connectorized Module

**Connectors**

| Description                       | Connector 1   | Connector 2            |
|-----------------------------------|---------------|------------------------|
| Type                              | TNC Male      | TNC Female             |
| Contact Material and Plating      | Brass, Gold   | Beryllium Copper, Gold |
| Dielectric Type                   | Teflon        | Teflon                 |
| Coupling Nut Material and Plating | Brass, Nickel |                        |
| Body Material and Plating         | Brass, Nickel | Brass, Nickel          |

**Environmental Specifications**

**Temperature**

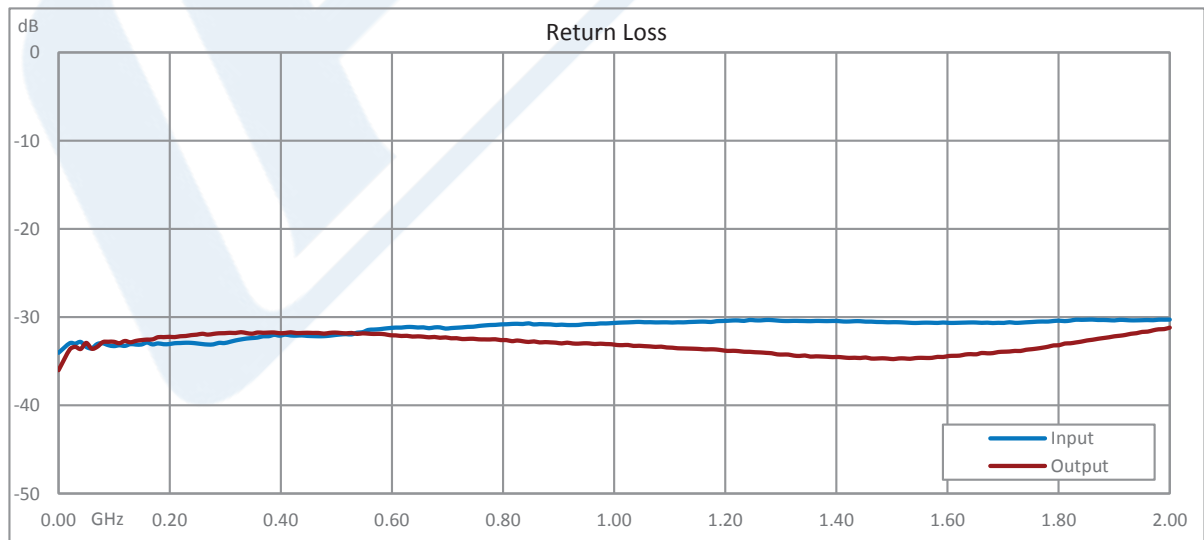
Operating Range -65 to +165 deg C

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

**Plotted and Other Data**

Notes:

**Typical Performance Data**



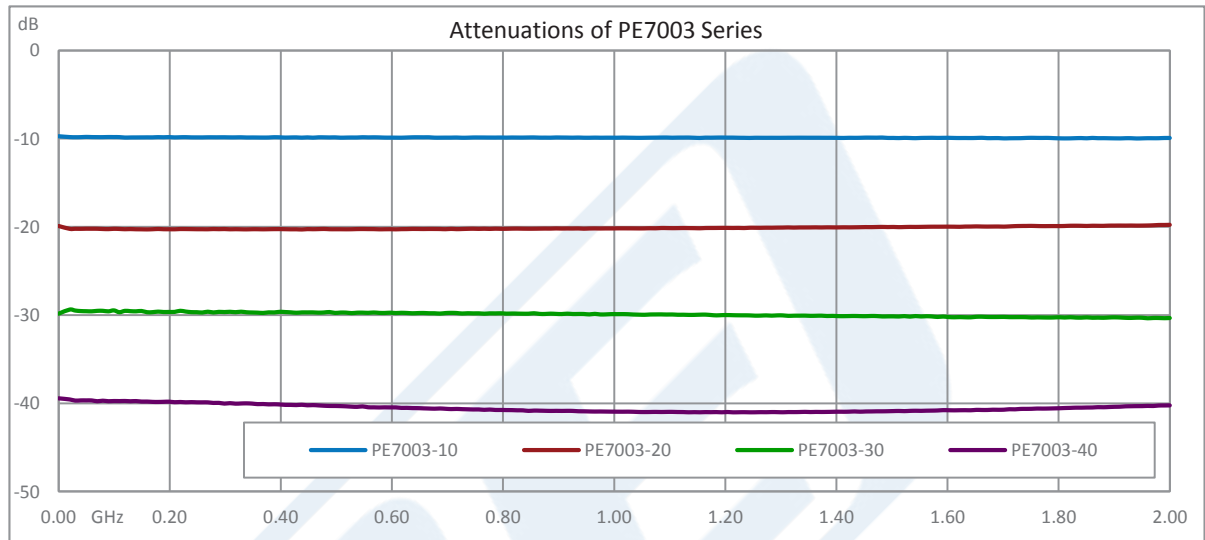
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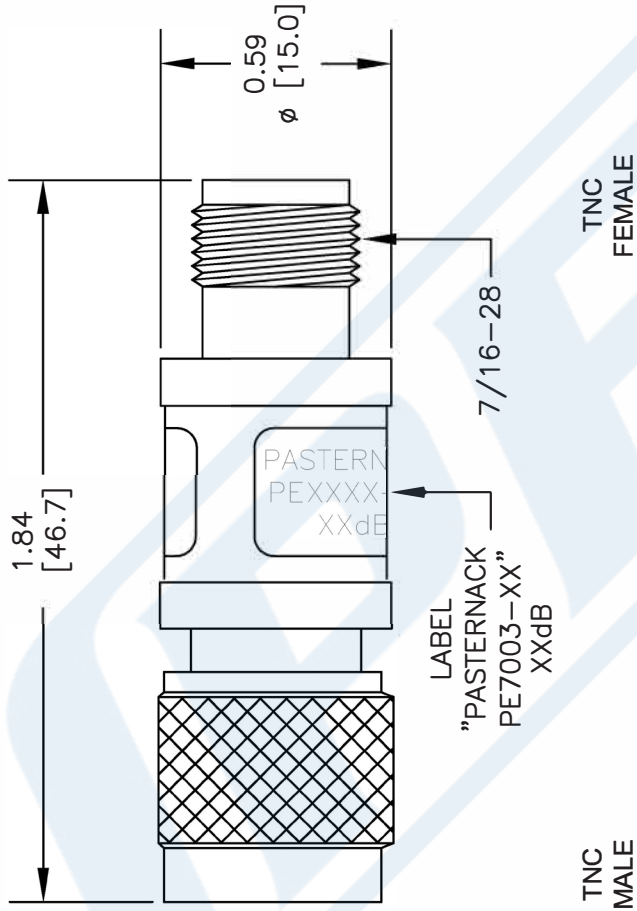
1 dB Fixed Attenuator, TNC Male to TNC Female Brass Nickel Body Rated to 1 Watt Up to 2 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the 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, TNC Male to TNC Female Brass Nickel Body Rated to 1 Watt Up to 2 GHz PE7003-1](https://www.pasternack.com/1db-fixed-tnc-female-tnc-male-1-watt-attenuator-pe7003-1-p.aspx)

URL: <https://www.pasternack.com/1db-fixed-tnc-female-tnc-male-1-watt-attenuator-pe7003-1-p.aspx>

# PE7003-1 CAD Drawing

1 dB Fixed Attenuator, TNC Male to TNC Female Brass  
Nickel Body Rated to 1 Watt Up to 2 GHz



| STANDARD TOLERANCES |        |
|---------------------|--------|
| .X                  | ±0.2   |
| .XX                 | ±0.01  |
| .XXX                | ±0.005 |

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



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DWG TITLE

**PE7003**

FSCM NO. 53919

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 092216

SCALE N/A

SIZE A

2233