

1 dB Fixed Attenuator, TNC Male to TNC Female Brass
Nickel Body Rated to 2 Watts Up to 12.4 GHz



PE7051-1

Features

- Bidirectional
- DC to 12.4 GHz Frequency Range
- Attenuation 1±0.3 dB
- Max Power 2 Watts (CW)
- VSWR < 1.25:1

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 PE7051-1 is rated to 2 Watts and operates from DC to 12.4 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		12.4	GHz
Impedance		50		Ohms
Nominal Attenuation		1		dB
Attenuation Accuracy		0.3		dB
VSWR			1.25:1	
Input Power, CW			2	Watts
derated linearly from 2W @ 25°C to 0.5W @ 125°C				
Input Power, Peak			250	Watts
5µs pulse, 0.05% duty cycle				

Mechanical Specifications

Size

- Length 1.36 in [34.54 mm]
- Width/Diameter 0.59 in [14.99 mm]
- Height 0 in [0 mm]
- Weight 0.052 lbs [23.59 g]
- Body Material and Plating Brass, Nickel

Configuration

- Design Fixed, Bidirectional
- Package Style Connectorized Module

1 dB Fixed Attenuator, TNC Male to TNC Female Brass
Nickel Body Rated to 2 Watts Up to 12.4 GHz



PE7051-1

Connectors

Description	Connector 1	Connector 2
Type	TNC Male	TNC Female
Connector Specification	MIL-STD-348	MIL-STD-348
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Coupling Nut Material and Plating	Brass, Nickel	
Body Material and Plating	Brass, Nickel	Brass, Nickel

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, TNC Male to TNC Female Brass Nickel Body Rated to 2 Watts Up to 12.4 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 2 Watts Up to 12.4 GHz PE7051-1](#)

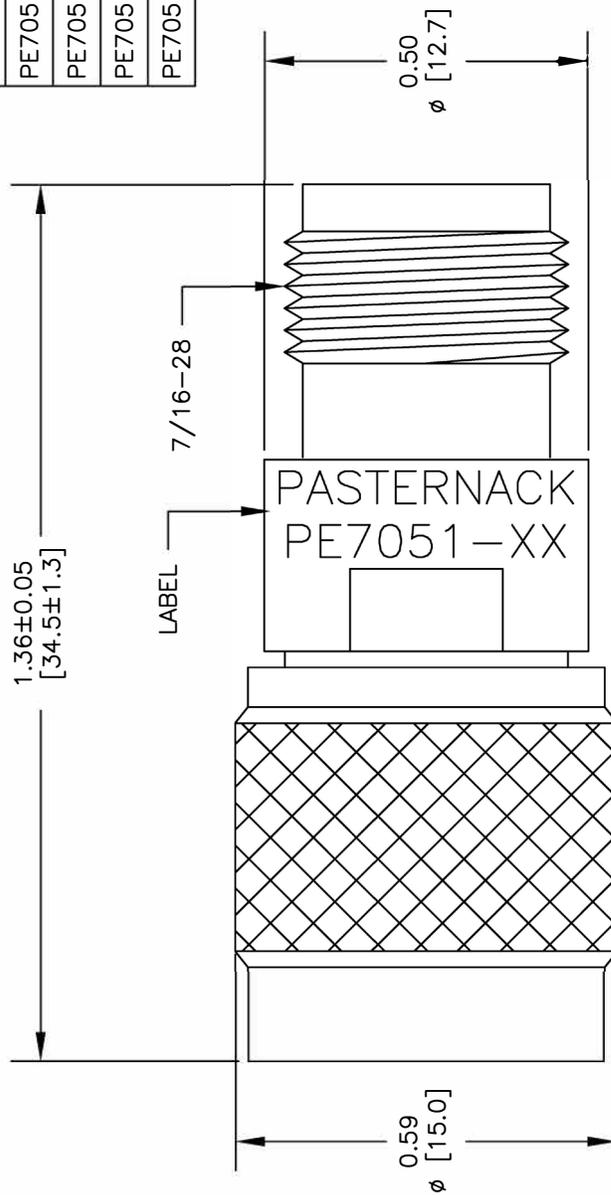
URL: <https://www.pasternack.com/1db-fixed-tnc-male-tnc-female-2-watts-attenuator-pe7051-1-p.aspx>

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.

PE7051-1 CAD Drawing

1 dB Fixed Attenuator, TNC Male to TNC Female Brass Nickel Body Rated to 2 Watts Up to 12.4 GHz

P/N	ATTEN.	FIGURE
PE7051-1	1 dB	1
PE7051-2	2 dB	1
PE7051-3	3 dB	1
PE7051-6	6 dB	1
PE7051-10	10 dB	1
PE7051-20	20 dB	1
PE7051-30	30 dB	1
PE7051-40	40 dB	1



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

*STANDARD TOLERANCES APPLY
 ONLY TO DIMENSIONS IN INCHES

TNC MALE

FIGURE 1

TNC FEMALE



PASTERNAK
 THE ENGINEER'S RF SOURCE
 Pasternack Enterprises, Inc.
 P.O. Box 16759 | Irvine | CA | 92623
 Phone: (949) 261-1920 | Fax: (949) 261-7451
 Website: www.pasternack.com | E-Mail: sales@pasternack.com

DWG TITLE

PE7051

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

CAD FILE 022916

SCALE N/A

SIZE A

3045