

1 dB Fixed Attenuator, TNC Male to TNC Female Passivated Stainless Steel Body Rated to 2 Watts Up to 18 GHz

PE7030-1



Features

- Bidirectional
- DC to 18 GHz Frequency Range
- Attenuation 1 ± 0.3 dB
- Max Power 2 Watts (CW)
- VSWR < 1.35:1

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 PE7030-1 is rated to 2 Watts and operates from DC to 18 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		18	GHz
Impedance		50		Ohms
Nominal Attenuation		1		dB
VSWR			1.35:1	
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				

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 4	4 to 8	8 to 12.4	12.4 to 18		GHz
VSWR, Max	1.15:1	1.25:1	1.3:1	1.35:1		
Attenuation Accuracy, Typ	0.3	0.3	0.3	0.4		dB

Mechanical Specifications

Size

Length	2.11 in [53.59 mm]
Width/Diameter	0.61 in [15.49 mm]
Height	0 in [0 mm]

1 dB Fixed Attenuator, TNC Male to TNC Female Passivated Stainless Steel Body Rated to 2 Watts Up to 18 GHz



PE7030-1

Weight	0.093 lbs [42.18 g]
Body Material and Plating	Passivated Stainless Steel
Configuration	
Design	Fixed, Bidirectional
Package Style	Connectorized Module

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
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel

Mechanical Specification Notes:
TNC Connectors are Mode-Free up to 18 GHz.

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 Passivated Stainless Steel Body Rated to 2 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, TNC Male to TNC Female Passivated Stainless Steel Body Rated to 2 Watts Up to 18 GHz PE7030-1](#)

URL: <https://www.pasternack.com/1db-fixed-tnc-female-tnc-male-2-watts-attenuator-pe7030-1-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.

1 dB Fixed Attenuator, TNC Male to TNC Female Passivated Stainless Steel Body Rated to 2 Watts Up to 18 GHz

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



Website: www.pasternack.com | E-Mail: sales@pasternack.com

Phone: (949) 261-1920 | **Fax:** (949) 261-451
Website: www.pasternack.com | **E-Mail:** sales@pasternack.com