

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



PE7416-6

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 6 dB Fixed Attenuator PE7416-6 is rated to 300 Watts and operates from DC to 3 GHz. The versatile coaxial package uses TNC female to 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		6		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	0.75	1				dB

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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
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Connectors

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

Environmental Specifications

Temperature

Operating Range	-55 to +125 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Typical Performance Data

6 dB Fixed Attenuator, TNC Female 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: [6 dB Fixed Attenuator, TNC Female To TNC Male Directional Black Aluminum Heatsink Body Rated To 300 Watts Up To 3 GHz PE7416-6](#)

URL: <https://www.pasternack.com/6db-fixed-tnc-female-tnc-male-300-watts-attenuator-pe7416-6-p.asp>

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