

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



PE7053-1

Features

- Bidirectional
- DC to 18 GHz Frequency Range
- Attenuation 1 ± 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 PE7053-1 is rated to 10 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. 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	2.58 in [65.53 mm]
Width/Diameter	1 in [25.4 mm]
Height	0 in [0 mm]
Weight	0.11 lbs [49.9 g]
Body Material and Plating	Black Anodized Aluminum Heatsink

Configuration

Design	Fixed, Bidirectional
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1 dB Fixed Attenuator, TNC Male to TNC
Female Black Anodized Aluminum Heatsink
Body Rated to 10 Watts Up to 18 GHz



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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
Coupling Nut Material and Plating	Passivated Stainless Steel	
Hex Size	5/8 in.	
Torque	14 in-lbs 1.58 Nm	
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 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, TNC Male to TNC Female Black Anodized Aluminum Heatsink Body Rated to 10 Watts Up to 18 GHz PE7053-1](#)

URL: <https://www.pasternack.com/1db-fixed-tnc-male-tnc-female-10-watts-attenuator-pe7053-1-p.aspx>

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