

30 dB Fixed Attenuator, N Male to N Female
Directional Black Anodized Aluminum Heatsink
Body Rated to 250 Watts Up to 8.5 GHz



PE7AP250-30

Features

- Directional
- DC to 8.5 GHz Frequency Range
- Attenuation 30±0.75 dB
- Max Power 250 Watts (CW)
- VSWR < 1.45:1

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 30 dB Fixed Attenuator PE7AP250-30 is rated to 250 Watts and operates from DC to 8.5 GHz. The versatile coaxial package uses type N male to type N 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		8.5	GHz
Impedance		50		Ohms
Nominal Attenuation		30		dB
Attenuation Accuracy		0.75		dB
VSWR			1.45:1	
Input Power, CW			250	Watts
rated at +25°C, derated linearly to 25W at +125°C				
Input Power, Peak			5	kWatts
5µs pulse, 1.5% duty cycle				

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 4	4 to 8.5				GHz
VSWR, Max	1.3:1	1.45:1				

Electrical Specification Notes:
Values at +25°C, sea level.

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Mechanical Specifications

Size

Length	9.22 in [234.19 mm]
Width/Diameter	2.04 in [51.82 mm]
Height	3.12 in [79.25 mm]
Weight	2.7805 lbs [1.26 kg]
Body Material and Plating	Black Anodized Aluminum Heatsink

Configuration

Design	Fixed, Directional
Package Style	Connectorized Module

Connectors

Description	Connector 1	Connector 2
Type	N Male	N Female
Connector Specification	MIL-STD-348A	MIL-STD-348A
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

30 dB Fixed Attenuator, N Male to N Female Directional Black Anodized Aluminum Heatsink Body Rated to 250 Watts Up to 8.5 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: [30 dB Fixed Attenuator, N Male to N Female Directional Black Anodized Aluminum Heatsink Body Rated to 250 Watts Up to 8.5 GHz PE7AP250-30](#)

URL: <https://www.pasternack.com/30db-fixed-n-male-n-female-250-watts-attenuator-pe7ap250-30-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.

PE7AP250-30 CAD Drawing

30 dB Fixed Attenuator, N Male to N Female Directional Black Anodized Aluminum Heatsink Body Rated to 250 Watts Up to 8.5 GHz

REVISIONS		DATE	APPROVED
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	1/30/2020	S.PONG

N MALE (INPUT) N FEMALE (OUTPUT)

10X #6-32 3.50 [8.89] MIN.
FOR MOUNTING

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:

.X = ±.2 [5.08] FRACTIONS ±.192

.XX = ±.02 [5.1] ±.192

.XXX = ±.005 [13] ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0

12 [305] < L ≤ 60 [1524] = +2 [51] / -0

60 [1524] < L ≤ 120 [3048] = +4 [102] / -0

120 [3048] < L ≤ 300 [7620] = +6 [152] / -0

300 [7620] < L = +9.5% / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

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SIZE [CAGE CODE] DRAWN BY ITEM NO.

A 53919 K.DANG PE7AP250-30 REV A

LABEL:

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PE7AP250-30
D/C: YYWW

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