



3 dB Fixed Attenuator, N Male to N Female  
Directional Black Anodized Aluminum Heatsink  
Body Rated to 300 Watts Up to 1,000 MHz

## RF Fixed Attenuators Technical Data Sheet

PE7031-3

### Features

- Directional
- DC to 1 GHz Frequency Range
- Attenuation  $3 \pm 0.75$  dB
- Max Power 300 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 3 dB Fixed Attenuator PE7031-3 is rated to 300 Watts and operates from DC to 1,000 MHz. The versatile coaxial package uses N male to 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		1,000	MHz
Impedance		50		Ohms
Nominal Attenuation		3		dB
Attenuation Accuracy		$\pm 0.75$		dB
VSWR			1.4:1	
Input Power, CW			300	Watts
derated linearly to 75W at +85°C				

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [3 dB Fixed Attenuator, N Male to N Female Directional Black Anodized Aluminum Heatsink Body Rated to 300 Watts Up to 1,000 MHz PE7031-3](#)



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### Mechanical Specifications

#### Size

Length	8.37 in [212.6 mm]
Width/Diameter	6.25 in [158.75 mm]
Height	6.25 in [158.75 mm]
Weight	13.708 lbs [6.22 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-348	MIL-STD-348
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel

### Environmental Specifications

#### Compliance Certifications (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

RoHS Compliant	
REACH Compliant	12/17/2015

#### Plotted and Other Data

##### Notes:

3 dB Fixed Attenuator, N Male to N Female Directional Black Anodized Aluminum Heatsink Body Rated to 300 Watts Up to 1,000 MHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% 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: [3 dB Fixed Attenuator, N Male to N Female Directional Black Anodized Aluminum Heatsink Body Rated to 300 Watts Up to 1,000 MHz PE7031-3](http://www.Pasternack.com/3db-fixed-n-female-n-male-300-watts-attenuator-pe7031-3-p.aspx)

URL: <http://www.pasternack.com/3db-fixed-n-female-n-male-300-watts-attenuator-pe7031-3-p.aspx>

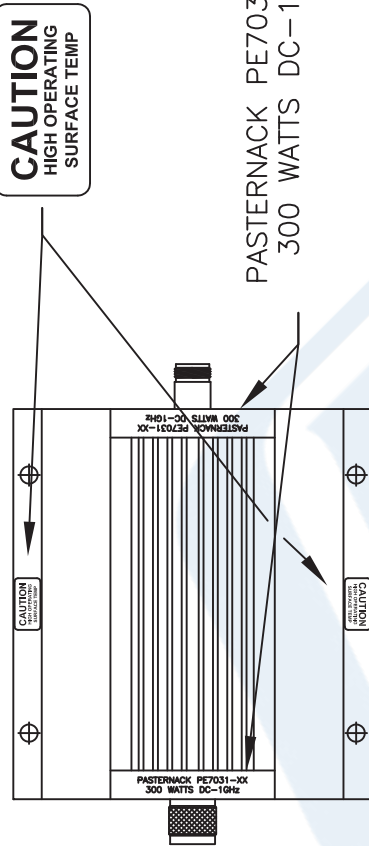
# PE7031-3 CAD Drawing

3 dB Fixed Attenuator, N Male to N Female Directional Black Anodized  
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## Top View

STANDARD TOLERANCES
.X ±0.2
.XX ±0.1
.XXX ±0.05

\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES



PASTERNAK PE7031-XX  
300 WATTS DC-1GHz

P/N	ATTEN.	FIGURE
PE7031-1	1 dB	1
PE7031-2	2 dB	1
PE7031-3	3 dB	1
PE7031-6	6 dB	1
PE7031-10	10 dB	1
PE7031-20	20 dB	1
PE7031-30	30 dB	1

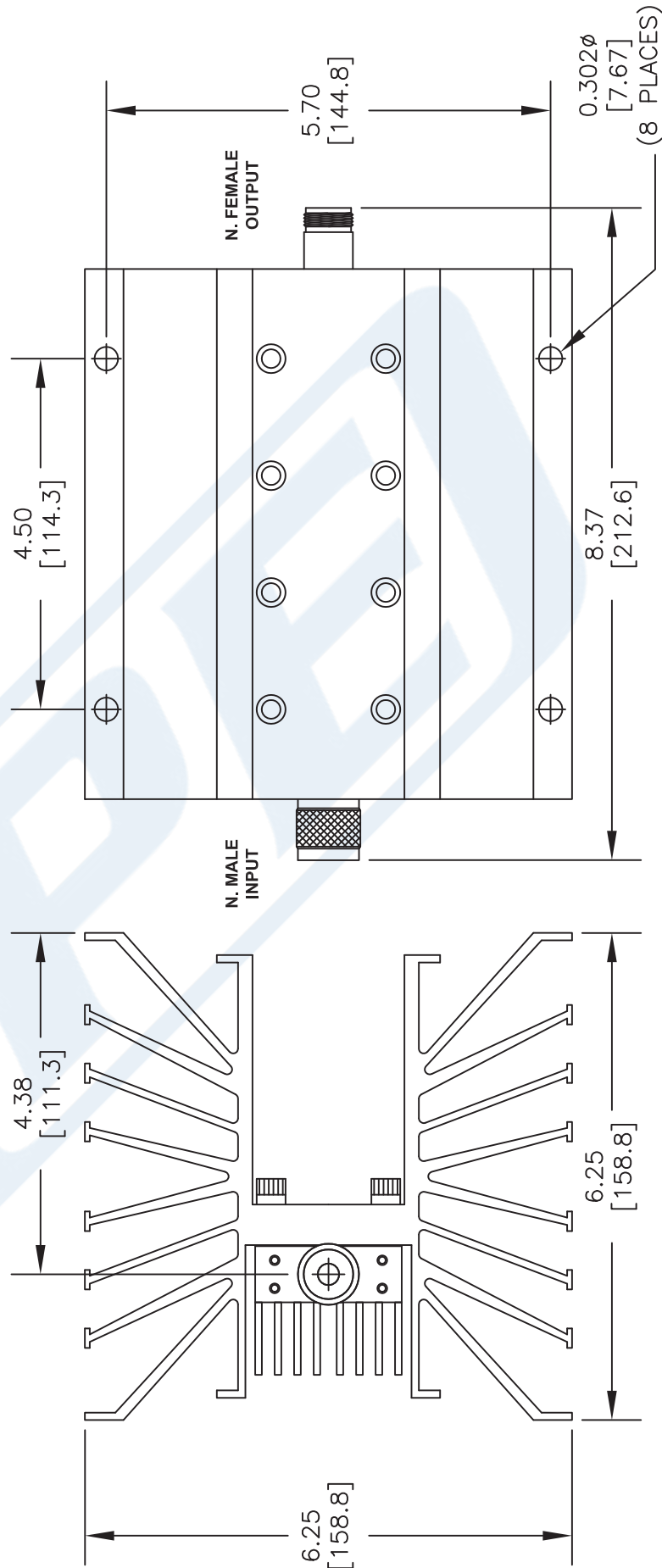


FIGURE 1

DWG TITLE

**PE7031**

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].

**PE PASTERNAK**  
THE ENGINEER'S RF SOURCE

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CAD FILE 0309116

SCALE N/A

SIZE A

3045