



10 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

PE7031-10

Features

- Directional
- DC to 1 GHz Frequency Range
- Attenuation 10±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 10 dB Fixed Attenuator PE7031-10 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 | | 10 | | dB |
| Attenuation Accuracy | | ±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: [10 dB Fixed Attenuator, N Male to N Female Directional Black Anodized Aluminum Heatsink Body Rated to 300 Watts Up to 1,000 MHz PE7031-10](#)



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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 | 13.853 lbs [6.28 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 for current document)

| | |
|-----------------|------------|
| RoHS Compliant | |
| REACH Compliant | 12/17/2015 |

Plotted and Other Data

Notes:

10 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.

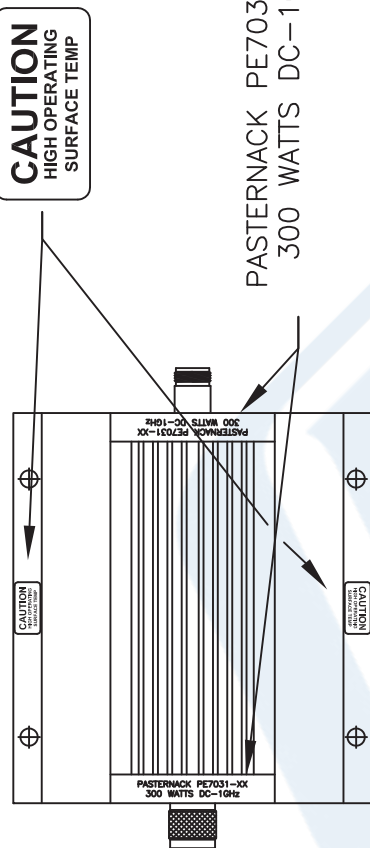
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [10 dB Fixed Attenuator, N Male to N Female Directional Black Anodized Aluminum Heatsink Body Rated to 300 Watts Up to 1,000 MHz PE7031-10](http://www.pasternack.com/10db-fixed-n-female-n-male-300-watts-attenuator-pe7031-10-p.aspx)

URL: <http://www.pasternack.com/10db-fixed-n-female-n-male-300-watts-attenuator-pe7031-10-p.aspx>

PE7031-10 CAD Drawing

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

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 |

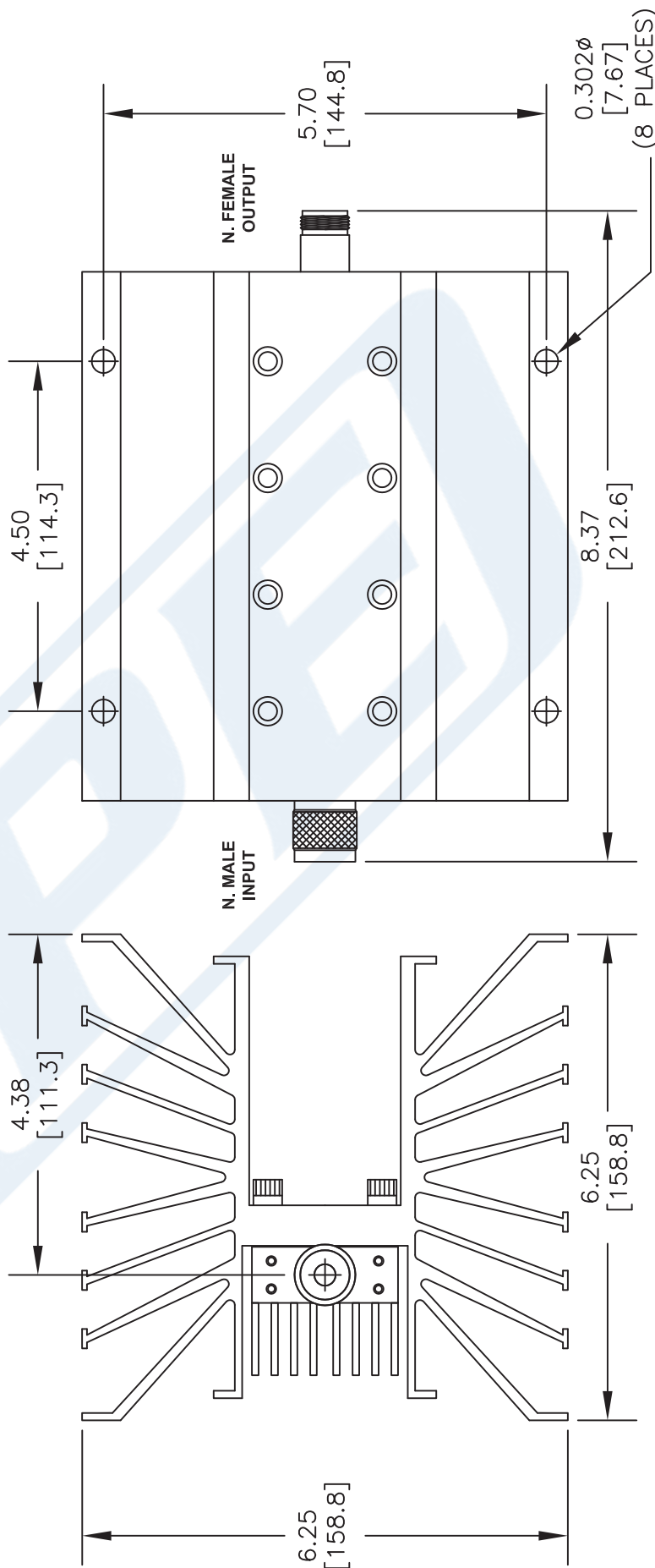


FIGURE 1

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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FSCM NO. 53919

CAD FILE 0309116

SCALE N/A

SIZE A

3045