

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



**PE7031-20**

**Features**

- Directional
- DC to 1 GHz Frequency Range
- Attenuation 20±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 20 dB Fixed Attenuator PE7031-20 is rated to 300 Watts and operates from DC to 1 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		1,000	MHz
Impedance		50		Ohms
Nominal Attenuation		20		dB
Attenuation Accuracy		0.75		dB
VSWR			1.4:1	
Input Power, CW			300	Watts

derated linearly from 300W @ 25°C to 75W @ 85°C

**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 6.886 lbs [3.12 kg]
- Body Material and Plating Black Anodized Aluminum Heatsink

**Configuration**

- Design Fixed, Directional
- Package Style Connectorized Module

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## PE7031-20

### 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

#### Temperature

**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

### Typical Performance Data

20 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 99.4% availability and are part of the broadest selection in the industry.

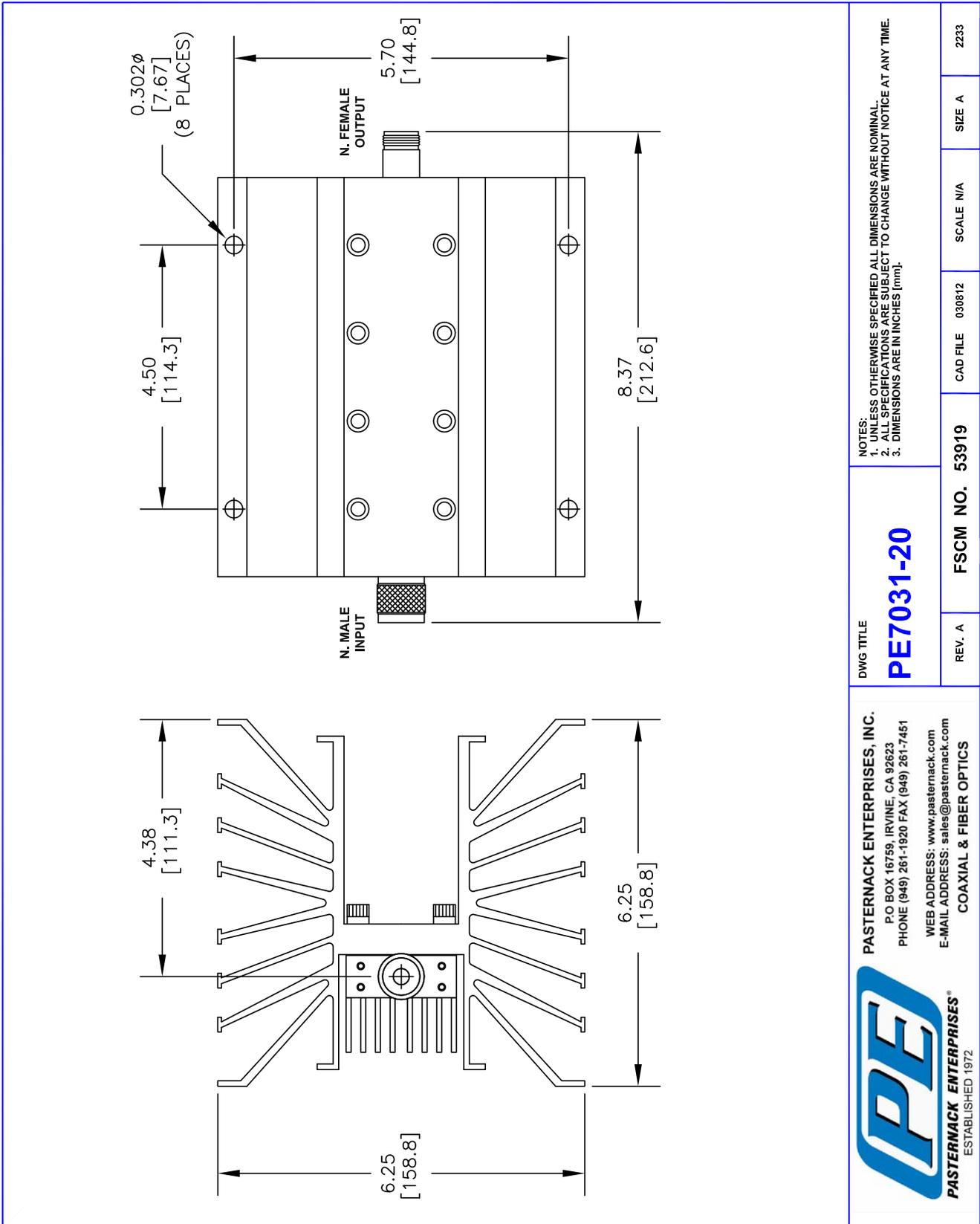
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [20 dB Fixed Attenuator, N Male to N Female Directional Black Anodized Aluminum Heatsink Body Rated to 300 Watts Up to 1,000 MHz PE7031-20](#)

URL: <https://www.pasternack.com/20db-fixed-n-female-n-male-300-watts-attenuator-pe7031-20-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.

# PE7031-20 CAD Drawing

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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].

DWG TITLE  
**PE7031-20**

REV. A      FSCM NO. 53919      CAD FILE 030812      SCALE N/A      SIZE A      2233

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