



20 dB Fixed Attenuator, N Male to N Female  
Directional Black Anodized Aluminum Heatsink  
Body Rated to 500 Watts Up to 3 GHz

## RF Fixed Attenuators Technical Data Sheet

PE7AP418-20

### Features

- Directional
- DC to 3 GHz Frequency Range
- Attenuation 20 dB
- Accuracy +/-1.75 dB
- Max Power 500 Watts (CW)
- VSWR < 1.35:1

### 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 PE7AP418-20 is rated to 500 Watts and operates from DC to 3 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		3	GHz
Impedance		50		Ohms
Nominal Attenuation		20		dB
Attenuation Accuracy			1.75	dB
VSWR			1.35:1	
Input Power, CW derated linearly to 50W @125°C			500	Watts
Input Power, Peak 5µs pulse, 5% duty cycle			10	kWatts

Electrical Specification Notes:  
Typical accuracy of +/-1.75 dB from nominal attenuation.

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 500 Watts Up to 3 GHz PE7AP418-20](#)



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### Mechanical Specifications

#### Size

Length	17.2 in [436.88 mm]
Width/Diameter	5.197 in [132 mm]
Height	5.51 in [139.95 mm]
Body Material and Plating	Black Anodized Aluminum Heatsink

#### Configuration

Design	Fixed, Directional
Package Style	Connectorized

#### Connectors

Description	Connector 1	Connector 2
Type	N Male	N Female
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Coupling Nut Material and Plating	Brass, Nickel	
Body Material and Plating	Brass, Nickel	Brass, Nickel

### 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:

20 dB Fixed Attenuator, N Male to N Female Directional Black Anodized Aluminum Heatsink Body Rated to 500 Watts Up to 3 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.

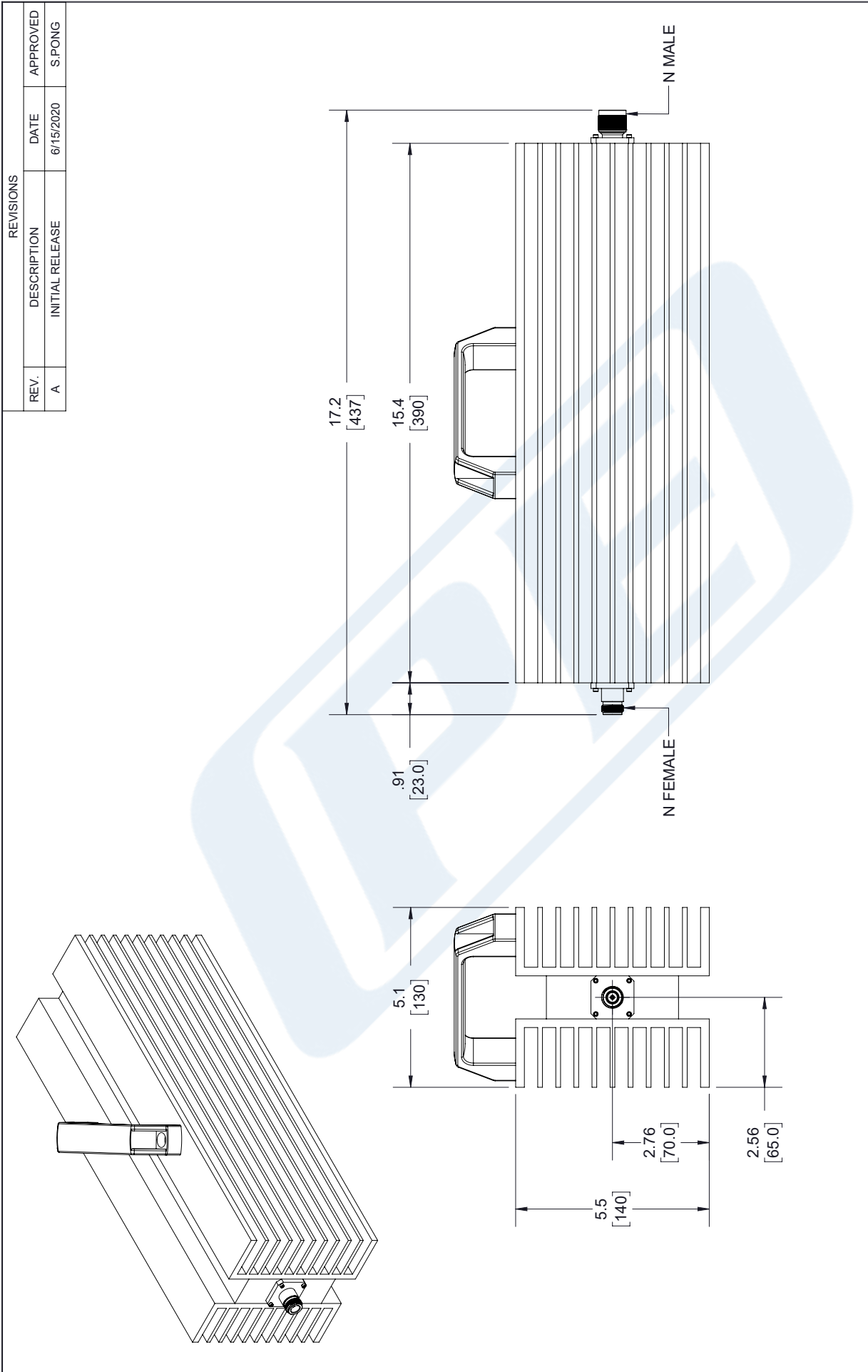
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [20 dB Fixed Attenuator, N Male to N Female Directional Black Anodized Aluminum Heatsink Body Rated to 500 Watts Up to 3 GHz PE7AP418-20](#)

URL: <https://www.pasternack.com/20db-fixed-n-male-n-female-500-watts-attenuator-pe7ap418-20-p.aspx>

# PE7AP418-20 CAD Drawing

20 dB Fixed Attenuator, N Male to N Female Directional Black Anodized  
Aluminum Heatsink Body Rated to 500 Watts Up to 3 GHz

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	6/15/2020	S.PONG



LABEL:

PASTERNAK  
PE7AP418-20  
D/C: YYWW

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

TOLERANCES:

.X = ± .2	[5.08]	FRACTIONS
.XX = ± .02	[.51]	± 1/32
.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	± .5% L	/ -0

ALL DIMENSIONS SHOWN  
ARE FOR REFERENCE ONLY.

**PE PASTERNAK**  
an INFINITI® brand

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1  
SCALE N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	K.DANG	PE7AP418-20
REV	A		

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