



## 20 dB Fixed Attenuator, N Male to N Female Black Anodized Aluminum Heatsink Body Rated to 10 Watts Up to 2 GHz

### RF Fixed Attenuators Technical Data Sheet

PE7010-20

#### Features

- Bidirectional
- DC to 2 GHz Frequency Range
- Attenuation 20±1 dB
- Max Power 10 Watts (CW)
- VSWR < 1.6:1

#### 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 PE7010-20 is rated to 10 Watts and operates from DC to 2 GHz. 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		2	GHz
Impedance		50		Ohms
Nominal Attenuation		20		dB
VSWR			1.6:1	
Input Power, CW derated linearly to 2W at +125°C			10	Watts
Input Power, Peak 5µs pulse, 0.05% duty cycle			500	Watts

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 Black Anodized Aluminum Heatsink Body Rated to 10 Watts Up to 2 GHz PE7010-20](#)



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### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Range	DC to 1	1 to 2				GHz
VSWR, Max	1.3:1	1.6:1				
Attenuation Accuracy, Typ	±0.7	±1				dB

### Mechanical Specifications

#### Size

Length	2.41 in [61.21 mm]
Width/Diameter	1 in [25.4 mm]
Weight	0.158 lbs [71.67 g]
Body Material and Plating	Black Anodized Aluminum Heatsink

#### Configuration

Design	Fixed, Bidirectional
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

#### Temperature

Operating Range	-65 to +125 deg C
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### 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:

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20 dB Fixed Attenuator, N Male to N Female Black Anodized Aluminum Heatsink Body Rated to 10 Watts Up to 2 GHz 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: [20 dB Fixed Attenuator, N Male to N Female Black Anodized Aluminum Heatsink Body Rated to 10 Watts Up to 2 GHz PE7010-20](http://www.pasternack.com/20db-fixed-n-female-n-male-10-watts-attenuator-pe7010-20-p.aspx)

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# PE7010-20 CAD Drawing

20 dB Fixed Attenuator, N Male to N Female Black Anodized  
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P/N	ATTEN.	FIGURE
PE7010-2	2 dB	1
PE7010-3	3 dB	1
PE7010-6	6 dB	1
PE7010-10	10 dB	1
PE7010-20	20 dB	1
PE7010-30	30 dB	2
PE7010-40	40 dB	2

## STANDARD TOLERANCES

.X ±0.2  
.XX ±0.1  
.XXX ±0.05

\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES

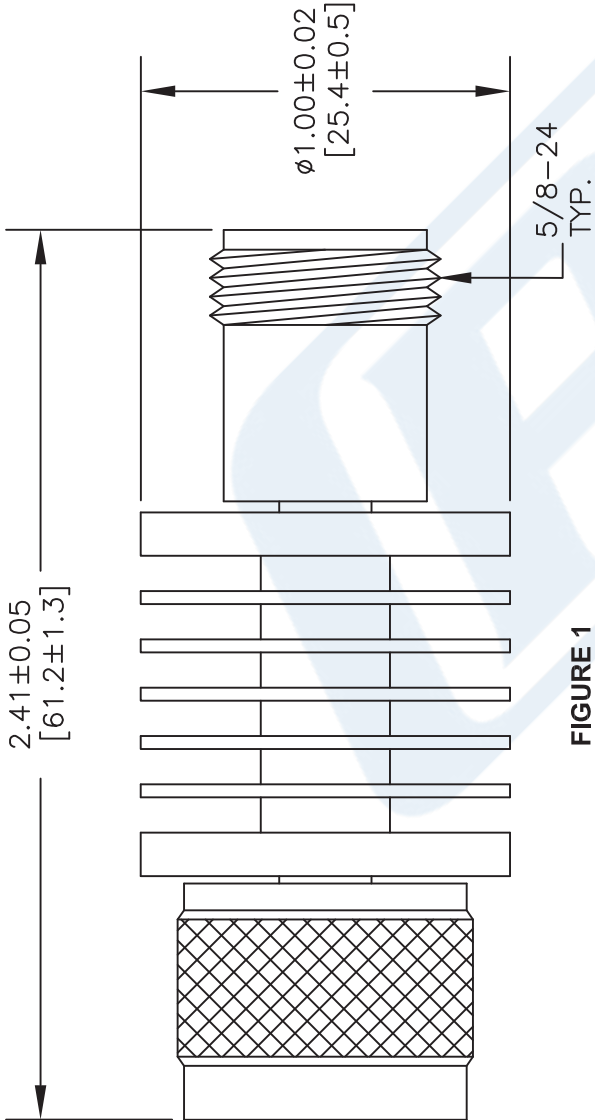


FIGURE 1

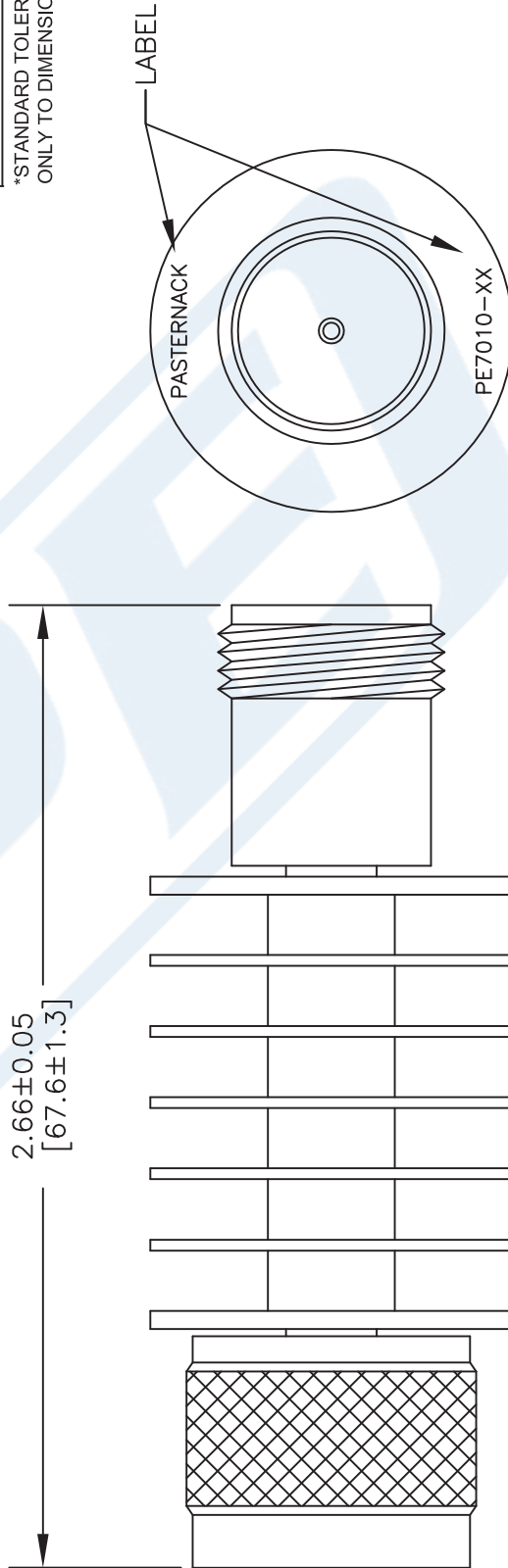


FIGURE 2

N FEMALE

N MALE

DWG TITLE

PE7010

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].

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FSCM NO. 53919

CAD FILE 022516

SCALE N/A

SIZE A

3045