



## 20 dB Fixed Attenuator, SMA Male to SMA Female Passivated Stainless Steel Body Rated to 2 Watts Up to 6 GHz

### RF Fixed Attenuators Technical Data Sheet

PE7162-20

#### Features

- Bidirectional
- DC to 6 GHz Frequency Range
- Attenuation 20±0.75 dB
- Max Power 2 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 PE7162-20 is rated to 2 Watts and operates from DC to 6 GHz. The versatile coaxial package uses SMA male to SMA female connectors and is also REACH and RoHS compliant.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
Impedance		50		Ohms
Nominal Attenuation		20		dB
Attenuation Accuracy		±0.75		dB
VSWR			1.35:1	
Input Power, CW derated linearly to 1.1W at +85°C			2	Watts

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Range	DC to 4	4 to 6				GHz
VSWR, Max	1.2:1	1.35:1				

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, SMA Male to SMA Female Passivated Stainless Steel Body Rated to 2 Watts Up to 6 GHz PE7162-20](#)



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**Mechanical Specifications**

**Size**

Length	0.86 in [21.84 mm]
Width/Diameter	0.312 in [7.92 mm]
Weight	0.013 lbs [5.9 g]
Body Material and Plating	Passivated Stainless Steel

**Configuration**

Design	Fixed, Bidirectional
Package Style	Connectorized Module

**Connectors**

Description	Connector 1	Connector 2
Type	SMA Male	SMA Female
Connector Specification	MIL-STD-348	MIL-STD-348
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Coupling Nut Material and Plating	Passivated Stainless Steel	
Hex Size	5/16 inch	
Torque	8 in-lbs 0.9 Nm	
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel

**Environmental Specifications**

**Temperature**

Operating Range	-20 to +85 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:

20 dB Fixed Attenuator, SMA Male to SMA Female Passivated Stainless Steel Body Rated to 2 Watts Up to 6 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, SMA Male to SMA Female Passivated Stainless Steel Body Rated to 2 Watts Up to 6 GHz PE7162-20](http://www.pasternack.com/20db-fixed-sma-female-sma-male-2-watts-attenuator-pe7162-20-p.aspx)

URL: <http://www.pasternack.com/20db-fixed-sma-female-sma-male-2-watts-attenuator-pe7162-20-p.aspx>

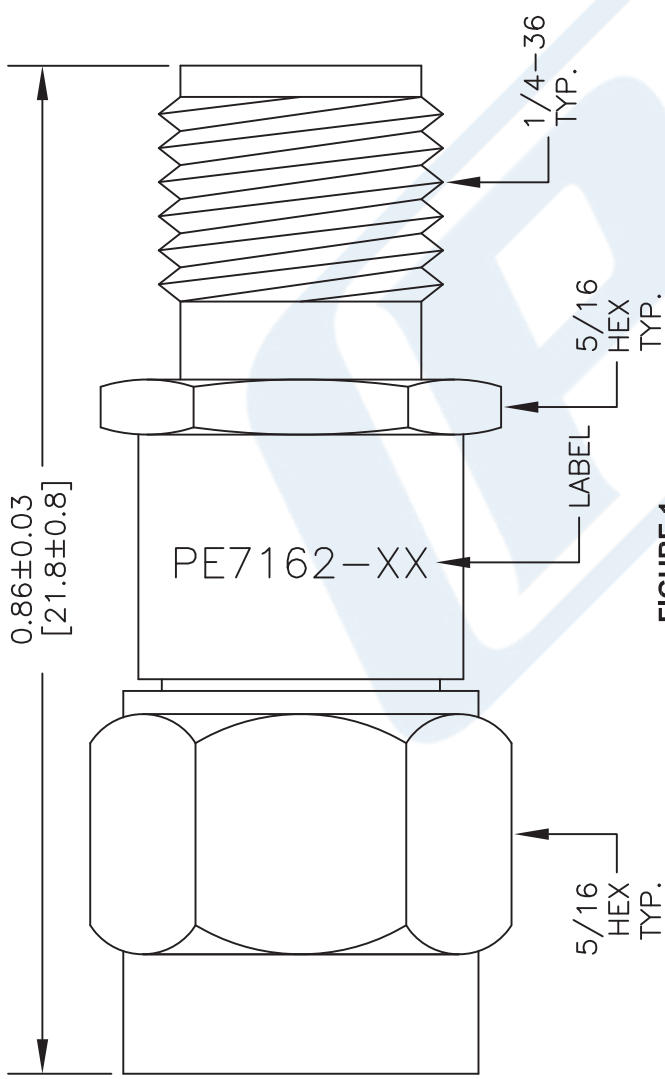
# PE7162-20 CAD Drawing

20 dB Fixed Attenuator, SMA Male to SMA Female Passivated  
Stainless Steel Body Rated to 2 Watts Up to 6 GHz

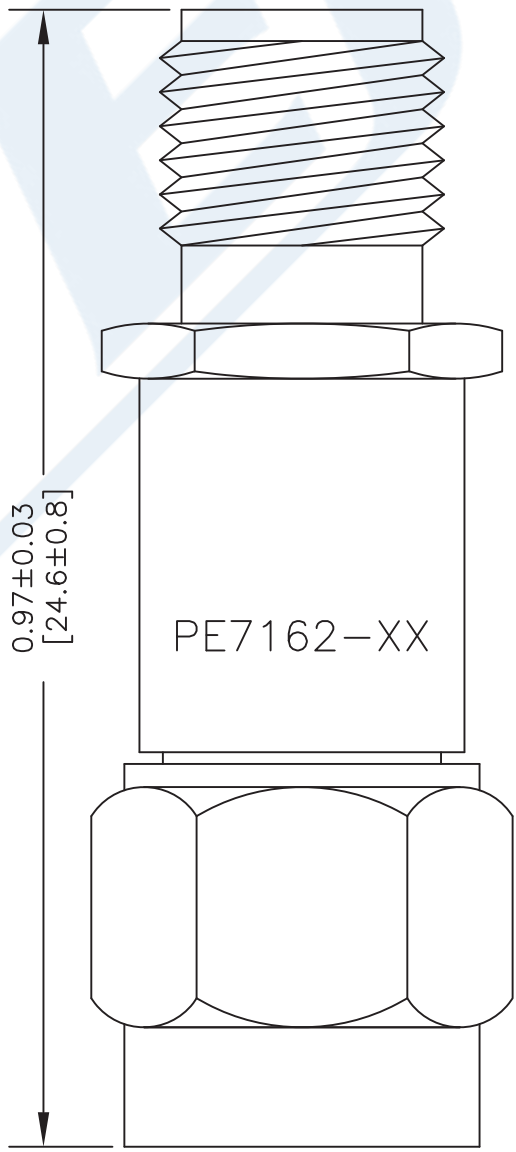
P/N	ATTEN.	FIGURE
PE7162-1	1 dB	1
PE7162-2	2 dB	1
PE7162-3	3 dB	1
PE7162-4	4 dB	1
PE7162-5	5 dB	1
PE7162-6	6 dB	1
PE7162-7	7 dB	1
PE7162-8	8 dB	1
PE7162-9	9 dB	1
PE7162-10	10 dB	1
PE7162-12	12 dB	1
PE7162-15	15 dB	1
PE7162-20	20 dB	1
PE7162-30	30 dB	2
PE7162-40	40 dB	2

STANDARD TOLERANCES  
DECIMAL  
.XX ±0.01  
.XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



**FIGURE 1**



**FIGURE 2**

DWG TITLE  
**PE7162**

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 030116

SCALE N/A

SIZE A 3045