



## 20 dB Fixed Attenuator, SMA Male to SMA Female Black Anodized Aluminum Heatsink Body Rated to 10 Watts Up to 6 GHz

### RF Fixed Attenuators Technical Data Sheet

PE7428-20

#### Features

- Bidirectional
- DC to 6 GHz Frequency Range
- Attenuation 20dB Typical
- Max Power 10 Watts (CW)
- VSWR < 1.2:1

#### 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 PE7428-20 is rated to 10 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. 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		6	GHz
Impedance		50		Ohms
Nominal Attenuation		20		dB
Attenuation Accuracy		0.7		dB
VSWR			1.2:1	
Input Power, CW			10	Watts

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Range	DC to 3	3 to 6				GHz
VSWR, Max	1.15:1	1.2:1				

Electrical Specification Notes:  
Values at +25°C, sea level.

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 Black Anodized Aluminum Heatsink Body Rated to 10 Watts Up to 6 GHz PE7428-20](#)



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### Mechanical Specifications

#### Size

Length	1.86 in [47.24 mm]
Width/Diameter	0.62 in [15.75 mm]
Weight	0.052 lbs [23.59 g]
Body Material and Plating	Black Anodized Aluminum Heatsink

#### Configuration

Design	Fixed
Package Style	Connectorized Module

#### Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Female
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	MIL-G-45204	MIL-G-45204
Torque	7 in-lbs 0.79 Nm	
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel

### 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, SMA Male to SMA Female Black Anodized Aluminum Heatsink Body Rated to 10 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 99.4% availability and are part of the broadest selection in the industry.

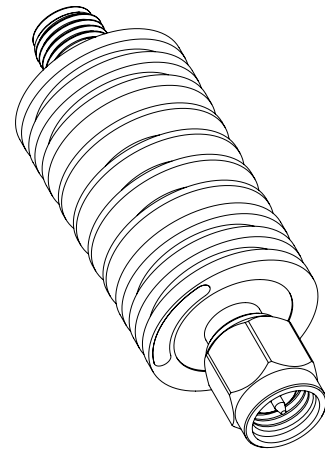
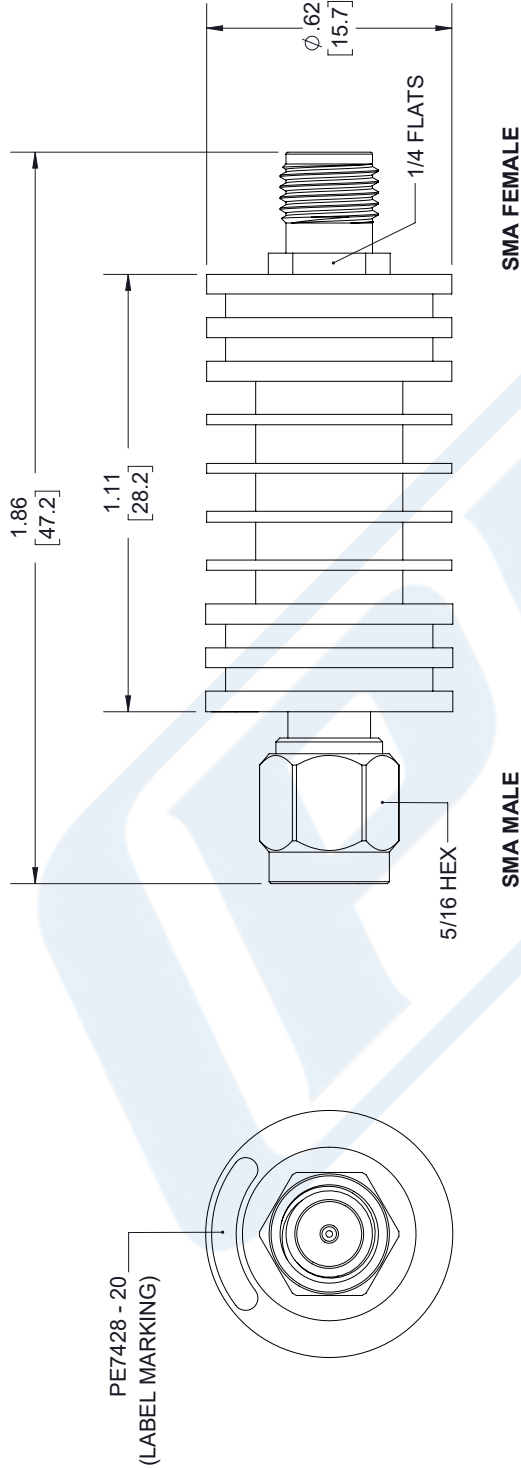
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URL: <https://www.pasternack.com/20db-fixed-sma-male-sma-female-10-watts-attenuator-pe7428-20-p.aspx>

# PE7428-20 CAD Drawing

20 dB Fixed Attenuator, SMA Male to SMA Female Black Anodized  
Aluminum Heatsink Body Rated to 10 Watts Up to 6 GHz

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	01/09/19	S. PONG



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [ ] ARE MILLIMETERS			
TOLERANCES:			
X $\pm$ .2	[5.08]	FRACTIONS	
.XX $\pm$ .01	[.25]		$\pm 1/32$
.XXX $\pm$ .005	[.13]	ANGLES $\pm 1^\circ$	
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.			
THIRD-ANGLE PROJECTION			

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SIZE	CAGE	DRAWN BY	PART NUMBER
A	53919	K.DANG	PE7428-20
			REV
			A

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SHEET	1	OF	1
SCALE	N/A		

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