



3 dB Fixed Attenuator, 1.0 mm Male to 1.0 mm Female Rated to 0.2 Watts Up to 110 GHz

## RF Fixed Attenuators Technical Data Sheet

**PE7450-3**

### Features

- DC to 110 GHz Frequency Range
- 1.0 mm (W1) Connectorized Design
- Attenuation 3 dB
- Max Power 0.2 Watts (CW)
- Typical VSWR of 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 3 dB Fixed Attenuator PE7450-3 is rated to 0.2 Watts and operates from DC to 110 GHz. The versatile coaxial package uses 1.0 mm (W1) male to 1.0 mm (W1) female connectors.

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		110	GHz
Impedance		50		Ohms
Nominal Attenuation		3		dB
Attenuation Accuracy			±2	dB
VSWR			1.9:1	
Input Power, CW			0.2	Watts

### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 15	15 to 50	50 to 105	105 to 110		GHz
VSWR, Max	1.2:1	1.4:1	1.7:1	1.9:1		
Attenuation Accuracy, Max	±1	±2	±2	±2		dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [3 dB Fixed Attenuator, 1.0 mm Male to 1.0 mm Female Rated to 0.2 Watts Up to 110 GHz PE7450-3](#)



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### Mechanical Specifications

#### Size

Length	1.1 in [27.94 mm]
Width/Diameter	0.433 in [11 mm]
Height	0.433 in [11 mm]
Weight	0.15 lbs [68.04 g]

#### Configuration

Design	Fixed
Package Style	Connectorized

#### Connectors

Description	Connector 1	Connector 2
Type	1.0mm Female	1.0mm Male

### Environmental Specifications

#### Temperature

Operating Range	+0 to +70 deg C
Storage Range	-55 to +125 deg C
Humidity	95% at 40 °C, 96 hours, Test 103B, Condition B
Shock	100 Gn peak sawtooth, method 213, Condition B

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

### Plotted and Other Data

#### Notes:

3 dB Fixed Attenuator, 1.0 mm Male to 1.0 mm Female Rated to 0.2 Watts Up to 110 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.

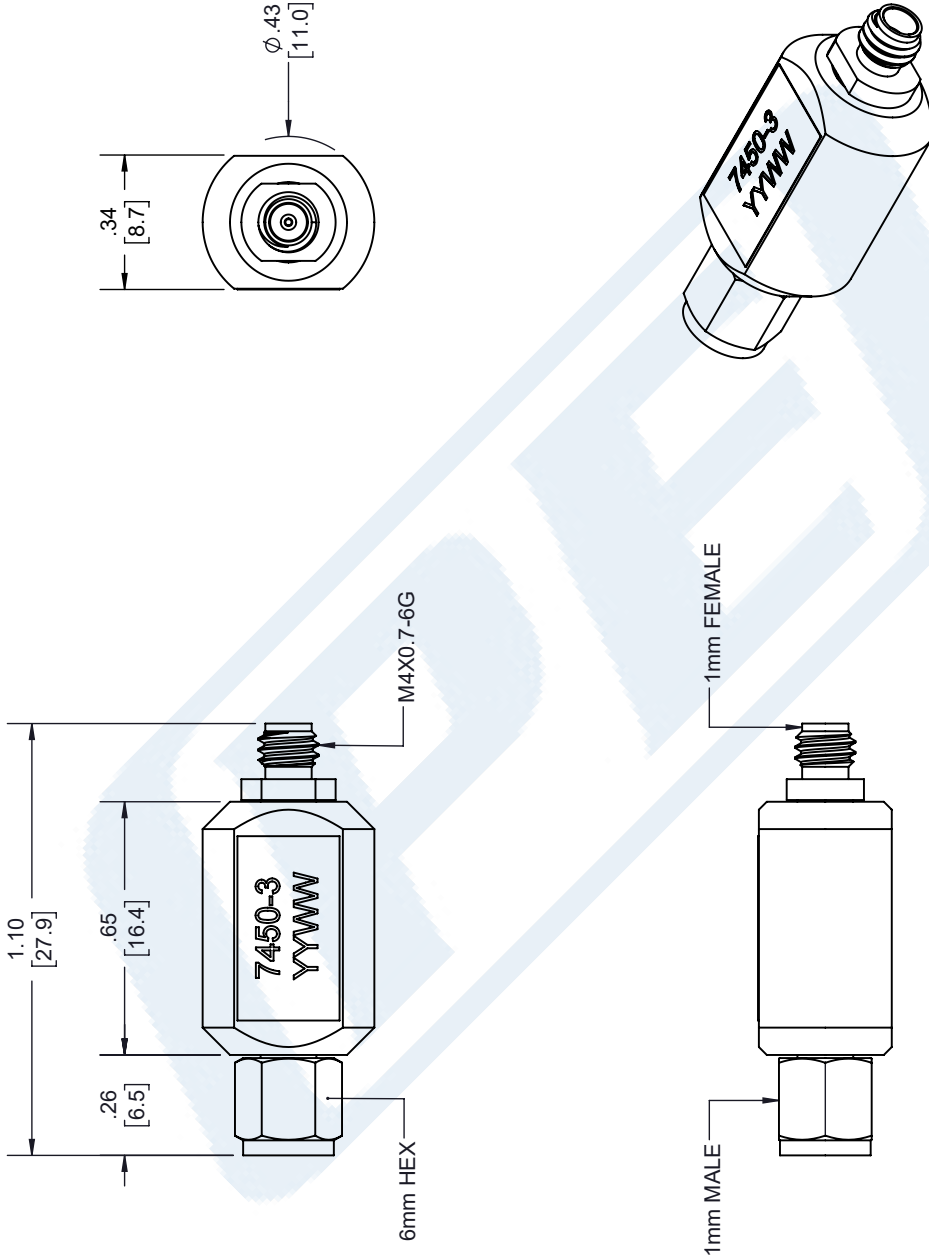
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URL: <https://www.pasternack.com/3db-fixed-1.0mm-female-1.0mm-male-0.2-watts-attenuator-pe7450-3-p.aspx>

# PE7450-3 CAD Drawing

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	8/1/2022	S. PONG



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

TOLERANCES:  
 .X = ±.2 [5.08]    FRACTIONS ± 1/32  
 .XX = ±.02 [ .51]    ANGLES ± 1°  
 .XXX = ±.005 [ .13]

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% / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A

ITEM NO. PE7450-3

DRAWN BY K.DANG

CAGE CODE 53919

DATE 8/1/2022



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