

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



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

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]

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



PE7450-3

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:

Typical Performance Data

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.

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](#)

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

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. Pasternack Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE7450-3 CAD Drawing

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

