

1 dB Fixed Attenuator, 2.4mm Male to 2.4mm Female Passivated Stainless Steel Body Rated to 1 Watt Up to 50 GHz

PE7089-1



Features

- Bidirectional
- DC to 50 GHz Frequency Range
- Attenuation 1dB Typical
- Max Power 1 Watts (CW)
- VSWR < 1.75:1

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 1 dB Fixed Attenuator PE7089-1 is rated to 1 Watt and operates from DC to 50 GHz. The versatile coaxial package uses 2.4mm male to 2.4mm female connectors and is also REACH and RoHS compliant.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		50	GHz
Impedance		50		Ohms
Nominal Attenuation		1		dB
VSWR			1.75:1	
Input Power, CW			1	Watt
derated linearly from 1W @ 25°C to .1W @ 100°C				

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 26.5	26.5 to 40	40 to 50			GHz
VSWR, Max	1.35:1	1.6:1	1.75:1			
Attenuation Accuracy, Max	±0.5	±1	±1.5			dB

Mechanical Specifications

Size

Length	0.87 in [22.1 mm]
Width/Diameter	0.312 in [7.92 mm]
Height	0.312 in [7.92 mm]
Weight	0.0149 lbs [6.76 g]
Body Material and Plating	Passivated Stainless Steel

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Configuration

Design

Package Style

Fixed, Bidirectional

Connectorized Module

Connectors

Description	Connector 1	Connector 2
Type	2.4mm Male	2.4mm Female
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	MIL-PRF-39012	MIL-PRF-39012
Coupling Nut Material and Plating	Passivated Stainless Steel	
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel

Mechanical Specification Notes:

The connectors use high temperature plastic bead dielectric.

Environmental Specifications

Temperature

Operating Range

Storage Range

-55 to +100 deg C

-55 to +100 deg C

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

Plotted and Other Data

Notes:

Typical Performance Data

1 dB Fixed Attenuator, 2.4mm Male to 2.4mm Female Passivated Stainless Steel Body Rated to 1 Watt Up to 50 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: [1 dB Fixed Attenuator, 2.4mm Male to 2.4mm Female Passivated Stainless Steel Body Rated to 1 Watt Up to 50 GHz PE7089-1](#)

URL: <https://www.pasternack.com/1db-fixed-2.4mm-male-2.4mm-female-1-watt-attenuator-pe7089-1-p.aspx>

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PE7089-1 CAD Drawing

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Stainless Steel Body Rated to 1 Watt Up to 50 GHz

