



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

RF Fixed Attenuators Technical Data Sheet

PE7089-6

Features

- Bidirectional
- DC to 50 GHz Frequency Range
- Attenuation 6±1.5 dB
- 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 6 dB Fixed Attenuator PE7089-6 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		6		dB
VSWR			1.75:1	
Input Power, CW derated linearly to .1W at +100°C			1	Watts

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
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, Typ	±0.5	±1	±1.5			dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [6 dB Fixed Attenuator, 2.4mm Male to 2.4mm Female Passivated Stainless Steel Body Rated to 1 Watt Up to 50 GHz PE7089-6](#)



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

RF Fixed Attenuators Technical Data Sheet

PE7089-6

Mechanical Specifications

Size

Length	0.87 in [22.1 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	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	-55 to +100 deg C
-----------------	-------------------

Compliance Certifications (visit www.Pasternack.com for current document)

RoHS Compliant	
REACH Compliant	12/17/2015

Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [6 dB Fixed Attenuator, 2.4mm Male to 2.4mm Female Passivated Stainless Steel Body Rated to 1 Watt Up to 50 GHz PE7089-6](#)

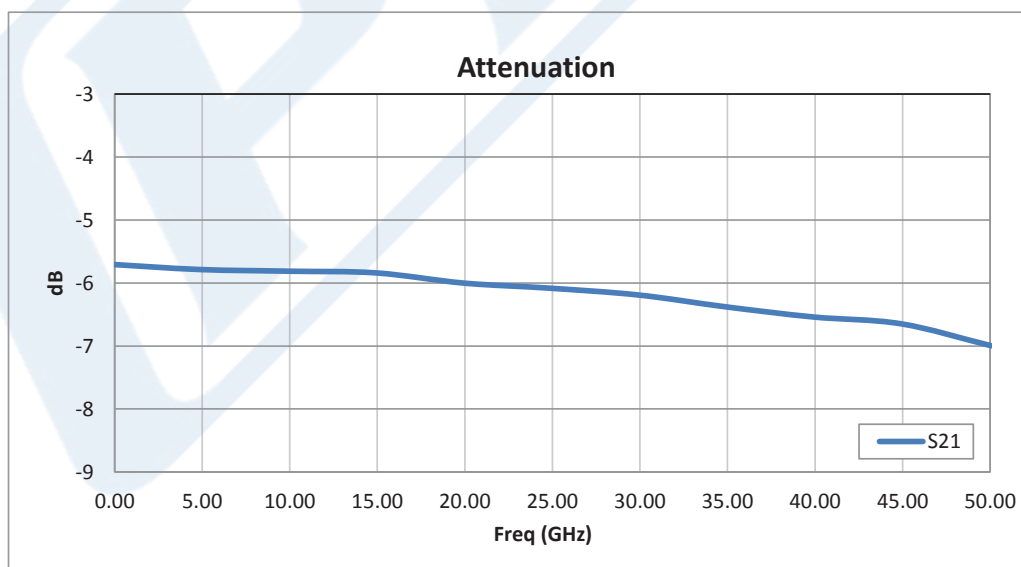
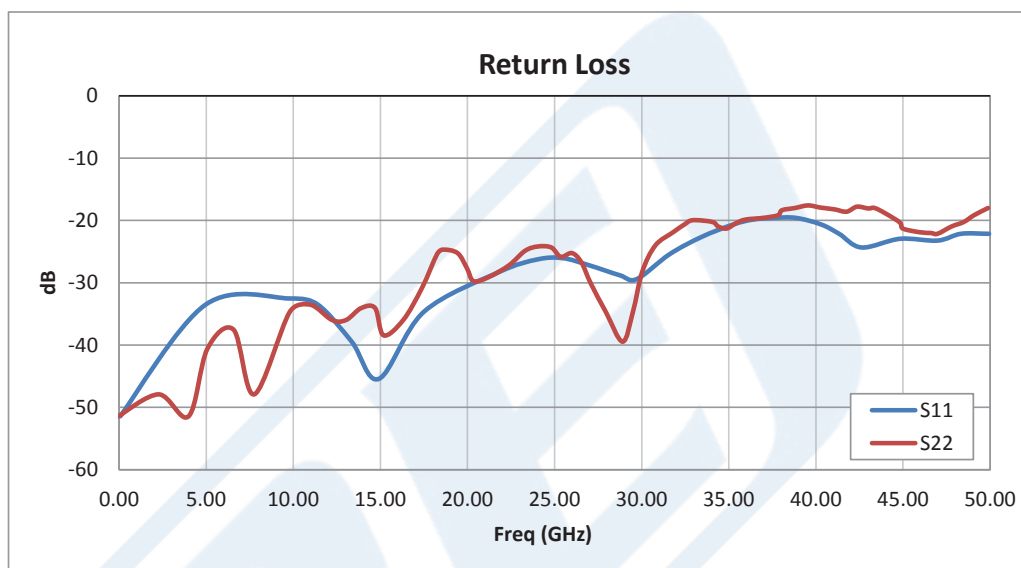


6 dB Fixed Attenuator, 2.4mm Male to 2.4mm Female Passivated
Stainless Steel Body Rated to 1 Watt Up to 50 GHz

RF Fixed Attenuators Technical Data Sheet

PE7089-6

Typical Performance Data



Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [6 dB Fixed Attenuator, 2.4mm Male to 2.4mm Female Passivated Stainless Steel Body Rated to 1 Watt Up to 50 GHz PE7089-6](#)

PE7089-6

PE7089-6 CAD Drawing

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

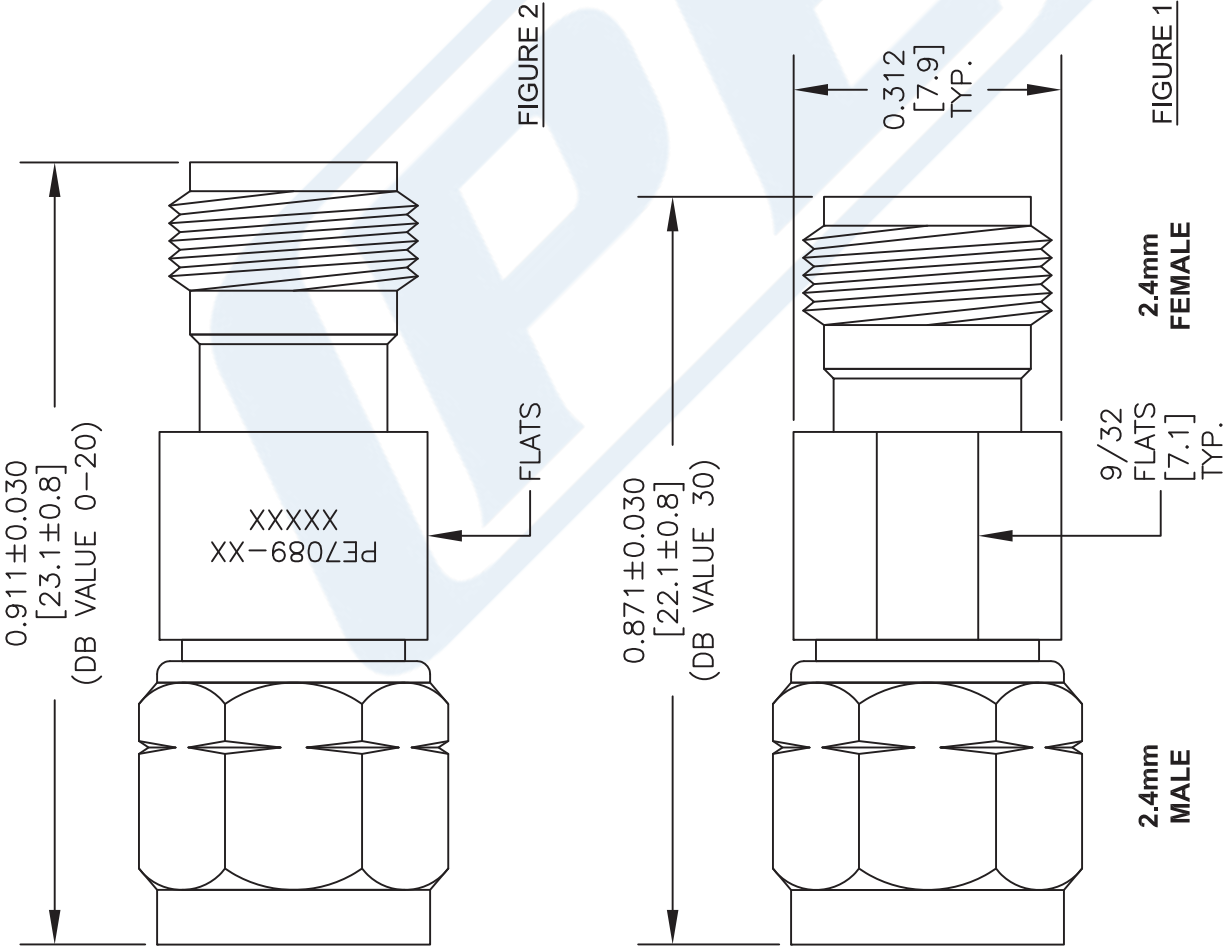
P/N	ATTEN.	FIGURE
PE7089-3	3 dB	1
PE7089-6	6 dB	1
PE7089-10	10 dB	1
PE7089-20	20 dB	1
PE7089-30	30 dB	2

STANDARD TOLERANCES
.X ±0.05
.XX ±0.03
.XXX ±0.010

*STANDARD TOLERANCES APPLY
ONLY TO DIMENSIONS IN INCHES

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].

CAD FILE	SCALE	SIZE	
022616	N/A	A	3045



DWG TITLE
PE7089

FSCM NO.	53919
----------	-------

PE PASTERNAK®
THE ENGINEER'S RF SOURCE
Pasternack Enterprises, Inc.
P.O. Box 16759 | Irvine | CA | 92623
Phone: (949) 261-1920 | Fax: (949) 261-7451
Website: www.pasternack.com | E-Mail: sales@pasternack.com