



0 to 70 dB Rotary Step Attenuator, SMA Female to SMA Female With 10 dB Step Rated to 2 Watts Up to 2.2 GHz

RF Step Attenuators Technical Data Sheet

PE70A1023

Features

- 10 dB steps from 0 to 70 dB Attenuation
- Rotary Dial Control
- ± 0.5 dB or 3% Attenuation Accuracy
- SMA Female Connectors
- -20°C to $+80^{\circ}\text{C}$ Operating Temperature

Applications

- Instrumentation
- Precision Measurements
- Prototyping and Characterization
- Production Systems

Description

The PE70A1023 is a Step Attenuator that has 70 dB of total attenuation with 10 dB step size and rotary dial design across a frequency range from DC to 2.2 GHz. The design is tried and true technology that offers exceptional performance characteristics that include 0.5 dB maximum insertion loss, and a maximum VSWR of 1.4:1 at 2.2 GHz. The design also features excellent attenuation accuracy with ± 0.4 dB typical at 2.2 GHz. The Chem film Aluminum alloy package has SMA Female connectors, and operates within the temperature range of -20°C to 80°C .

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		2.2	GHz
Impedance		50		Ohms
Insertion Loss			0.5	dB
Attenuation Value		0 to 70		dB
Step Size		10		dB
Step Type		Rotary		
Accuracy Statement	± 0.5 dB or 3% (Whichever is greater)			
Input Power			2	Watts
Input Power, Peak			1	KWatts

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Range	DC to 1	1 to 2.2				GHz
Insertion Loss	0.3	0.5				dB
VSWR	1.2:1	1.4:1				

Electrical Specification Notes:
Specs by Frequency are maximum values

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [0 to 70 dB Rotary Step Attenuator, SMA Female to SMA Female With 10 dB Step Rated to 2 Watts Up to 2.2 GHz PE70A1023](#)



0 to 70 dB Rotary Step Attenuator, SMA Female to SMA Female With 10 dB Step Rated to 2 Watts Up to 2.2 GHz

RF Step Attenuators Technical Data Sheet

PE70A1023

Mechanical Specifications

Size

Length	2.67 in [67.82 mm]
Width	1.5 in [38.1 mm]
Weight	0.544 lbs [246.75 g]
Body Material and Plating	Aluminum, Chem Film

Connectors

Description	Connector 1	Connector 2
Type	SMA Female	SMA Female

Environmental Specifications

Temperature

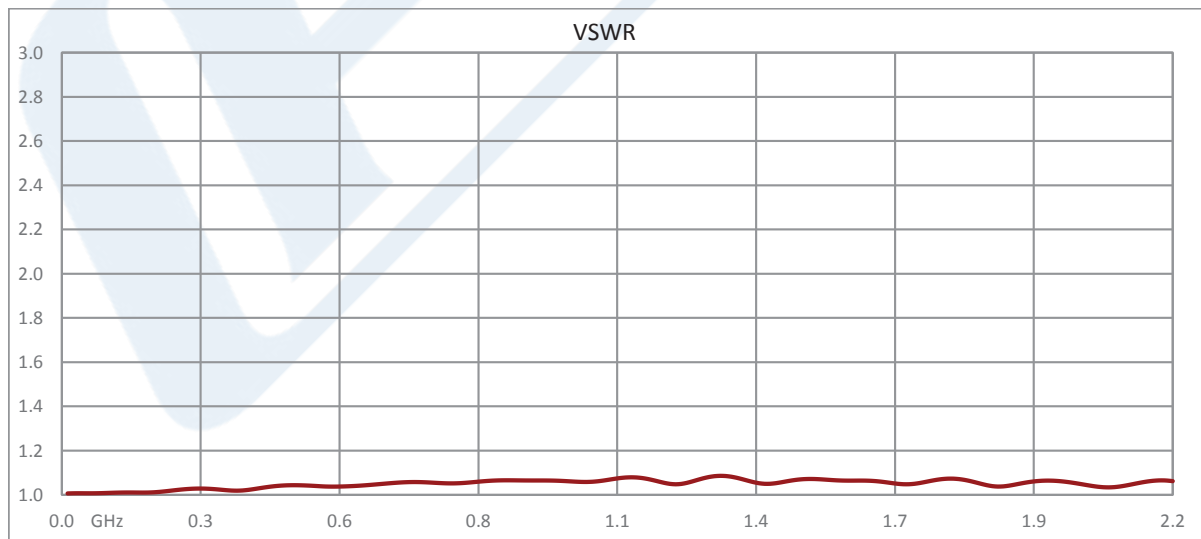
Operating Range	-20 to 85 deg C
-----------------	-----------------

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

Plotted and Other Data

Notes:

Typical Performance Data



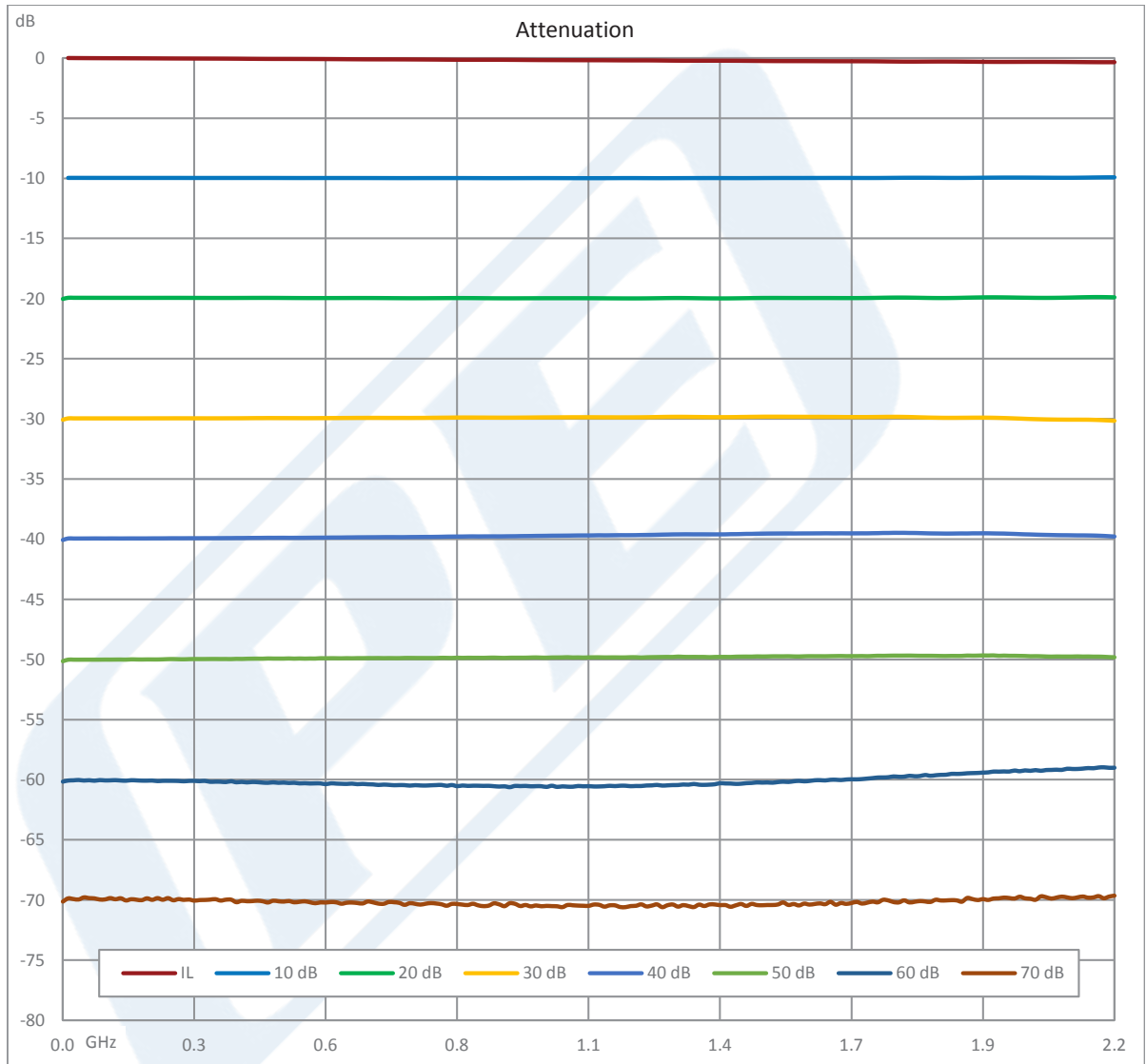
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [0 to 70 dB Rotary Step Attenuator, SMA Female to SMA Female With 10 dB Step Rated to 2 Watts Up to 2.2 GHz PE70A1023](#)



0 to 70 dB Rotary Step Attenuator, SMA Female to SMA Female With 10 dB Step Rated to 2 Watts Up to 2.2 GHz

RF Step Attenuators Technical Data Sheet

PE70A1023



Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [0 to 70 dB Rotary Step Attenuator, SMA Female to SMA Female With 10 dB Step Rated to 2 Watts Up to 2.2 GHz PE70A1023](#)



0 to 70 dB Rotary Step Attenuator, SMA Female to SMA Female With 10 dB Step Rated to 2 Watts Up to 2.2 GHz

RF Step Attenuators Technical Data Sheet

PE70A1023

0 to 70 dB Rotary Step Attenuator, SMA Female to SMA Female With 10 dB Step Rated to 2 Watts Up to 2.2 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.

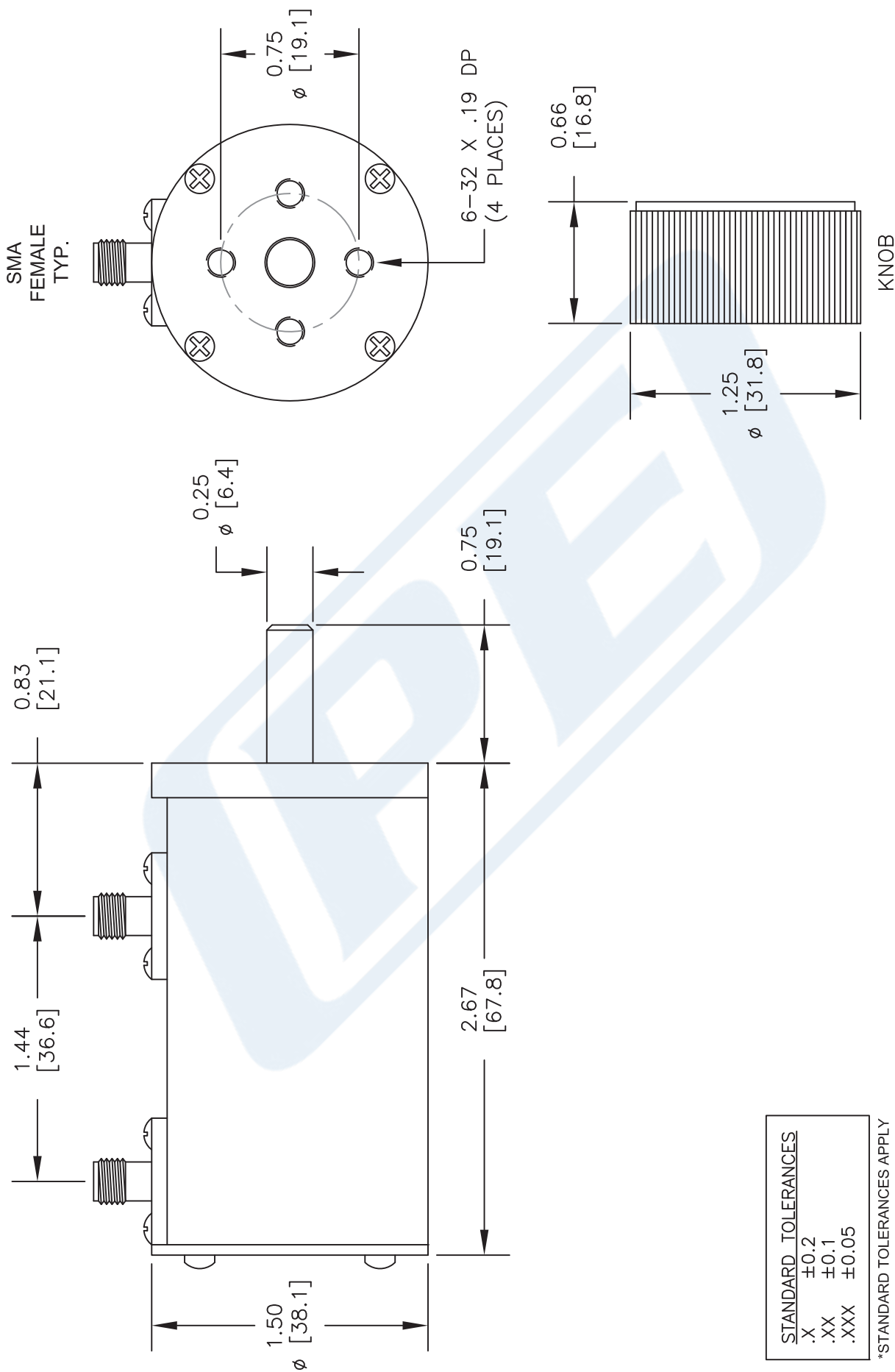
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [0 to 70 dB Rotary Step Attenuator, SMA Female to SMA Female With 10 dB Step Rated to 2 Watts Up to 2.2 GHz PE70A1023](https://www.pasternack.com/70db-step-sma-female-sma-female-2-watts-attenuator-pe70a1023-p.aspx)

URL: <https://www.pasternack.com/70db-step-sma-female-sma-female-2-watts-attenuator-pe70a1023-p.aspx>

The information contained in 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 reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

PE70A1023 CAD Drawing

0 to 70 dB Rotary Step Attenuator, SMA Female to SMA Female
With 10 dB Step Rated to 2 Watts Up to 2.2 GHz



STANDARD TOLERANCES
.X ±0.2
.XX ±0.1
.XXX ±0.05

*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].

DWG TITLE
PE70A1023

CAGE CODE 53919

CAD FILE 121316

SCALE N/A

SIZE A

2233

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