



## 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
- $\pm 0.5$  dB or 3% Attenuation Accuracy
- SMA Female Connectors
- -20°C to +80°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  $\pm 0.4$  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	$\pm 0.5$ 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](#)



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### 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

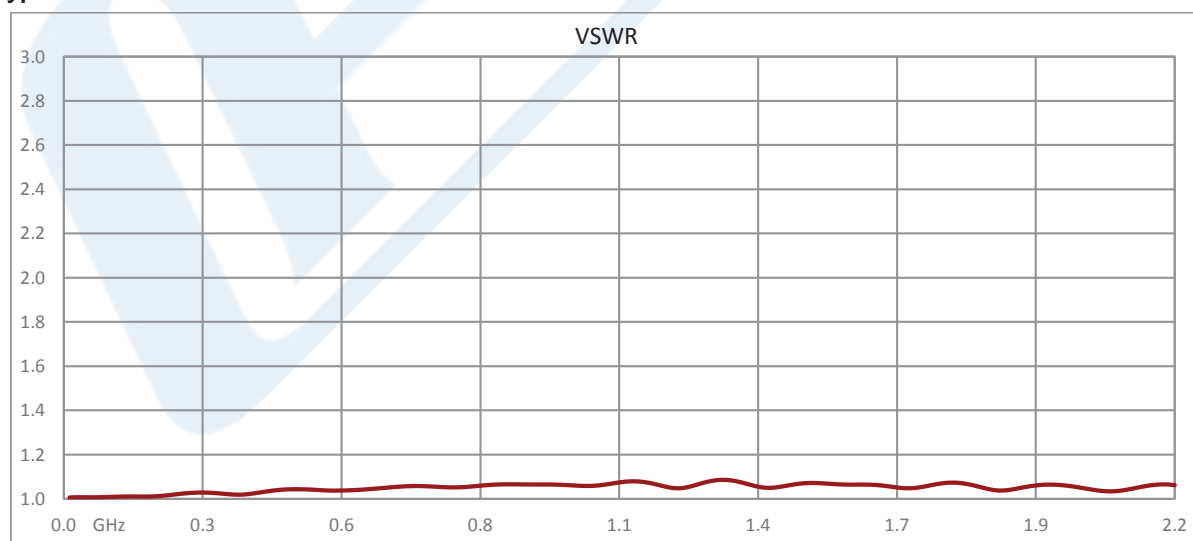
Operating Range	-20 to 85 deg C
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### Compliance Certifications (see [product page](#) for current document)

### Plotted and Other Data

Notes:

#### Typical Performance Data



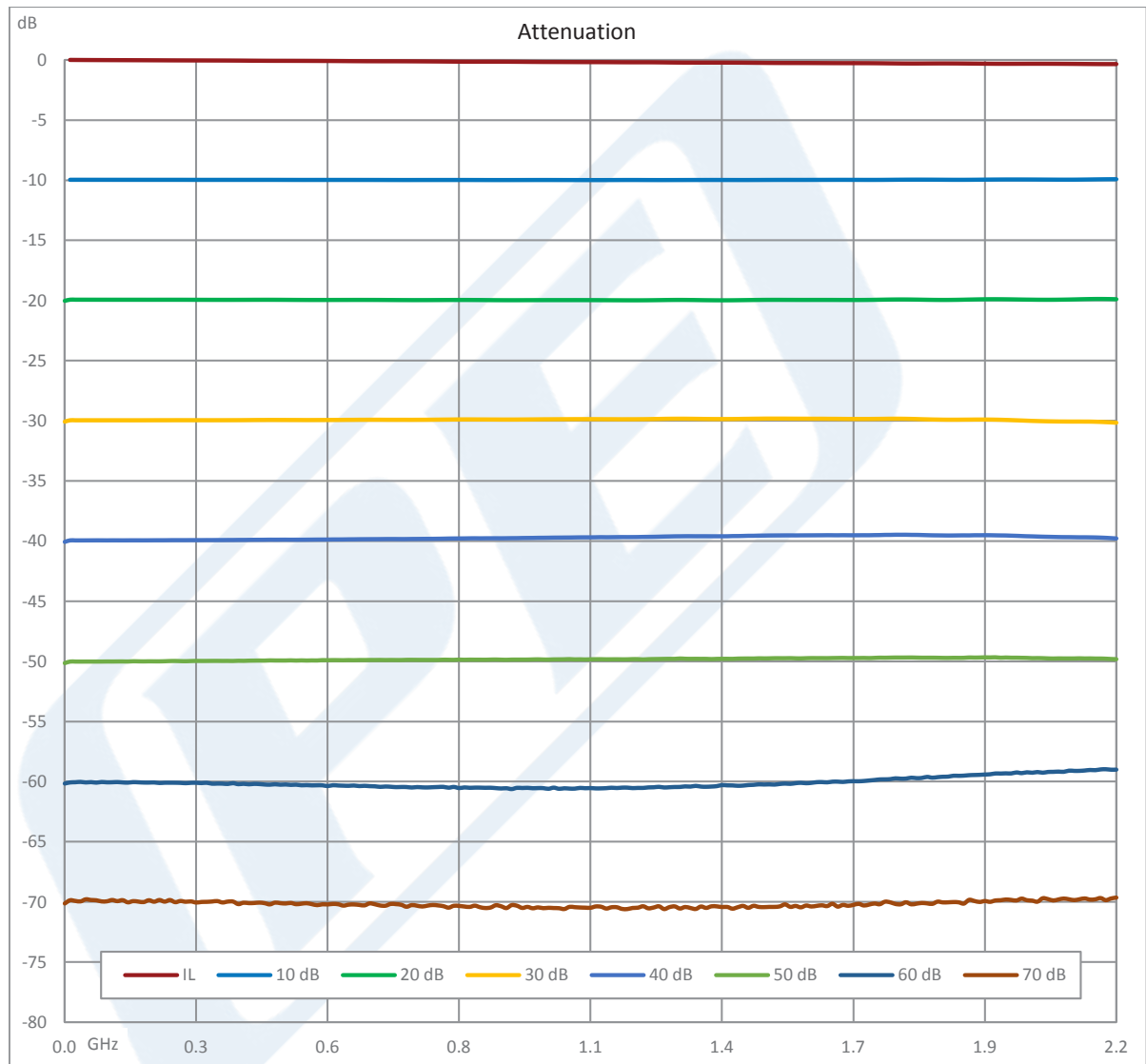
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [0 to 70 dB Rotary Step Attenuator, SMA Female to SMA Female With 10 dB Step Rated to 2 Watts Up to 2.2 GHz PE70A1023](#)



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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.

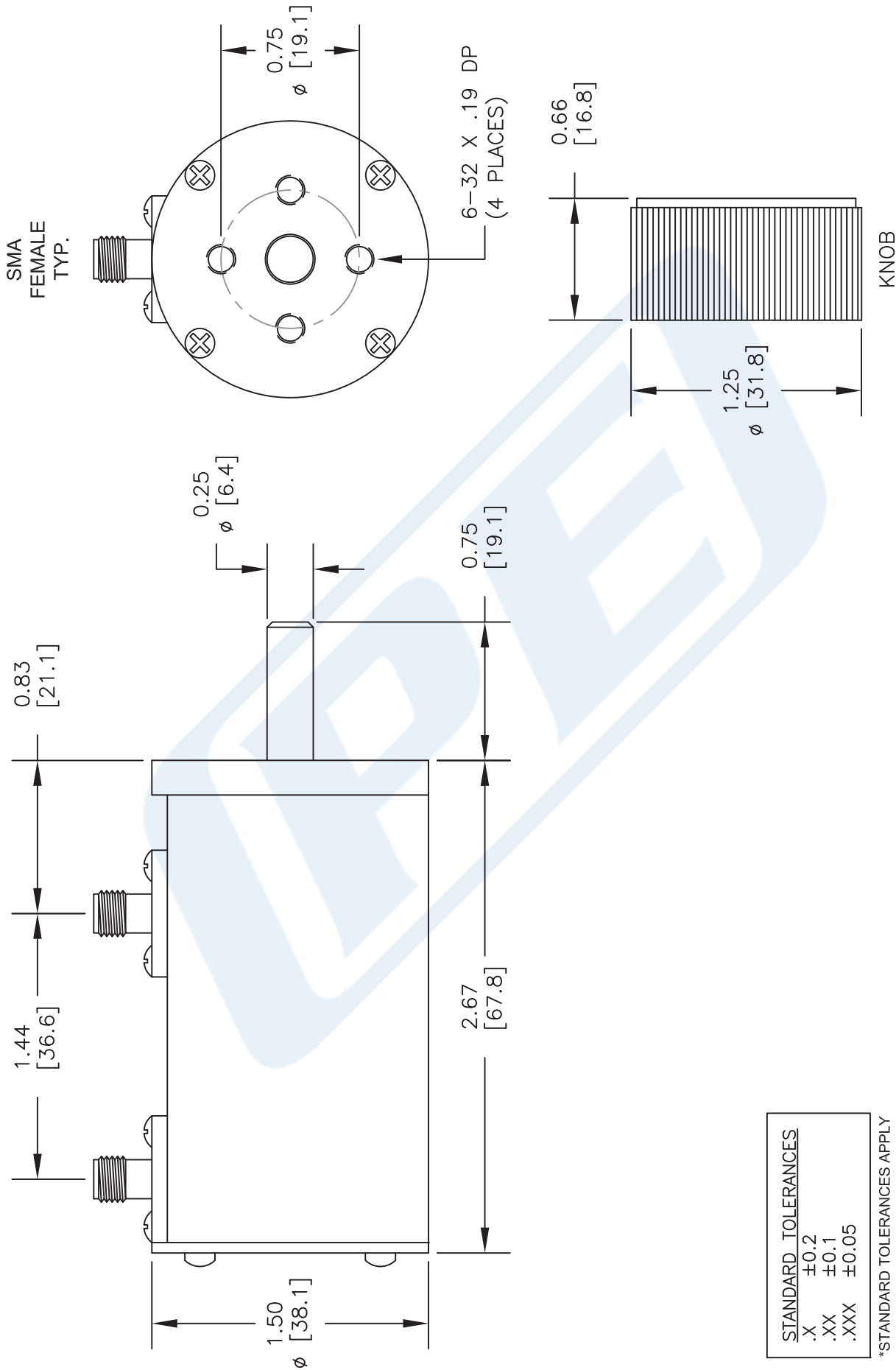
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [0 to 70 dB Rotary Step Attenuator, SMA Female to SMA Female With 10 dB Step Rated to 2 Watts Up to 2.2 GHz PE70A1023](https://www.pasternack.com/70db-step-sma-female-sma-female-2-watts-attenuator-pe70a1023-p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

<p>NOTES:</p> <ol style="list-style-type: none"> <li>1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.</li> <li>2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.</li> <li>3. DIMENSIONS ARE IN INCHES [mm].</li> </ol>	<p>DWG TITLE</p> <p><b>PE70A1023</b></p>	<p><b>PE PASTERNAK®</b> 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</p>
	<p>CAGE CODE 53919</p>	
	<p>CAD FILE 121316</p>	
	<p>SCALE N/A</p>	
	<p>SIZE A</p>	
		<p>2233</p>