

0 to 90 dB Push Button Step Attenuator,
50 Ohm SMA Female To 50 Ohm SMA Female With
1 dB Step Rated To 2 Watts Up To 1 GHz

RF Step Attenuators Technical Data Sheet

PE70A1040S

Features

- 1, 2, 4, 8, 16, 20, 20, and 20 dB step buttons
- 0 to 90 dB Attenuation
- 3% Attenuation Accuracy Maximum
- SMA Female Connectors
- Maximum Power 2 Watts (CW)

Applications

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

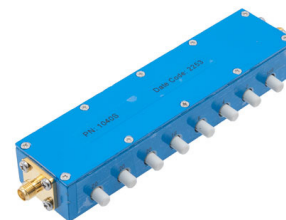
Description

The PE70A1040S is a Step Attenuator that has 90 dB of total attenuation with 1, 2, 4, 8, 16, 20, 20, and 20 dB push button steps, designed across the frequency range of DC to 1 GHz. Select button for desired attenuation level, total attenuation is the sum of all buttons selected. The design is tried and true technology that offers exceptional performance characteristics that include 2 dB maximum insertion loss, and a maximum VSWR of 1.4:1. The design also features excellent attenuation accuracy with 3% maximum. The Nickel plated Brass package has SMA Female connectors, and operates within the temperature range of -20°C to 85°C.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		1,000	MHz
Impedance		50		Ohms
Insertion Loss			2	dB
Attenuation Value		0 to 90		dB
Step Size		1		dB
Step Type		Push Button		
Accuracy Statement		±0.8dB (<50dB Atten) ±3%dB (>50dB Atten)		
Input Power (CW)			2	Watts
Input Power, Peak			100	Watts
5 μs pulse width 2% duty cycle				
VSWR			1.4:1	

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [0 to 90 dB Push Button Step Attenuator, 50 Ohm SMA Female To 50 Ohm SMA Female With 1 dB Step Rated To 2 Watts Up To 1 GHz PE70A1040S](#)



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Mechanical Specifications

Size

Length	5.709 in [145.01 mm]
Width	0.787 in [19.99 mm]
Height	1.398 in [35.51 mm]
Weight	0.375 lbs [170.1 g]

Body Material and Plating

Aluminum, Paint

Connectors

Description	Connector 1	Connector 2
Type	SMA Female	SMA Female
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Body Material and Plating	Brass, Nickel	Brass, Nickel

Environmental Specifications

Temperature

Operating Range -20 to 85 deg C

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

Plotted and Other Data

Notes:

0 to 90 dB Push Button Step Attenuator, 50 Ohm SMA Female To 50 Ohm SMA Female With 1 dB Step Rated To 2 Watts Up To 1 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.

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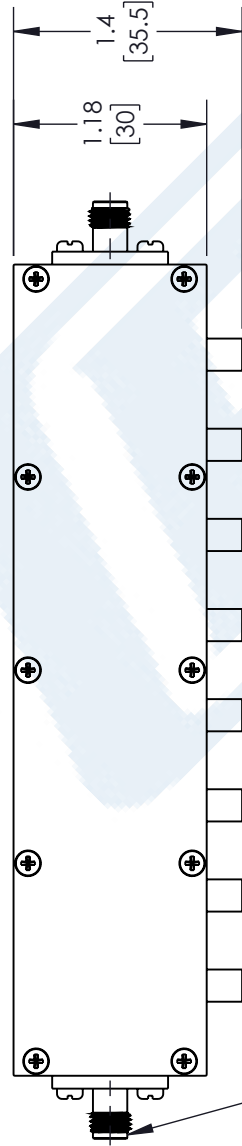
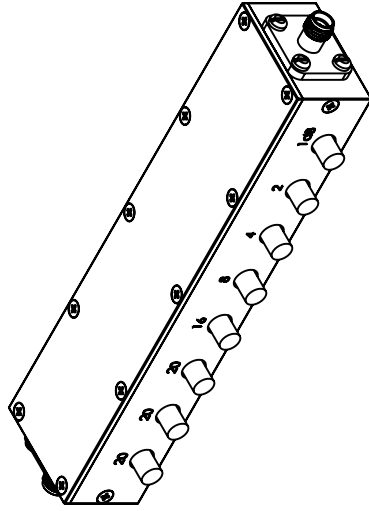
URL: <https://www.pasternack.com/90db-step-sma-female-sma-female-2-watts-attenuator-pe70a1040s-p.aspx>

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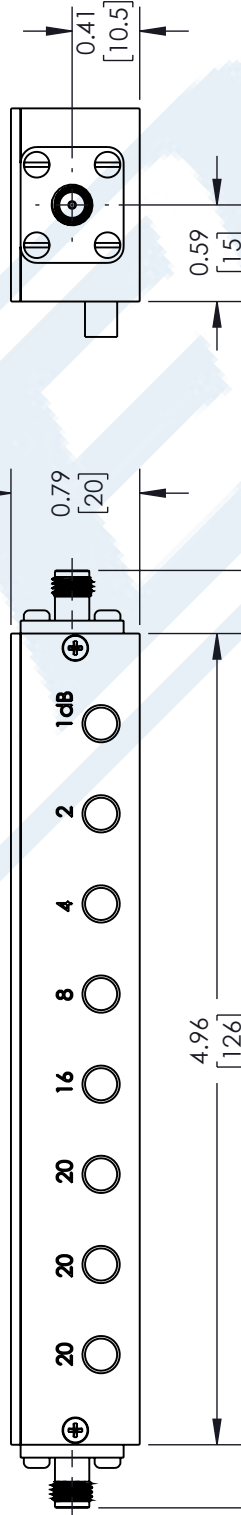
PE70A1040S CAD Drawing

0 to 90 dB Push Button Step Attenuator, 50 Ohm SMA Female To 50 Ohm
SMA Female With 1 dB Step Rated To 2 Watts Up To 1 GHz

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	12/21/22	SPONG



2X SMA FEMALE
CONNECTOR



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS TOLERANCES: X = ±.2 [5.08] FRACTIONS .XX = ±.02 [.51] ±1/32 .XXX = ±.005 [.13] ANGLES ± 1° CABLE LENGTH (L) TOLERANCES: L ≤ 12 [305] = +1 [25] / -0 12 [305] < L ≤ 60 [1524] = +2 [51] / -0 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0 300 [7620] < L = +5% / -0 ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.		THIRD-ANGLE PROJECTION THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION ALL RIGHTS RESERVED. SHEET 1 OF 1 SCALE N/A REV A
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