

## 0 to 70 dB Rotary Step Attenuator, N-type Female to N-type Female With 1 dB Step Rated to 2 Watts Up to 6 GHz



### PE7440N-70

#### Features

- 1 dB steps from 0 to 70 dB Attenuation
- Rotary Dial Control
- N Female Connectors
- -20°C to +85°C Operating Temperature
- ±1.5 dB Typical Attenuation Accuracy

#### Applications

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

#### Description

The PE7440N-70 is a Step Attenuator that has 70 dB of total attenuation with 1 dB step size and rotary dial design across a frequency range from DC to 6 GHz. The design is tried and true technology that offers exceptional performance characteristics that include 1.8 dB maximum insertion loss, and a maximum VSWR of 1.6:1 at 6 GHz. The design also features excellent attenuation accuracy with ±1.5 dB typical at 6 GHz. The Brass package has N Female connectors, and operates within the temperature range of -20°C to 85°C.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
Impedance		50		Ohms
Insertion Loss			1.8	dB
Attenuation Value		0 to 70		dB
Step Size		1		dB
Step Type		Rotary		
Input Power (CW)			2	Watts
Input Power, Peak 5µs Pulse Width, 2% Duty Cycle			100	Watts
VSWR			1.6:1	

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Range	DC to 6					GHz
Attenuation Accuracy	1.5					dB

Electrical Specification Notes:

Attenuation Accuracy specification is ±3.5% dB typ for any attenuation above 50dB.

#### Mechanical Specifications

##### Size

Length	4.724 in [119.99 mm]
Width	1.181 in [30 mm]
Height	2.098 in [53.29 mm]
Weight	0.05 lbs [22.68 g]

0 to 70 dB Rotary Step Attenuator, N-type Female to N-type Female With 1 dB Step Rated to 2 Watts Up to 6 GHz



**PE7440N-70**

**Connectors**

Description	Connector 1	Connector 2
Type	N Female	N Female
Contact Material and Plating	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 70 dB Rotary Step Attenuator, N-type Female to N-type Female With 1 dB Step Rated to 2 Watts Up to 6 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, N-type Female to N-type Female With 1 dB Step Rated to 2 Watts Up to 6 GHz PE7440N-70](#)

URL: <https://www.pasternack.com/70db-step-n-female-n-female-2-watts-attenuator-pe7440n-70-p.aspx>

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

# PE7440N-70 CAD Drawing

0 to 70 dB Rotary Step Attenuator, N-type Female to N-type Female With 1 dB Step Rated to 2 Watts Up to 6 GHz

REVISIONS		DATE	APPROVED
REV. A	DESCRIPTION INITIAL RELEASE	06/21/2022	SPONG

  
  

<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:          .X = ±.2 [5.08]    FRACTIONS ±.132          .XX = ±.02 [5.1]    ANGLES ± 1°          .XXX = ±.005 [13]    CABLE LENGTH (L) TOLERANCES:          L ≤ 12 [305] = ±.1 [25] / -0          12 [305] &lt; L ≤ 60 [1524] = ±.2 [51] / -0          60 [1524] &lt; L ≤ 120 [3048] = ±.4 [102] / -0          120 [3048] &lt; L ≤ 300 [7620] = ±.6 [152] / -0          300 [7620] &lt; L = +9.5% / -0</p> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>	<p><b>PE PASTERNAK</b> an INFINITE brand</p> <p>Pasternack Enterprises, Inc.          P.O. Box 16759, Irvine, CA 92623.          Phone: 1.949.261.1920   1.866.727.8376          Fax: 1.949.261.7451          Website: www.pasternack.com          E-mail: sales@pasternack.com</p>	<p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN CONTAINED HEREIN IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED.</p> <p>SHEET 1 OF 1</p> <p>SCALE N/A</p>
SIZE [CAGE CODE] DRAWN BY A 53919 PSRINIVAS	ITEM NO. PE7440N-70	REV A

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

T-Rev.D