



Positive Slope Equalizer, 6 GHz to 18 GHz, 4.8 dB Fixed Equalizing Value, 2 dB Loss, Max Pin +30 dBm, Field Replaceable SMA

## TECHNICAL DATA SHEET

PE70A9012

The PE70A9012 is a Positive Slope Equalizer module that covers a broadband frequency range from 6 GHz to 18 GHz and exhibits a fixed attenuation response that increases linearly with frequency. The 50 Ohm design has a positive slope equalizing value of 6 dB typical at 6 GHz. Positive Slope Equalizers are particularly useful in compensating for gain variation in systems where excessive losses occur at the lower end of the frequency band which may be due to low pass filtering effects in RF & Microwave systems and high-speed digital systems, or from long lengths of waveguide transmission. Impressive performance includes low insertion loss of 2 dB typ, 1.8:1 typ VSWR, and maximum RF input power handling of +30 dBm. The rugged and compact package design supports field replaceable SMA female connectors, operates across a wide temperature range of -20°C to +60°C, and can withstand relative humidity levels up to 95%.

### Features

- Positive Slope Equalizer Module
- Frequency Range: 6 GHz to 18 GHz
- 6 dB Fixed Equalizing Value
- Insertion Loss: 2 dB typ
- VSWR: 1.8:1 typ
- Maximum RF Input Power: +30 dBm
- 50 Ohm Design
- Field Replaceable SMA Connectors
- Compact Package Design withstands up to 95% Relative Humidity
- -20°C to +60°C Operating Temperature

### Applications

- Low Pass Filtering Compensation
- Cable or Waveguide Loss Compensation
- Amplifier Flatness Compensation
- Microwave Radio
- RF Transceivers
- SATCOM
- Test & Measurement
- Telecom Infrastructure

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	6		18	GHz
Small Signal Insertion Loss		2	3	dB
Equalizing Type		Positive		
Equalizing Value	4.8	6	7	dB
Input VSWR		1.8:1	2:1	
Output VSWR		1.8:1	2:1	
Impedance(IN/Out)		50		Ω
RF Input Power			+30	dBm

### Mechanical Specifications

Input Connector	SMA Female (Field Replaceable)
Output Connector	SMA Female (Field Replaceable)
Length	0.79in [20.07mm]
Width	0.63in [16mm]
Height	0.39in [9.91mm]
Weight	0.04lbs

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Positive Slope Equalizer, 6 GHz to 18 GHz, 4.8 dB Fixed Equalizing Value, 2 dB Loss, Max Pin +30 dBm, Field Replaceable SMA PE70A9012](#)



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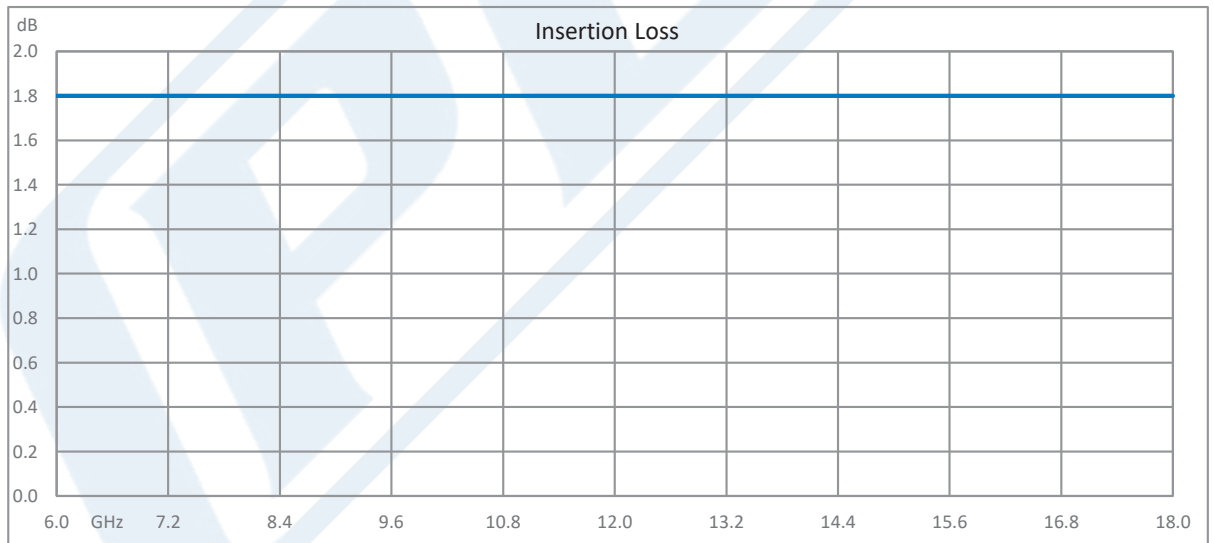
**Environmental**

Temperature	
Operating Range	-20 to +60 °C
Storage Range	-40 to +65 °C
Humidity	95% Non-Condensing

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

**Plotted and Other Data**

- Notes:
- Values at +25 °C, sea level



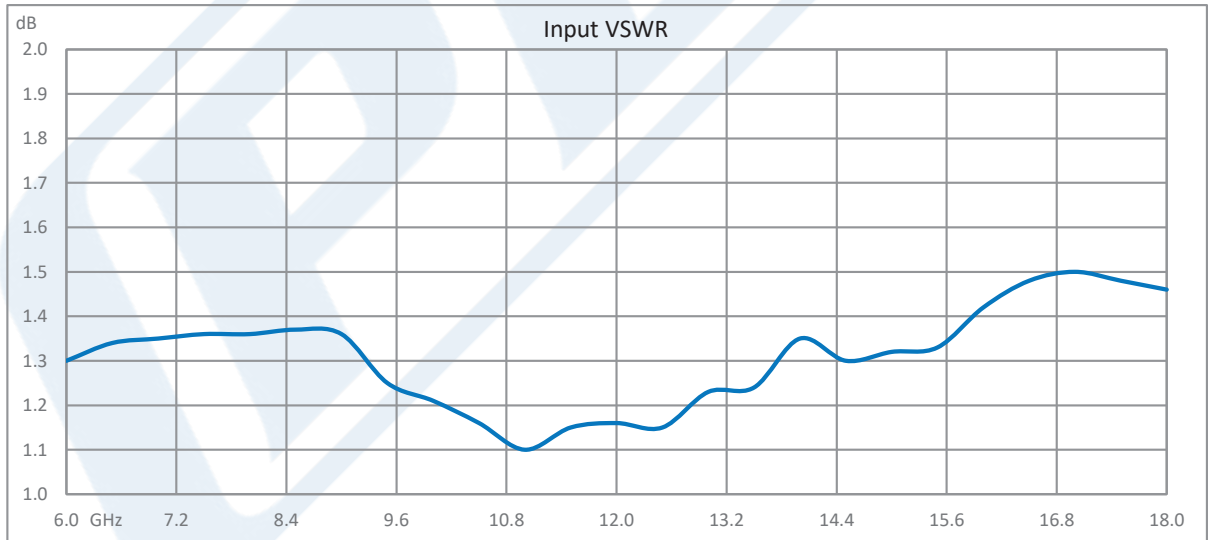
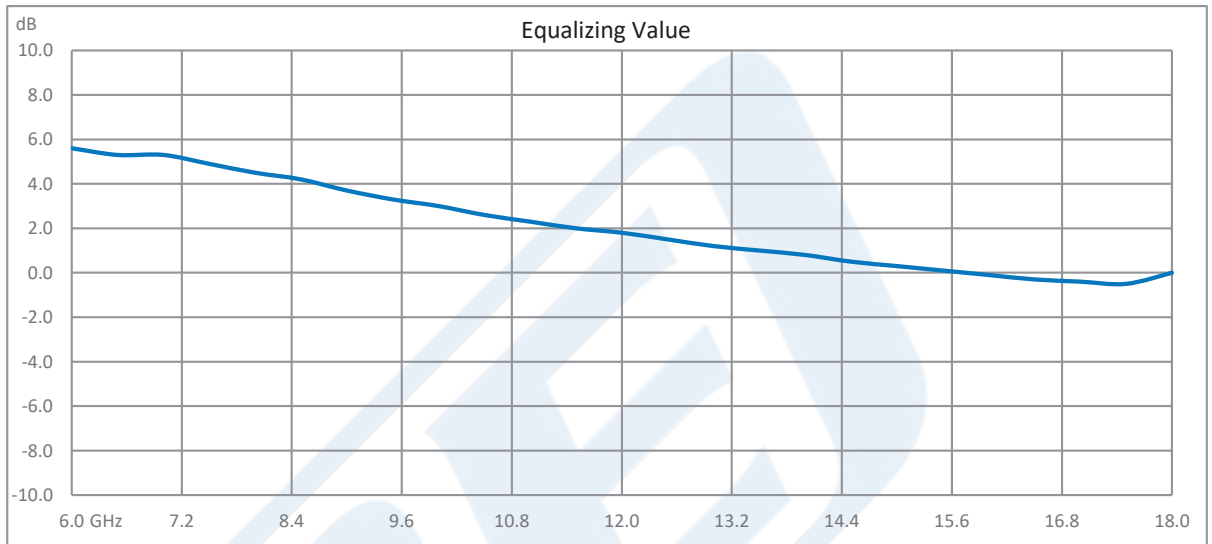
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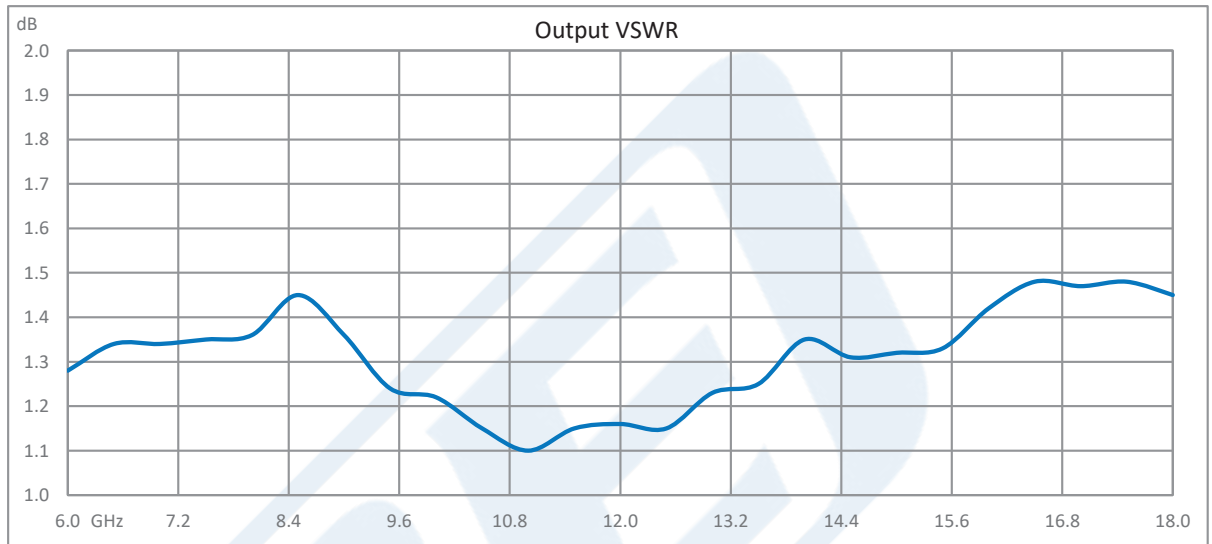
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Positive Slope Equalizer, 6 GHz to 18 GHz, 4.8 dB Fixed Equalizing Value, 2 dB Loss, Max Pin +30 dBm, Field Replaceable SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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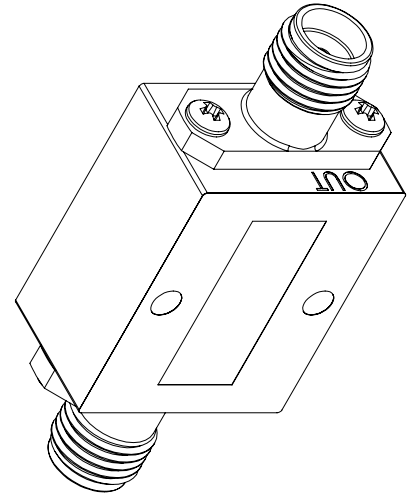
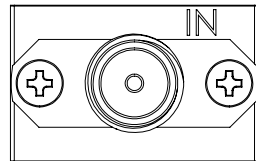
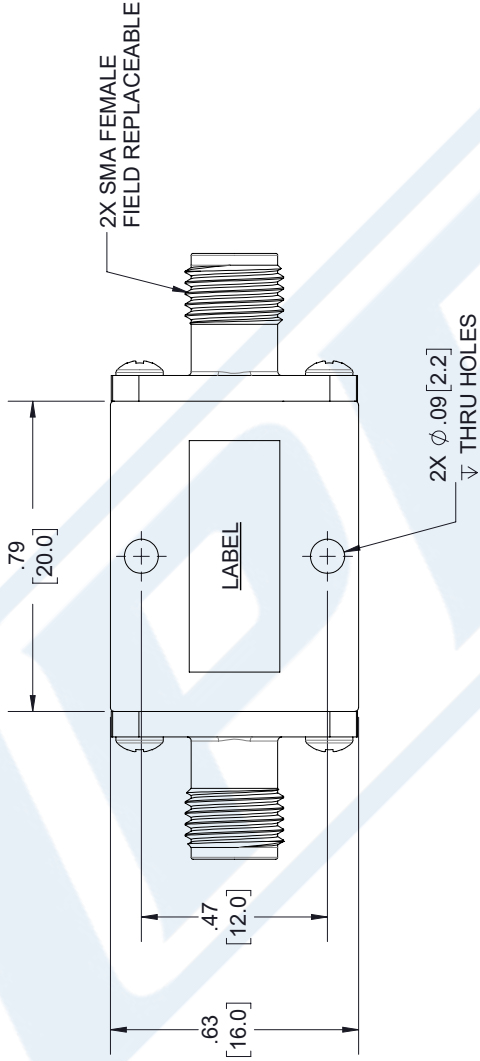
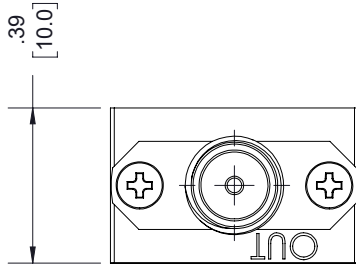
URL: <https://www.pasternack.com/pe70a9012-p.aspx>

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# PE70A9012 CAD Drawing

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REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	23-01-2020
		TCALLA



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

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SHEET 1 OF 1

SCALE N/A

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SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	MVEERAPPAN	PE70A9012

REV A

LABEL:  
PASTERNAK  
PE70A9012  
D/C: YYWW

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