



Negative Slope Equalizer, 1 GHz to 4 GHz, 3 dB Fixed Equalizing Value, 0.7 dB Loss, Max Pin 250 mW, SMA

TECHNICAL DATA SHEET

PE70A9019

The PE70A9019 is a Negative Slope Equalizer module that covers a frequency range from 1 GHz to 4 GHz and exhibits a fixed attenuation response that decreases linearly with frequency. The 50 Ohm design has an equalizing value of 3 dB typical at 4 GHz. Negative slope equalizers are particularly useful in compensating the gain slope in systems where large amounts of cabling may cause excessive loss at higher frequencies over the operating band. Impressive typical performance includes low insertion loss of 0.7 dB, 1.6:1 VSWR, +/- 0.5 dB linearity, and maximum RF input power handling of +24 dBm. The rugged and compact package design supports field replaceable SMA female connectors, operates across a wide temperature range of -55°C to +95°C, and meets MIL-E-5400 and MIL-E-16400 environmental requirements.

Features

- Negative Slope Equalizer Module
- Frequency Range 1 GHz to 4 GHz
- 3 dB Fixed Equalizing Value
- Insertion loss 0.7 dB typ
- VSWR 1.6:1 typ
- Linearity +/- 0.5 dB
- Maximum RF Input Power +24 dBm
- Operational Temperature Range -55°C to +95°C
- Field Replaceable SMA Female Connectors
- Rugged Mil Grade Aluminum Package Design
- Designed to meet MIL-E-5400 and MIL-E 16400 environmental requirements

Applications

- Gain Slope Compensation in Systems with excessive loss at higher frequencies over the Operating Band
- Aerospace & Defense
- Test & Measurement
- Microwave Radio Systems
- Military & Commercial Communication Systems
- Research & Development
- SATCOM
- Wireless Communications

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	1		4	GHz
Small Signal Insertion Loss		0.7		dB
Equalizing Type		Negative		
Equalizing Value		3		
Input VSWR		1.6:1		
Output VSWR		1.6:1		
Impedance(IN/Out)		50		Ohms
RF Input Power			24	dBm
Linearity		+/-0.5		dB

Mechanical Specifications

Input Connector	SMA Female (Field Replaceable)
Output Connector	SMA Female (Field Replaceable)
Length	0.59in 14.99mm
Width	0.63in 16mm

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Negative Slope Equalizer, 1 GHz to 4 GHz, 3 dB Fixed Equalizing Value, 0.7 dB Loss, Max Pin 250 mW, SMA PE70A9019](#)



Negative Slope Equalizer, 1 GHz to 4 GHz, 3 dB Fixed Equalizing Value, 0.7 dB Loss, Max Pin 250 mW, SMA

TECHNICAL DATA SHEET

PE70A9019

Height 0.39in 9.91mm
Weight 0.03lbs

Environmental

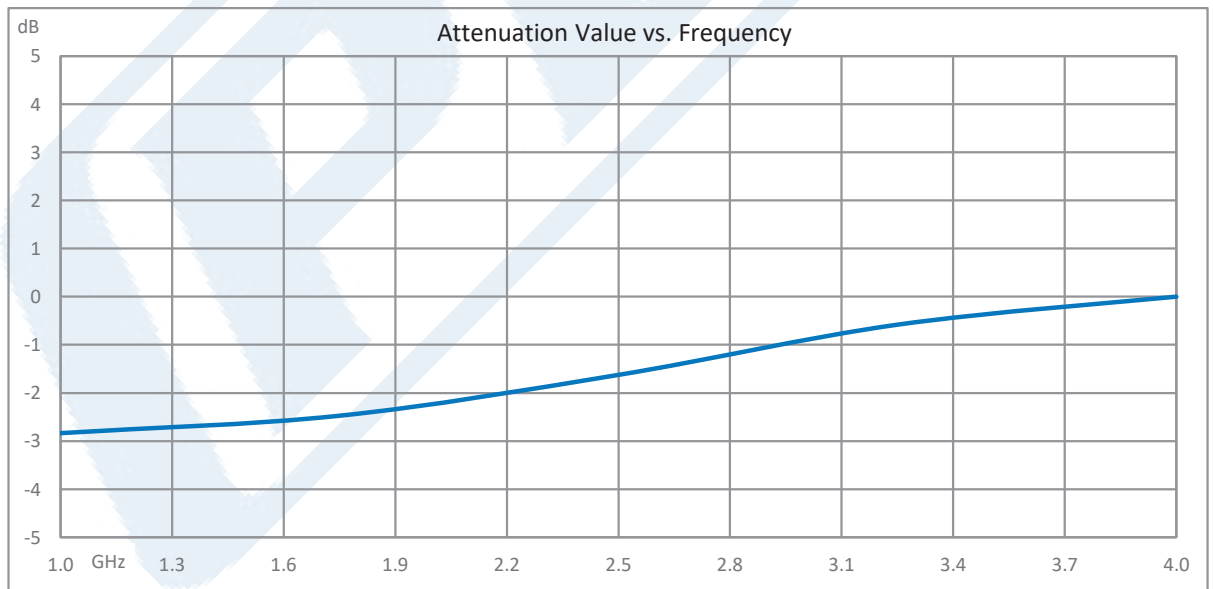
Temperature
Operating Range -55 to +95 deg C
Storage Range -65 to +125 deg C

Compliance Certifications (see for current document)

Plotted and Other Data

Notes:

- Values at +25 °C, sea level



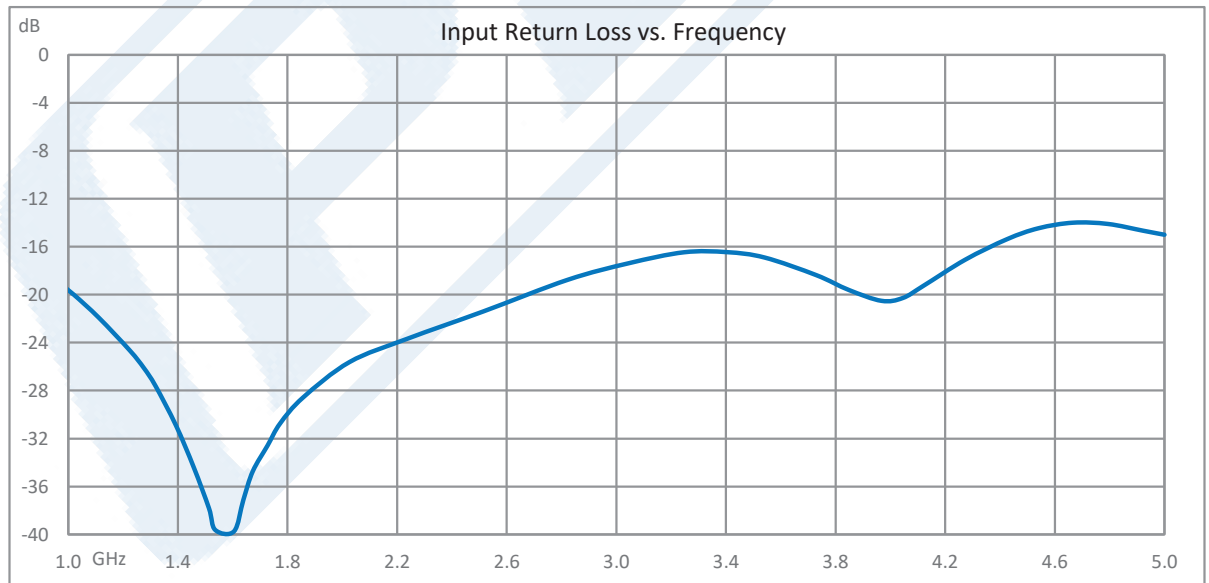
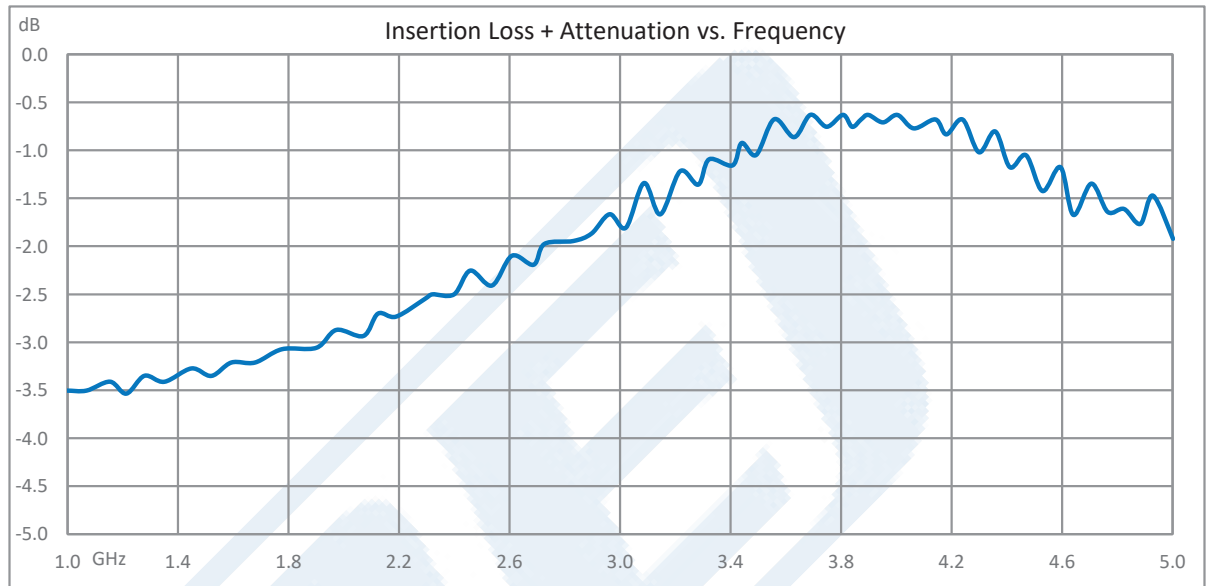
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Negative Slope Equalizer, 1 GHz to 4 GHz, 3 dB Fixed Equalizing Value, 0.7 dB Loss, Max Pin 250 mW, SMA PE70A9019](#)



Negative Slope Equalizer, 1 GHz to 4 GHz, 3 dB Fixed Equalizing Value, 0.7 dB Loss, Max Pin 250 mW, SMA

TECHNICAL DATA SHEET

PE70A9019



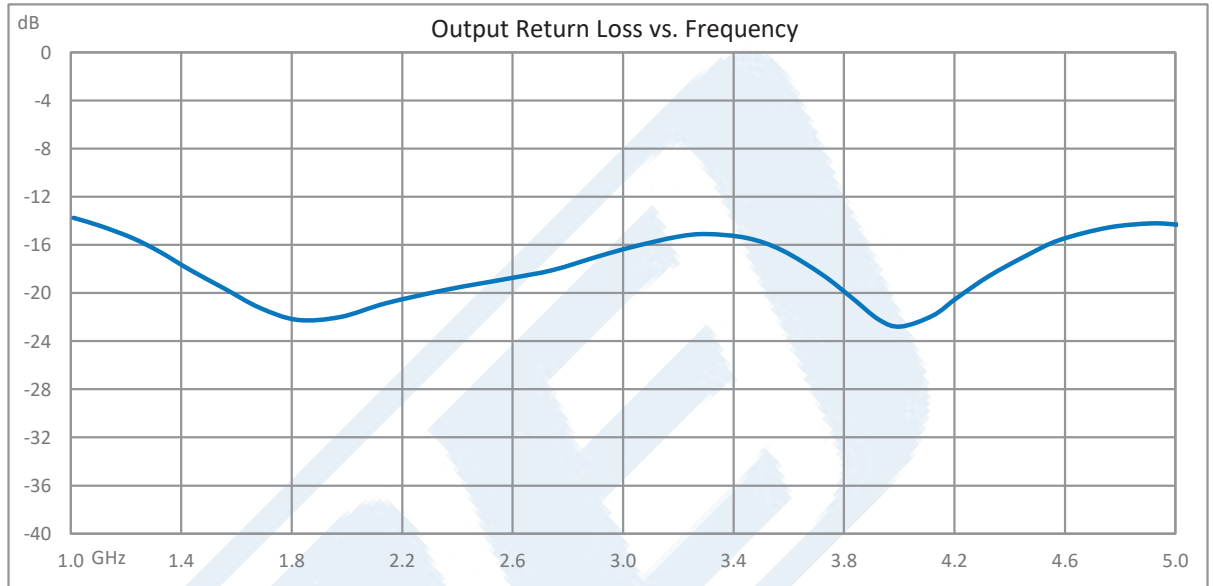
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Negative Slope Equalizer, 1 GHz to 4 GHz, 3 dB Fixed Equalizing Value, 0.7 dB Loss, Max Pin 250 mW, SMA PE70A9019](#)



Negative Slope Equalizer, 1 GHz to 4 GHz, 3 dB Fixed Equalizing Value, 0.7 dB Loss, Max Pin 250 mW, SMA

TECHNICAL DATA SHEET

PE70A9019



Negative Slope Equalizer, 1 GHz to 4 GHz, 3 dB Fixed Equalizing Value, 0.7 dB Loss, Max Pin 250 mW, 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Negative Slope Equalizer, 1 GHz to 4 GHz, 3 dB Fixed Equalizing Value, 0.7 dB Loss, Max Pin 250 mW, SMA PE70A9019](https://www.pasternack.com/negative-slope-equalizer-1-ghz-to-4-ghz-field-replaceable-sma-pe70a9019-p.aspx)

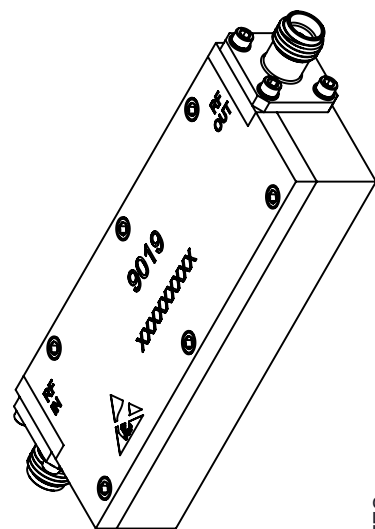
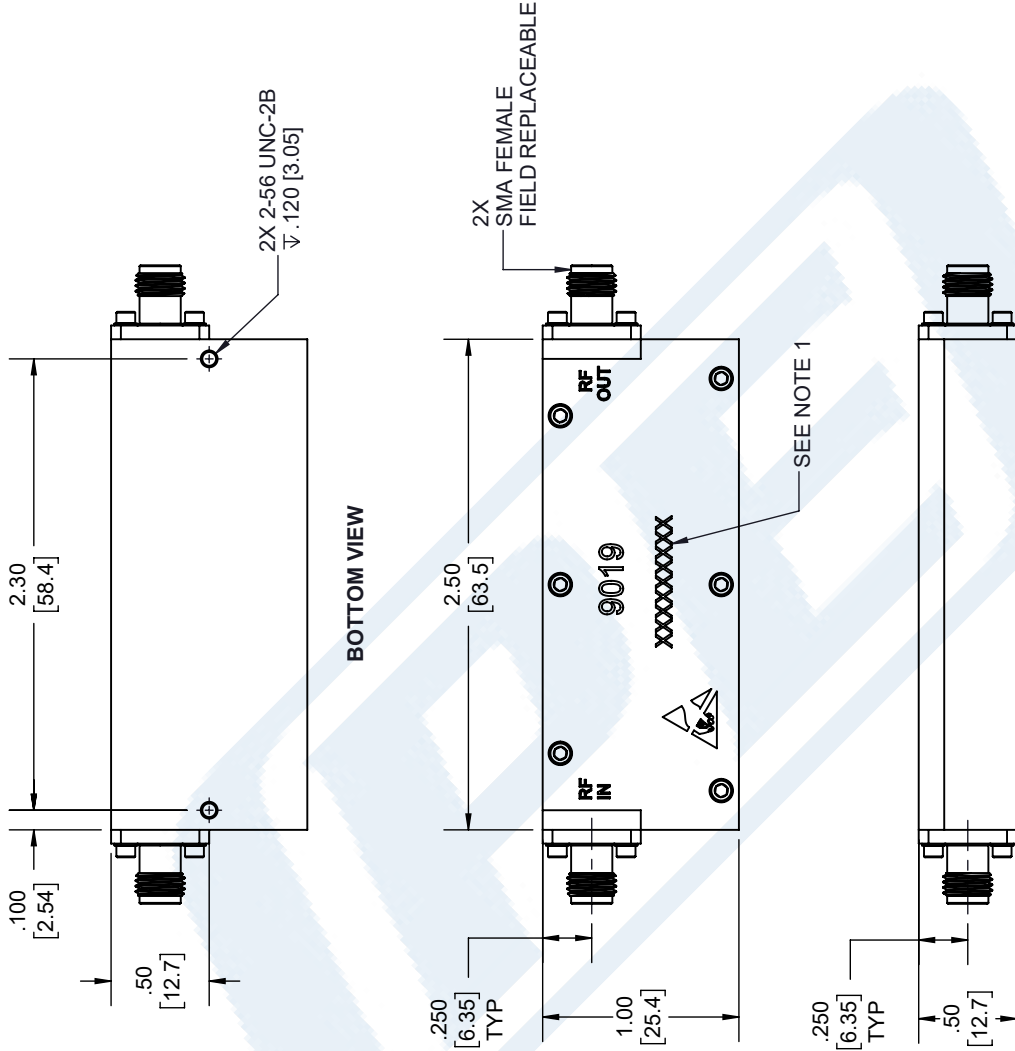
URL: <https://www.pasternack.com/negative-slope-equalizer-1-ghz-to-4-ghz-field-replaceable-sma-pe70a9019-p.aspx>

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.

PE70A9019 CAD Drawing

Negative Slope Equalizer, 1 GHz to 4 GHz, 3 dB Fixed Equalizing Value, 0.7 dB Loss, Max Pin 250 mW, SMA

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	3/4/2022	T. GALLA



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:
 .X = ±.2 [5.08] FRACTIONS ± 1/32
 .XX = ±.02 [.51] ANGLES ± 1°
 .XXX = ±.005 [.13]

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

ITEM NO. PE70A9019

DRAWN BY K.DANG

SIZE A

CAGE CODE 53919

DATE 3/4/2022

NOTES:

- SERIAL NUMBER AND DATE CODE ARE COMBINED.
EX: 221891396

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.