

Negative Slope Equalizer, 18 GHz to 26 GHz, 6 dB Fixed Equalizing Value, 1.3 dB Loss, Max Pin 250 mW, SMA

**TECHNICAL DATA SHEET**

**PE70A9038**

The PE70A9038 is a Negative Slope Equalizer module that covers a frequency range from 18 GHz to 26.5 GHz and exhibits a fixed attenuation response that decreases linearly with frequency. The 50 Ohm design has an equalizing value of 6 dB typical at 26.5 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 1.3 dB, 1.7:1 VSWR, +/- 0.75 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 18 GHz to 26.5 GHz
- 6 dB Fixed Equalizing Value
- Insertion loss 1.3 dB typ
- VSWR 1.7:1 typ
- Linearity +/- 0.75 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

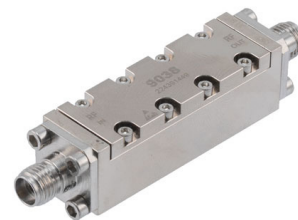
**Electrical Specifications**

| Description                 | Minimum | Typical  | Maximum | Units |
|-----------------------------|---------|----------|---------|-------|
| Frequency Range             | 18      |          | 26.5    | GHz   |
| Small Signal Insertion Loss |         | 1.3      |         | dB    |
| Equalizing Type             |         | Negative |         |       |
| Equalizing Value            |         | 6        |         |       |
| Input VSWR                  |         | 1.7:1    |         |       |
| Output VSWR                 |         | 1.7:1    |         |       |
| Impedance(IN/Out)           |         | 50       |         | Ohms  |
| RF Input Power              |         |          | 24      | dBm   |
| Linearity                   |         | +/-0.75  |         | 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, 18 GHz to 26 GHz, 6 dB Fixed Equalizing Value, 1.3 dB Loss, Max Pin 250 mW, SMA PE70A9038](#)



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Height 0.39in 9.91mm

Weight 0.03lbs

### Environmental

Temperature

Operating Range

Storage Range

-55 to +95 deg C

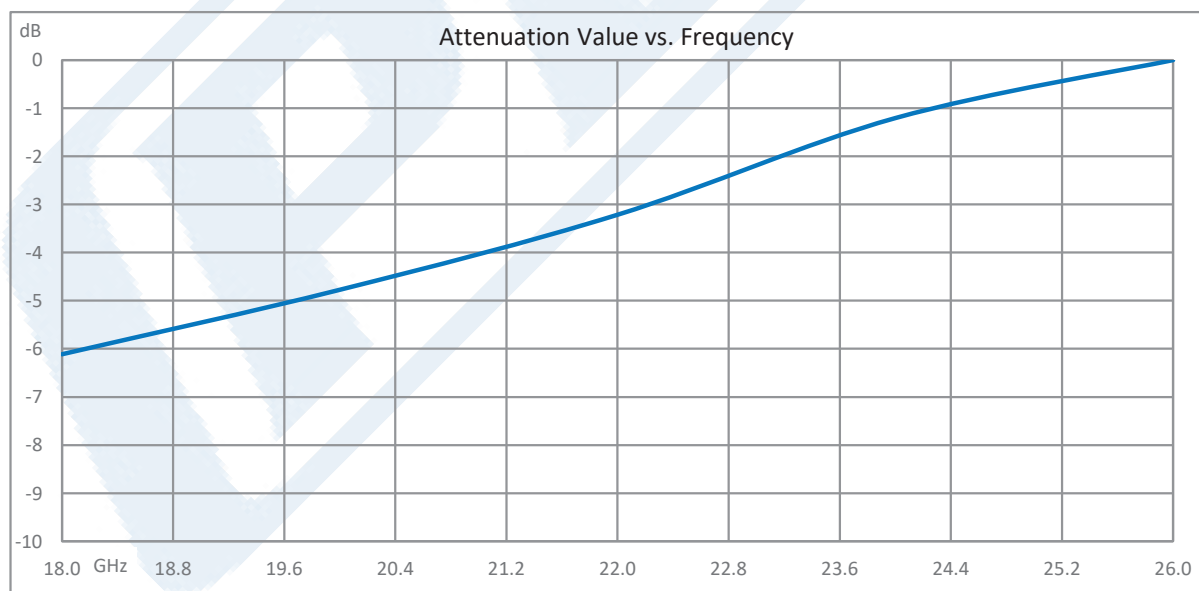
-65 to +125 deg C

**Compliance Certifications** (see for current document)

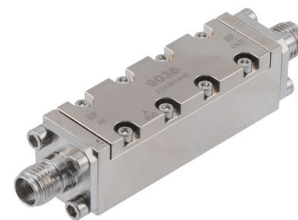
### Plotted and Other Data

Notes:

- Values at +25 °C, sea level



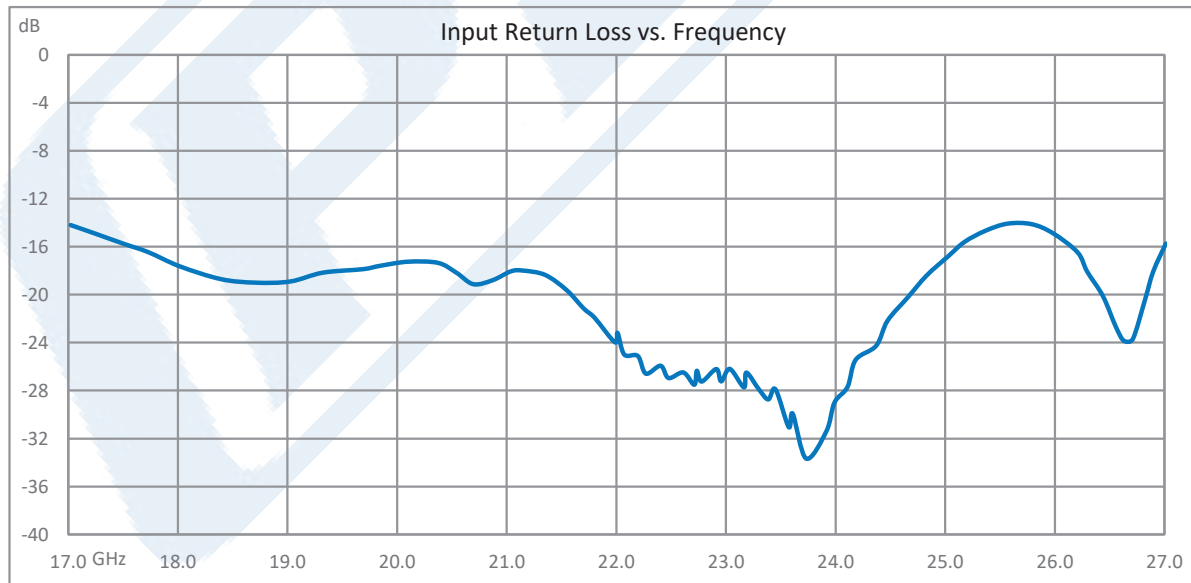
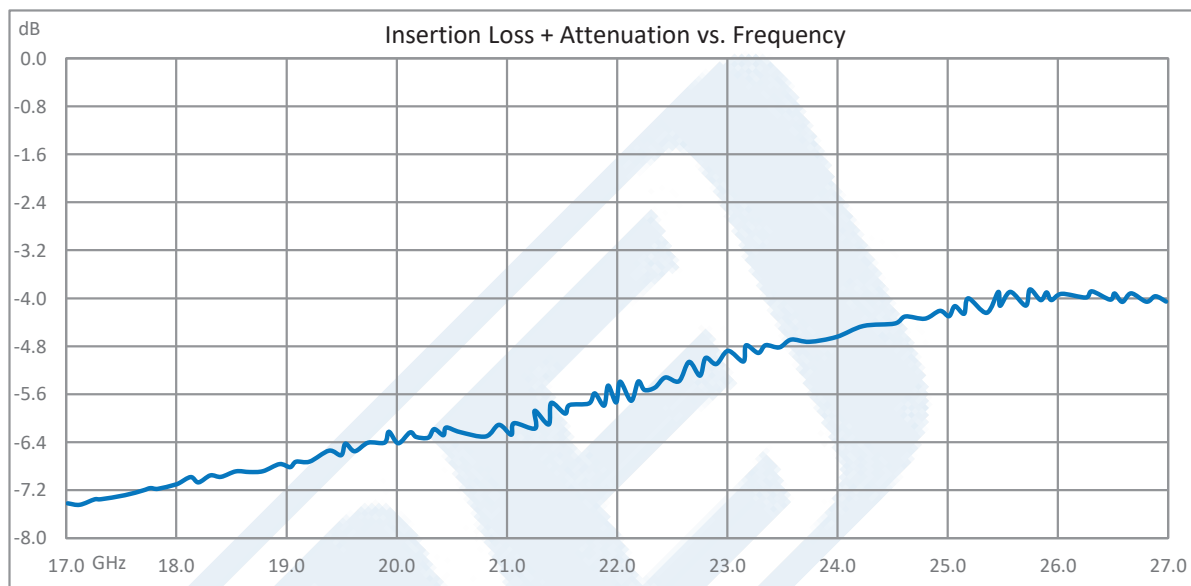
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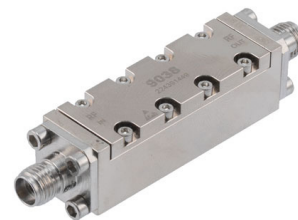
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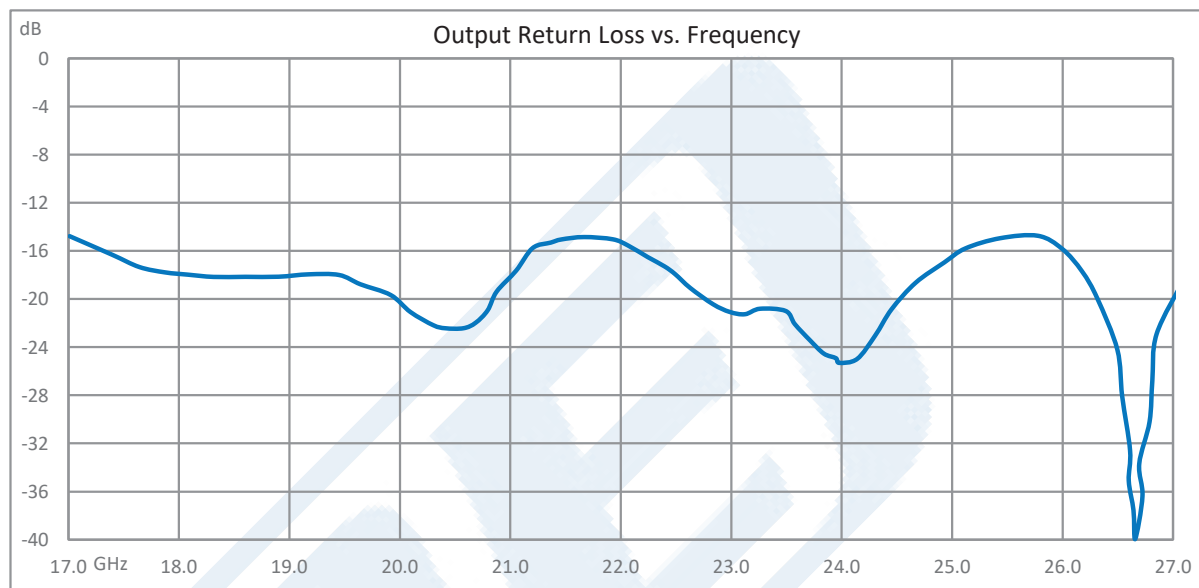
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Negative Slope Equalizer, 18 GHz to 26 GHz, 6 dB Fixed Equalizing Value, 1.3 dB Loss, Max Pin 250 mW, SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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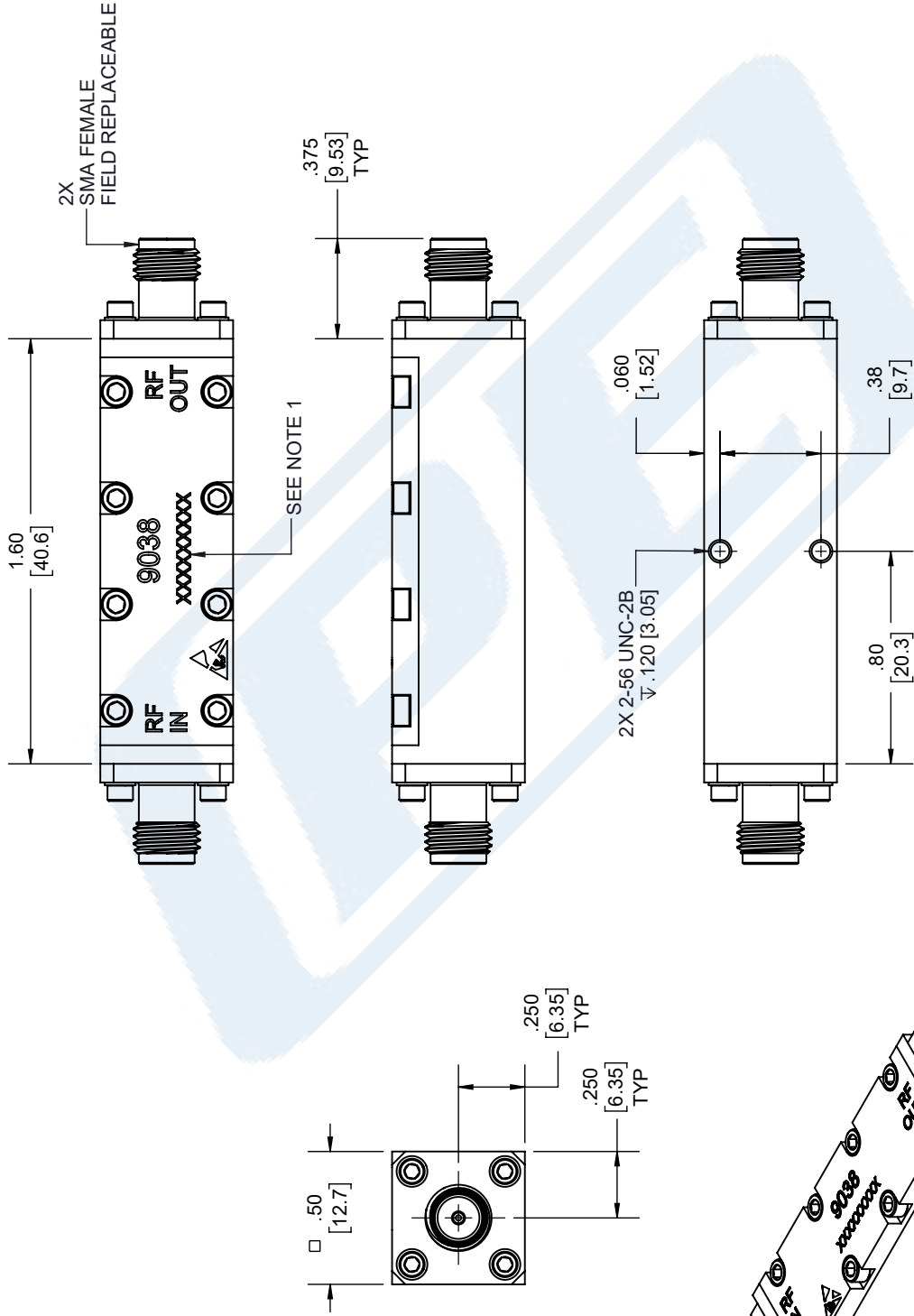
URL: <https://www.pasternack.com/Negative-slope-equalizer-18-ghz-to-26.5-ghz-field-replaceable-sma-pe70a9038-p.aspx>

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# PE70A9038 CAD Drawing

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| REVISIONS |                 |          |          |
|-----------|-----------------|----------|----------|
| REV.      | DESCRIPTION     | DATE     | APPROVED |
| A         | INITIAL RELEASE | 5/4/2022 | T. GALLA |



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |                                                                                                    |  |
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| <p><b>PASTERNAK</b><br/>an INFINITE brand</p> <p>Pasternack Enterprises, Inc.<br/>P.O. Box 16759, Irvine, CA 92623.<br/>Phone: 1.949.261.1920   1.866.727.8376<br/>Fax: 1.949.261.7451<br/>Website: www.pasternack.com<br/>E-mail: sales@pasternack.com</p>                                                                                                                                                                                                                                                                         |  | <p>SIZE A</p> <p>CAGE CODE 53919</p> <p>DRAWN BY K.DANG</p> <p>ITEM NO. PE70A9038</p> <p>REV A</p> |  |
| <p>UNLESS OTHERWISE SPECIFIED<br/>LEADING DIMENSIONS ARE INCHES<br/>DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <p>X = ± .2 [5.08] FRACTIONS<br/>.XX = ± .02 [ .51] ANGLES ± 1°<br/>.XXX = ± .005 [ .13] CABLE LENGTH (L) TOLERANCES:<br/>L ≤ 12 [305] = +1 [25] / -0<br/>12 [305] &lt; L ≤ 60 [1524] = +2 [51] / -0<br/>60 [1524] &lt; L ≤ 120 [3048] = +4 [102] / -0<br/>120 [3048] &lt; L ≤ 300 [7620] = +6 [152] / -0<br/>300 [7620] &lt; L = +5% / -0</p> <p>ALL DIMENSIONS SHOWN<br/>ARE FOR REFERENCE ONLY.</p> |  | <p>NOTES:</p> <p>1. SERIAL NUMBER AND DATE CODE ARE COMBINED.<br/>EX: 221891396</p>                |  |

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