Positive Slope Equalizer, 500 MHz to<br>$2 \mathrm{GHz}, 1.5 \mathrm{~dB}$ Fixed Equalizing Value, 1.4 dB Loss, Max<br>Pin +30 dBm , Field Replaceable SMA

## TECHNICAL DATA SHEET

The PE70A9000 is a Positive Slope Equalizer module that covers a frequency range from 500 MHz to 2000 MHz and exhibits a fixed attenuation response that increases linearly with frequency. The 50 Ohm design has an equalizing value of 2 dB typical at 500 MHz . 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 1.4 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 $-20^{\circ} \mathrm{C}$ to $+60^{\circ} \mathrm{C}$, and can withstand relative humidity levels up to $95 \%$.

## Features

- Positive Slope Equalizer Module
- Frequency Range: 500 MHz to 2000 MHz
- 2 dB Fixed Equalizing Value
- Insertion Loss: 1.4 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
- $-20^{\circ} \mathrm{C}$ to $+60^{\circ} \mathrm{C}$ 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 | 0.5 |  | 2 | GHz |
| Small Signal Insertion Loss |  | 1.4 |  | dB |
| Equalizing Type | 1.5 | Positive |  |  |
| Equalizing Value | 2 | 2.5 | dB |  |
| Input VSWR | $1.8: 1$ | $2.5: 1$ |  |  |
| Output VSWR | $1.8: 1$ | $2.5: 1$ |  |  |
| Impedence(IN/Out) | 50 |  | dBm |  |
| RF Input Power |  | +30 |  |  |

## Mechanical Specifications

Input Connector
Output Connector
Length
Width
Height
Weight

SMA Female (Field Replaceable)
SMA Female (Field Replaceable)
0.98 in [24.89mm]
0.87 in [22.1mm]
0.39 in [9.91mm]
0.05 lbs

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, 500 MHz to $2 \mathrm{GHz}, 1.5 \mathrm{~dB}$ Fixed Equalizing Value, 1.4 dB Loss, Max Pin +30 dBm , Field Replaceable SMA PE70A9000

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## TECHNICAL DATA SHEET

## Environmental

Temperature
Operating Range -20 to $+60^{\circ} \mathrm{C}$
Storage Range
Humidity
Compliance Certifications (see product page for current document)

## Plotted and Other Data

Notes:

- Values at $+25^{\circ} \mathrm{C}$, sea level


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## Positive Slope Equalizer, 500 MHz to

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Pin +30 dBm , Field Replaceable SMA



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## TECHNICAL DATA SHEET



Positive Slope Equalizer, 500 MHz to $2 \mathrm{GHz}, 1.5 \mathrm{~dB}$ Fixed Equalizing Value, 1.4 dB Loss, Max P in +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/pe70a9000-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.



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