



## 50 Ohm SMA Amplifier Operating From 10 MHz to 3 GHz With 20 dB Gain And 13 dB P1db

### TECHNICAL DATA SHEET

PE1513

#### 50 Ohm SMA Amplifier Operating From 10 MHz to 3 GHz With 20 dB Gain And 13 dB P1db

##### Configuration

Design	Broadband Amplifier
RF Input Connector	SMA Female
RF Input Connector Impedance	50 Ohms
RF Output Connector	SMA Female
RF Output Connector Impedance	50 Ohms
DC Bias Connector	Solder Pin

##### Electrical Specifications

Frequency Range, GHz	0.01 to 3
Typical Gain, dB	20
Output at 1 dB Compression Point, dBm	13
Maximum RF Input Power, dBm	13
Operating DC Voltage, Volts	9 to 15
Maximum DC Current, mA	50

##### Frequency 1

Frequency, MHz	10 to 1,000
Input Return Loss, dB	15
Output Return Loss, dB	-12
Output at 1 dB Compression Point, dBm	13
Noise Figure, dB	2.7
Gain, dB	20

##### Frequency 2

Frequency, GHz	1 to 2
Return Loss, dB	15
Output Return Loss, dB	-13
Output at 1 dB Compression Point, dBm	11
Noise Figure, dB	3.5
Gain, dB	17

##### Frequency 3

Frequency, GHz	2 to 3
Return Loss, dB	15
Output Return Loss, dB	-10
Output at 1 dB Compression Point, dBm	9
Noise Figure, dB	5
Gain, dB	14

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [50 Ohm SMA Amplifier Operating From 10 MHz to 3 GHz With 20 dB Gain And 13 dB P1db PE1513](#)

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.



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**Mechanical Specifications**

**Size**

Length, in [mm]	2.18 [55.37]
Width/Dia., in [mm]	1.18 [29.97]
Height, in [mm]	0.49 [12.45]

**RF Input Connector**

Type	SMA Female
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**RF Output Connector**

Type	SMA Female
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**DC Bias Connector**

Type	Solder Pin
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**Compliance Certifications** (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

RoHS Compliant	Yes
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**Plotted and Other Data**

Notes:	Values at 25 °C, sea level
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50 Ohm SMA Amplifier Operating From 10 MHz to 3 GHz With 20 dB Gain And 13 dB P1db from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

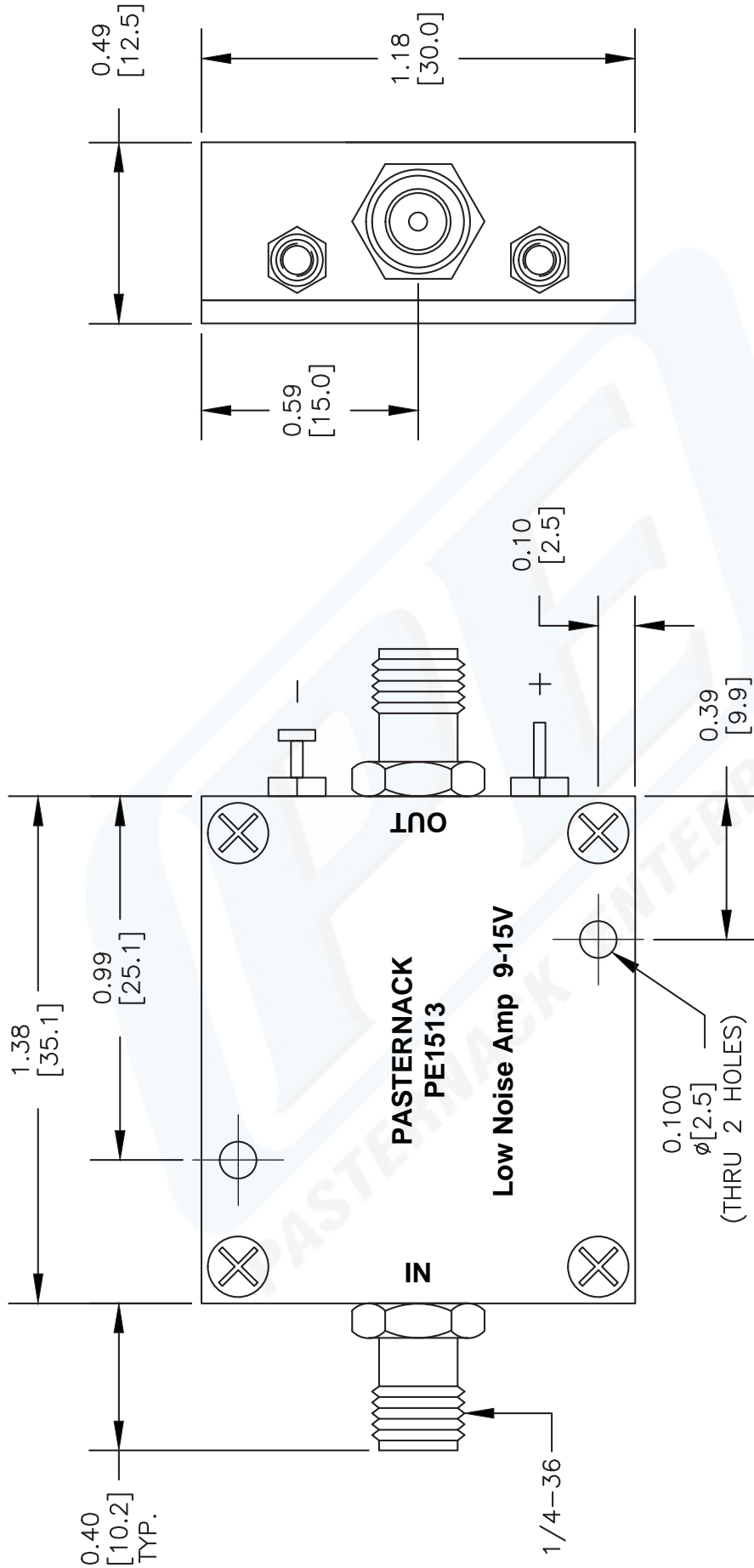
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# PE1513 CAD Drawing

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DWG TITLE

**PE1513**

NOTES:  
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
3. DIMENSIONS ARE IN INCHES [mm].

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CAD FILE 010411 SCALE N/A SIZE A 127