



15 dBm P1dB, 4 GHz to 8 GHz, Gain Block  
Amplifier, 26 dB Gain, 3 dB NF, SMA

TECHNICAL DATA SHEET

PE1522

The PE1522 is wideband general purpose RF coaxial gain block amplifier operating in the 4 GHz to 8 GHz frequency range. The amplifier offers 15 dBm of P1dB, 23 dB of Gain. This exceptional technical performance is achieved through the use of hybrid MIC design and advanced GaAs PHEMT devices. This gain block amplifier requires only a single positive supply, typically a +12V DC power supply and includes built-in voltage regulation, is unconditionally stable and operates over the temperature range of -30°C and +70°C.

**Features**

- 4 GHz to 8 GHz Frequency Range
- P1dB: 15 dBm
- High Small Signal Gain: 23 dB
- 50 Ohm Input and Output Matched
- -30 to +70°C Operating Temperature
- Unconditionally Stable
- Single DC Positive Supply
- Built-in Voltage Regulator

**Electrical Specifications** (TA = +25°C, DC Voltage = 12Volts, DC Current = 100mA)

Description	Minimum	Typical	Maximum	Units
Frequency Range	4		8	GHz
Small Signal Gain	23	26		dB
Gain Flatness		±0.5	±1	dB
Noise Figure			3	dB
Input VSWR			2:1	
Output VSWR			2:1	
Operating DC Voltage		12	12	Volts
Operating DC Current		100	120	mA
Operating Temperature Range	-30		+70	°C

**Mechanical Specifications**

**Size**

Length	2.36 in [59.94 mm]
Width	2.36 in [59.94 mm]
Height	0.75 in [19.05 mm]
Weight	0.027 lbs [12.25 g]
Input Connector	SMA Female
Output Connector	SMA Female

**Environmental Specifications**

**Temperature**

Operating Range	-30 to +70 deg C
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Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [15 dBm P1dB, 4 GHz to 8 GHz, Gain Block Amplifier, 26 dB Gain, 3 dB NF, SMA PE1522](#)



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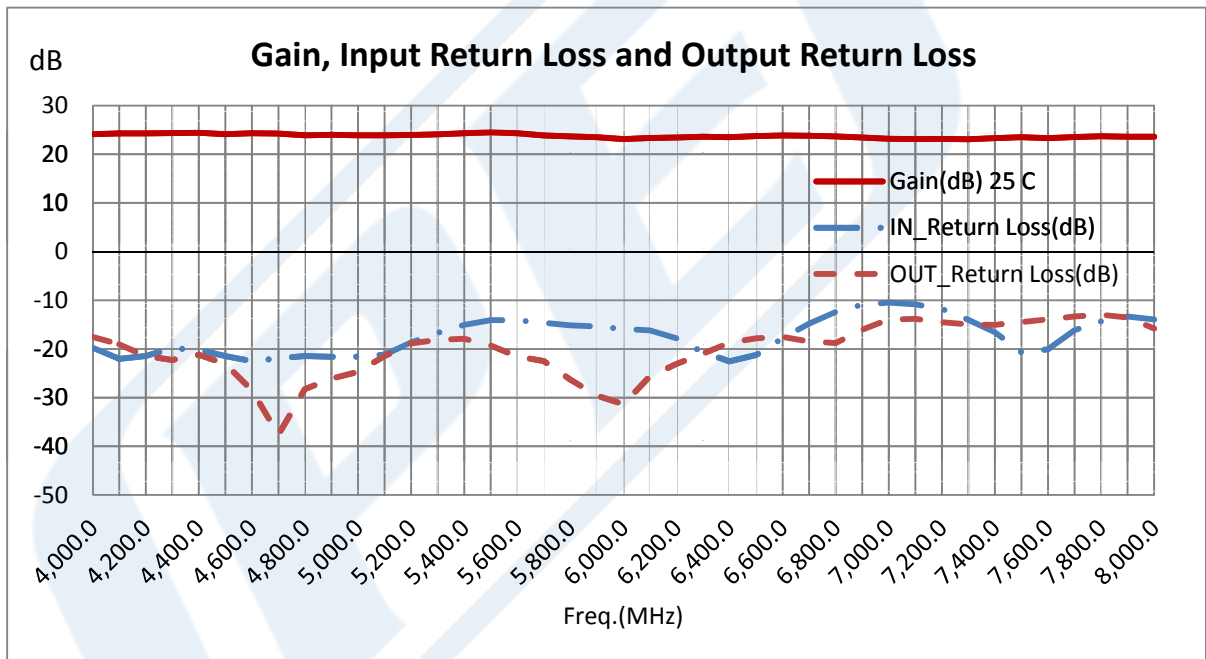
**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

- Values at +25 °C, sea level
- ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.

**Typical Performance Data**



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15 dBm P1dB, 4 GHz to 8 GHz, Gain Block Amplifier, 26 dB Gain, 3 dB NF, 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.

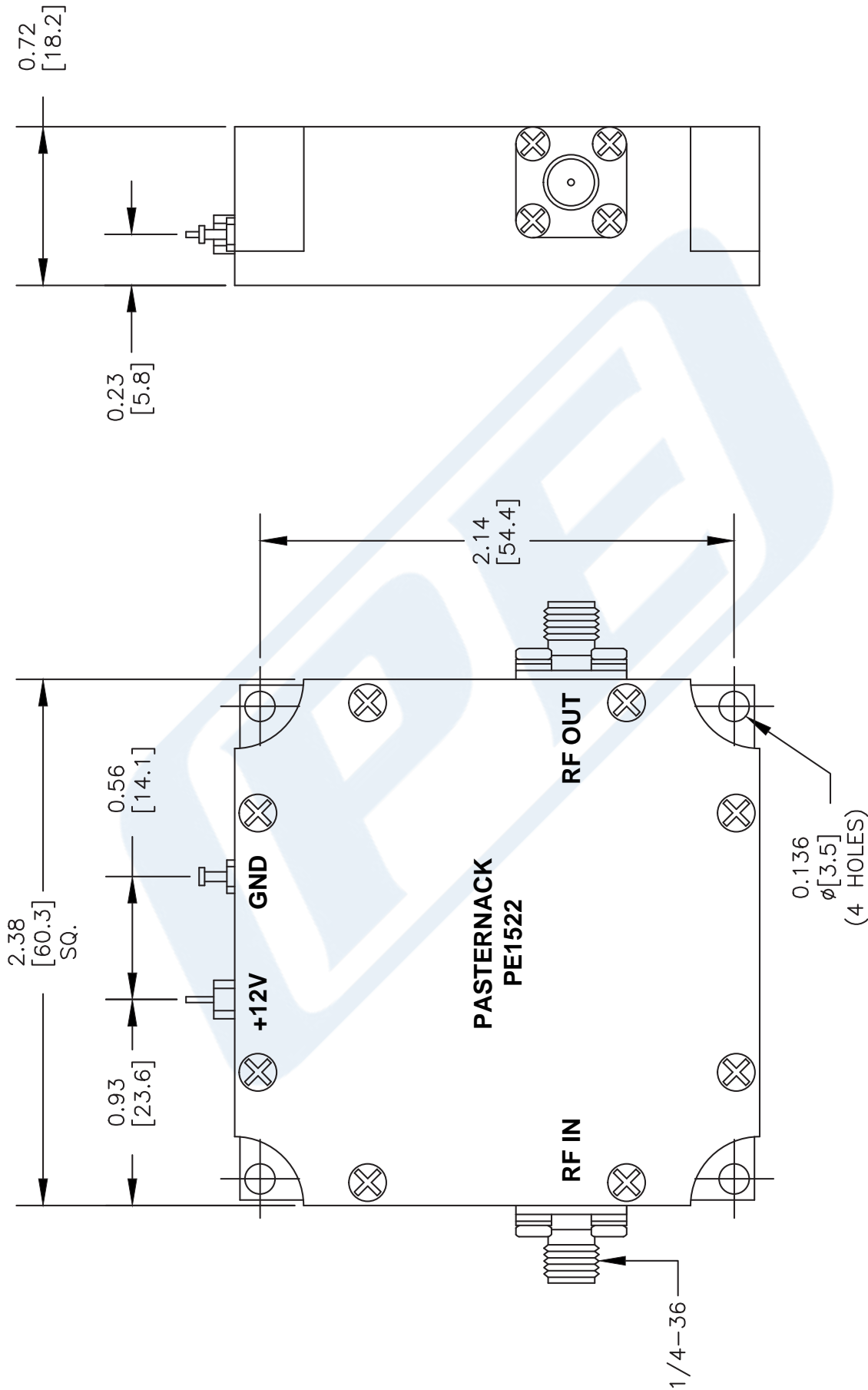
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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.

# PE1522 CAD Drawing

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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].

DWG TITLE		REV. A	
<b>PE1522</b>		FSCM NO. 53919	
CAD FILE	SCALE	SIZE	
031208-A	N/A	A	147

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