PASTERNACK®
THE ENGINEER'S RF SOURCE



11 dBm P1dB, 10 MHz to 3 GHz, Gain Block Amplifier, 15 dB Gain, 12 dBm IP3, 3 dB NF, SMA

TECHNICAL DATA SHEET PE1528

The PE1528 is a low noise RF coaxial amplifier operating in the 10 MHz to 3 GHz frequency range. The amplifier offers noise figure of 3.0 dB typical, 11 dBm typical P1dB, and 15 dB small signal gain. This exceptional technical performance is achieved through the use of a hybrid MIC design and advanced SiGe HBT technology. The low noise amplifier requires an operating voltage between 7-18 VDC. The connectorized SMA module is unconditionally stable and includes built-in voltage regulation and bias sequencing.

Features

- 10 MHz to 3 GHz frequency range
- P1db:11dbm Typ
- Small Signal Gain: 15 db Typ
- Noise Figure: 3.0 db Typ
- SiGe HBT Technology
- 50 Ohm Input and Output Matched
- Unconditionally Stable
- Single DC Positive Supply With EMI Filter
- Built-in voltage regulator
- Compact Aluminum Case

Applications

- Laboratory Applications
- R&D Labs
- RADAR Systems
- Telecom Infrastructure
- Test Instrumentation
- Communication Systems
- UMTS
- Wireless Communication
- Microwave Radio Systems
- Cellular Base Station, Repeaters
- Low Noise Amplifier
- General Purpose Amplification
- General Purpose Wireless
- GSM
- Wideband Gain Block
- IF Amplifier/RF Driver Amp
- RF Wideband Front Ends
- RF Pre Amplification
- Satellite

Electrical Specifications (TA = +25°C, DC Voltage = 18Volts, DC Current = 40mA)

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.01		3	GHz
Small Signal Gain		15		dB
Gain Flatness		±2		dB
Output 3rd Intercept Point	+10.5	+12		dBm
Noise Figure		3		dB
Operating DC Voltage	7		18	Volts
Operating DC Current		40		mA
Operating Temperature Range	-40		+70	°C

RF Characteristic

Description	Band 1	Band 2	Band 3	Units
Frequency Range	0.01 to 1	1 to 2	2 to 3	GHz
Small Signal Gain	16.5	15.2	14	dB
Input Return Loss	19	15	14	dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 11 dBm P1dB, 10 MHz to 3 GHz, Gain Block Amplifier, 15 dB Gain, 12 dBm IP3, 3 dB NF, SMA PE1528

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Output Return Loss	20	16	16	dB
Output at 1 dB Compression Point	11.5	11	10	dBm
Output 3rd Intercept Point	12.3	12	10.5	dBm

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

- Values at +25 °C, sea level

11 dBm P1dB, 10 MHz to 3 GHz, Gain Block Amplifier, 15 dB Gain, 12 dBm IP3, 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% availability and are part of the broadest selection in the industry.

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URL: https://www.pasternack.com/3-ghz-gain-block-amplifier-15-db-gain-3-db-sma-pe1528-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.

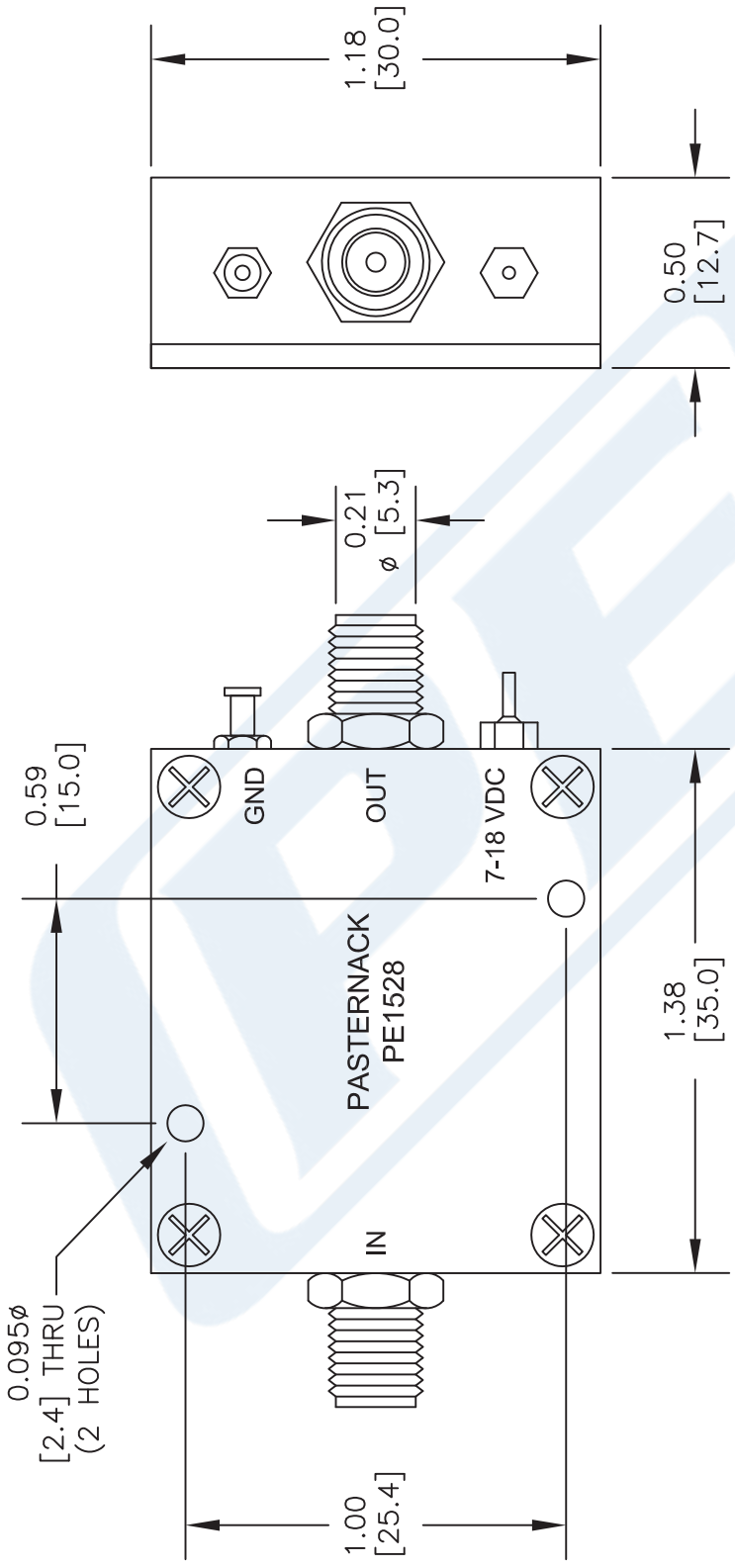
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PE1528 CAD Drawing

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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].

CAD FILE	072616	SCALE N/A	SIZE A	2233

DWG TITLE **PE1528**

FSCM NO. 53919

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