



23 dBm P1dB, 50 MHz to 4 GHz, Gain Block Amplifier, 26 dB Gain, 35 dBm IP3, 5 dB NF, SMA

TECHNICAL DATA SHEET

PE15A8000

The PE15A8000 is wideband general purpose RF coaxial gain block amplifier operating in the 0.05 GHz to 4 GHz frequency range. The amplifier offers 23 dBm of P1dB, 26 dB of Gain, IP3 of 35 dBm. 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 -40°C and +75°C.

Features

- 50 MHz to 4 GHz Frequency Range
- P1dB: 23 dBm
- High Small Signal Gain: 26 dB
- IP3: 35 dBm
- 50 Ohm Input and Output Matched
- -40 to +75°C Operating Temperature
- Unconditionally Stable
- Single DC Positive Supply
- Built-in Voltage Regulator

Applications

- Laboratory Applications
- R&D Labs
- Military Radio
- Radar Systems
- Telecom Infrastructure
- Test Instrumentation
- Military & Space
- Communication Systems
- Wireless Communication
- Microwave Radio Systems
- Cellular Base Stations
- Low Noise Amplifier
- General Purpose Amplification
- General Purpose Wireless
- Wideband Gain Block
- IF Amplifier/RF Driver Amplifier
- RF Wideband Front Ends
- RF Pre-amplification

Electrical Specifications (TA = +25°C, DC Voltage = 12Volts, DC Current = 120mA)

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.05		4	GHz
Small Signal Gain	24	26	28	dB
Gain Flatness		±1	±1.25	dB
Gain Variance at OTR*			±1	dB
Output at 1 dB Compression Point		+23		dBm
Output 3rd Intercept Point	+32	+35		dBm
Noise Figure		5	6	dB
Input VSWR		1.6:1	1.8:1	
Output VSWR		1.6:1	1.8:1	
Reverse Isolation	45	55		dB
Operating DC Voltage	11.5	12	13	Volts
Operating DC Current		120	220	mA
Operating Temperature Range	-40		+75	°C

*OTR= Base Plate Operating Temperature Range

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [23 dBm P1dB, 50 MHz to 4 GHz, Gain Block Amplifier, 26 dB Gain, 35 dBm IP3, 5 dB NF, SMA PE15A8000](#)



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Absolute Maximum Rating

Parameter	Rating	Units
Source Voltage	+13	Volts
RF input Power	+10	dBm
Operating Temperature (base-plate)	-40 to +75	°C
Storage Temperature	-55 to +125	°C



ESD Sensitive Material,
Transport material in
Approved ESD bags.
Handle only in approved
ESD Workstation.

Compliance Certifications (visit www.Pasternack.com for current document)

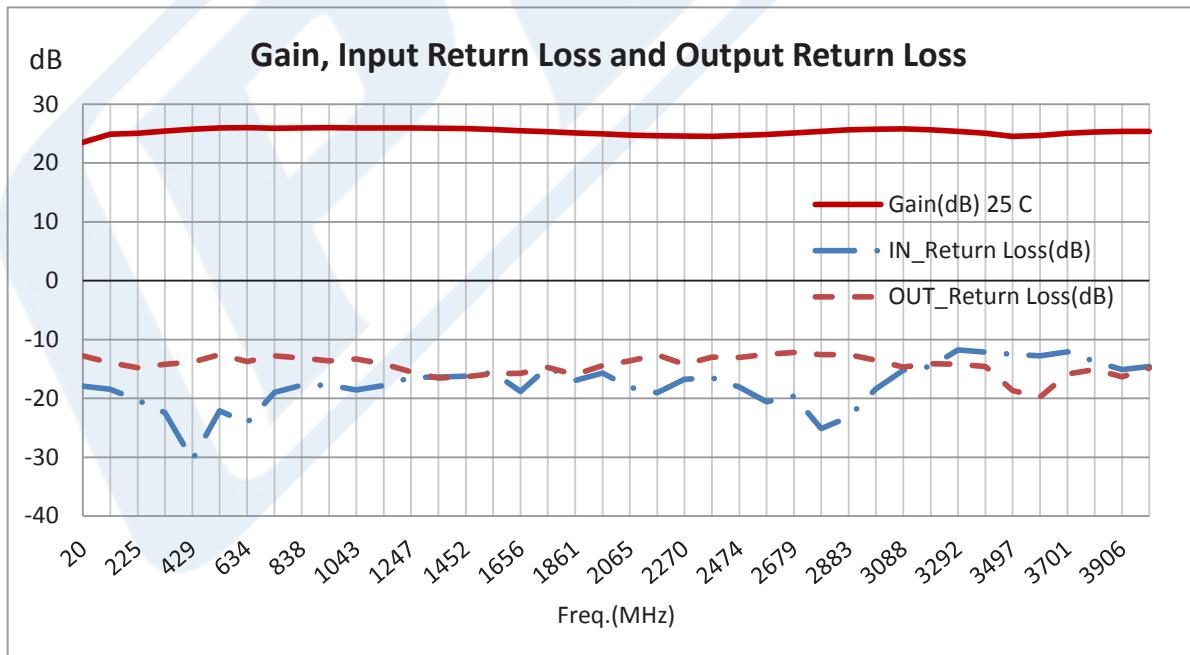
RoHS Compliant

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.

Power Data



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23 dBm P1dB, 50 MHz to 4 GHz, Gain Block Amplifier, 26 dB Gain, 35 dBm IP3, 5 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.

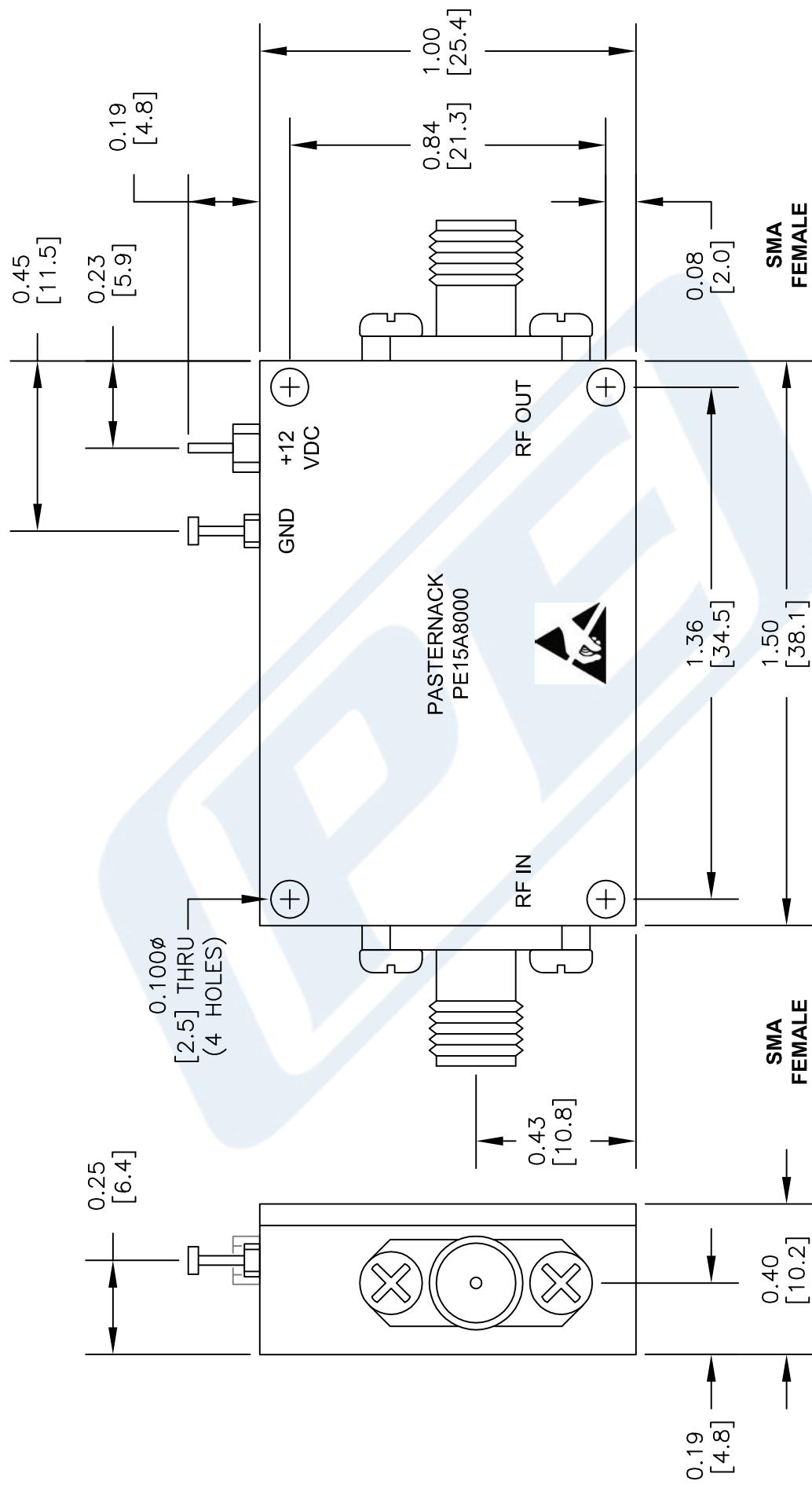
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URL: <http://www.pasternack.com/4-ghz-gain-block-amplifier-26-db-gain-35-dbm-ip3-sma-pe15a8000-p.aspx>

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.

PE15A8000 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].

PASTERNACK THE ENGINEER'S RF SOURCE	DWG TITLE PE15A8000	FSCM NO. 53919	CAD FILE 011414	SCALE N/A	SIZE A	2233
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单击下面可查看定价, 库存, 交付和生命周期等信息

[**>>PASTERNACK**](#)