



24.5 dBm P1dB, 12.4 GHz to 26.5 GHz, Medium Power Broadband Amplifier, 35 dB Gain, 3 dB NF, SMA

TECHNICAL DATA SHEET

PE15A3024

PE15A3024 is a Broadband General Purpose High Gain GaAs PHEMT MMIC-based coaxial Amplifier, operating in the 12.4 to 26.5 GHz frequency range, covering Ku & K band and beyond. The amplifier offers 3 dB typ Noise Figure, 24.5 dBm typ P1dB and 35 dB typ small signal gain, with gain flatness of ± 2.0 dB typ. This amplifier requires only a single positive DC supply, is unconditionally stable, operates over the temperature range of -40°C to 50°C . The package is compact size and lightweight and uses female SMA connectors.

Features

- 12.4 to 26.5 GHz Frequency Range
- Noise Figure: 3 dB typ
- Small Signal Gain: 35 dB typ
- Gain Flatness: ± 2.0 dB typ
- P1dB: +20 dBm min
- 50 Ohm Input and Output Matched
- -40 to $+50^{\circ}\text{C}$ Operating Temperature
- Unconditionally Stable
- Single DC Positive Supply
- Built-in DC Voltage Regulator
- Small Size & Light Weight
- Covers Ku & K band and beyond

Applications

- Telecommunications
- Test Instruments & Lab Equipment
- Transceiver Subassemblies

Electrical Specifications (TA= 25°C)

Description	Minimum	Typical	Maximum	Units
Frequency Range	12.4		26.5	GHz
Gain	30	35		dB
Gain Flatness		± 2		dB
Output at 1 dB Compression Point	+20	+24.5		dBm
Noise Figure		3	4.5	dB
Input Return Loss		20		dB
Output Return Loss		18		dB
Operating DC Voltage 1	8		12	Volts
Operating DC Current		500		mA
Operating Temperature Range (OTR)	-40		$+50$	$^{\circ}\text{C}$

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [24.5 dBm P1dB, 12.4 GHz to 26.5 GHz, Medium Power Broadband Amplifier, 35 dB Gain, 3 dB NF, SMA PE15A3024](#)



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Mechanical Specifications

Size

Length	1.2 in [30.48 mm]
Width	1.2 in [30.48 mm]
Height	0.6 in [15.24 mm]
Weight	0.1115 lbs [50.58 g]
Input Connector	SMA Female
Output Connector	SMA Female

Environmental Specifications

Temperature

Operating Range	-40 to +50 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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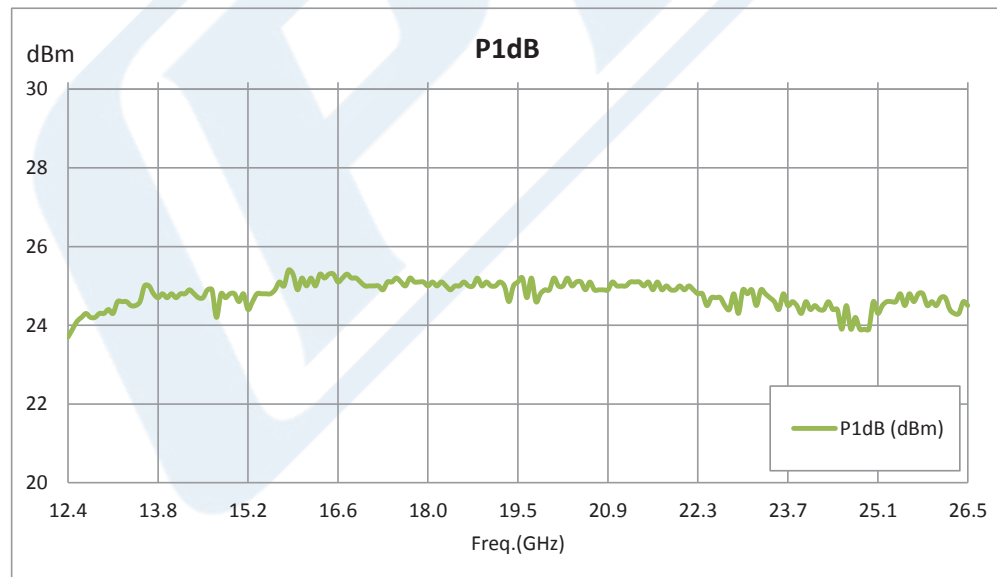
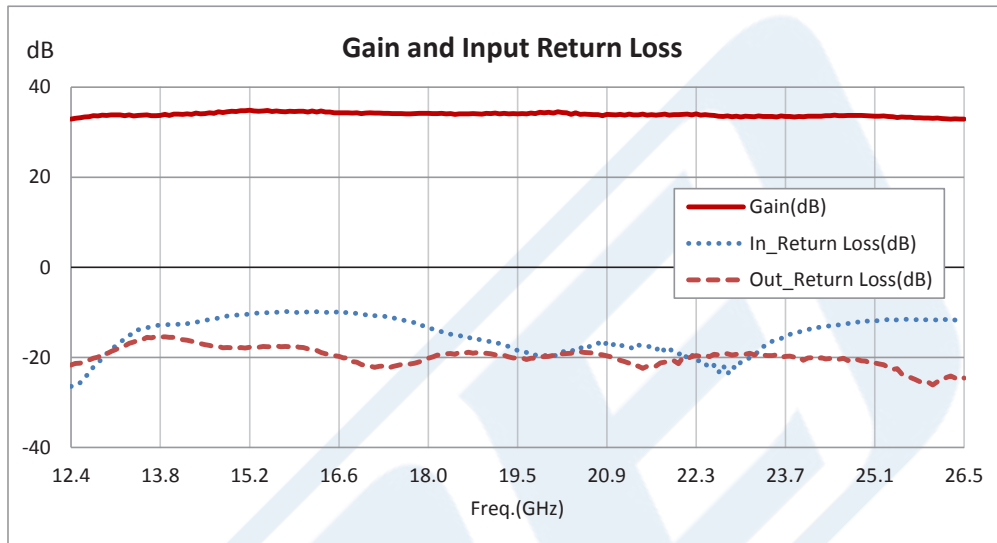


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Typical Performance Data



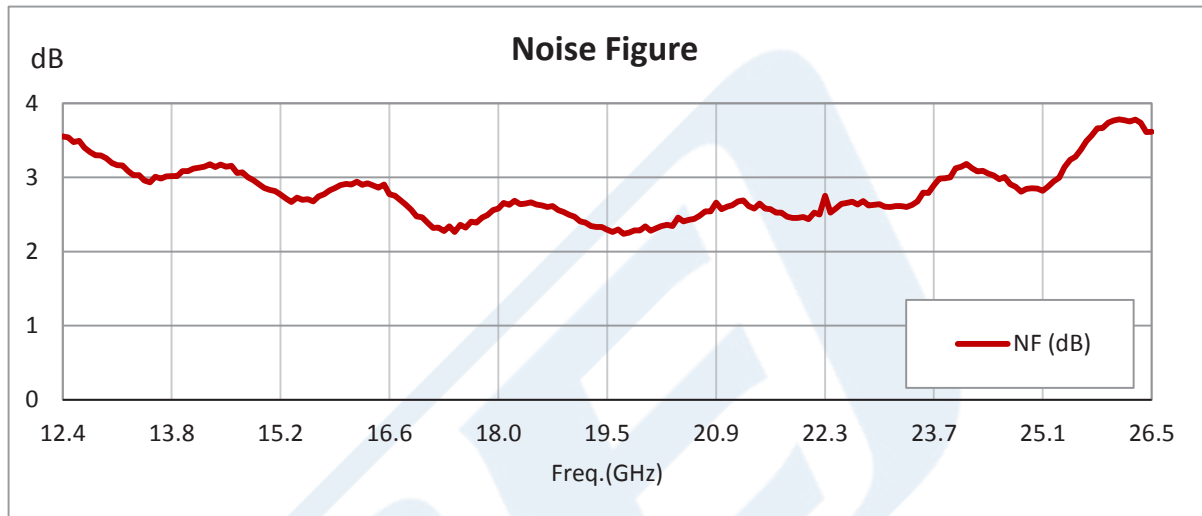
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24.5 dBm P1dB, 12.4 GHz to 26.5 GHz, Medium Power Broadband Amplifier, 35 dB Gain, 3 dB NF, SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

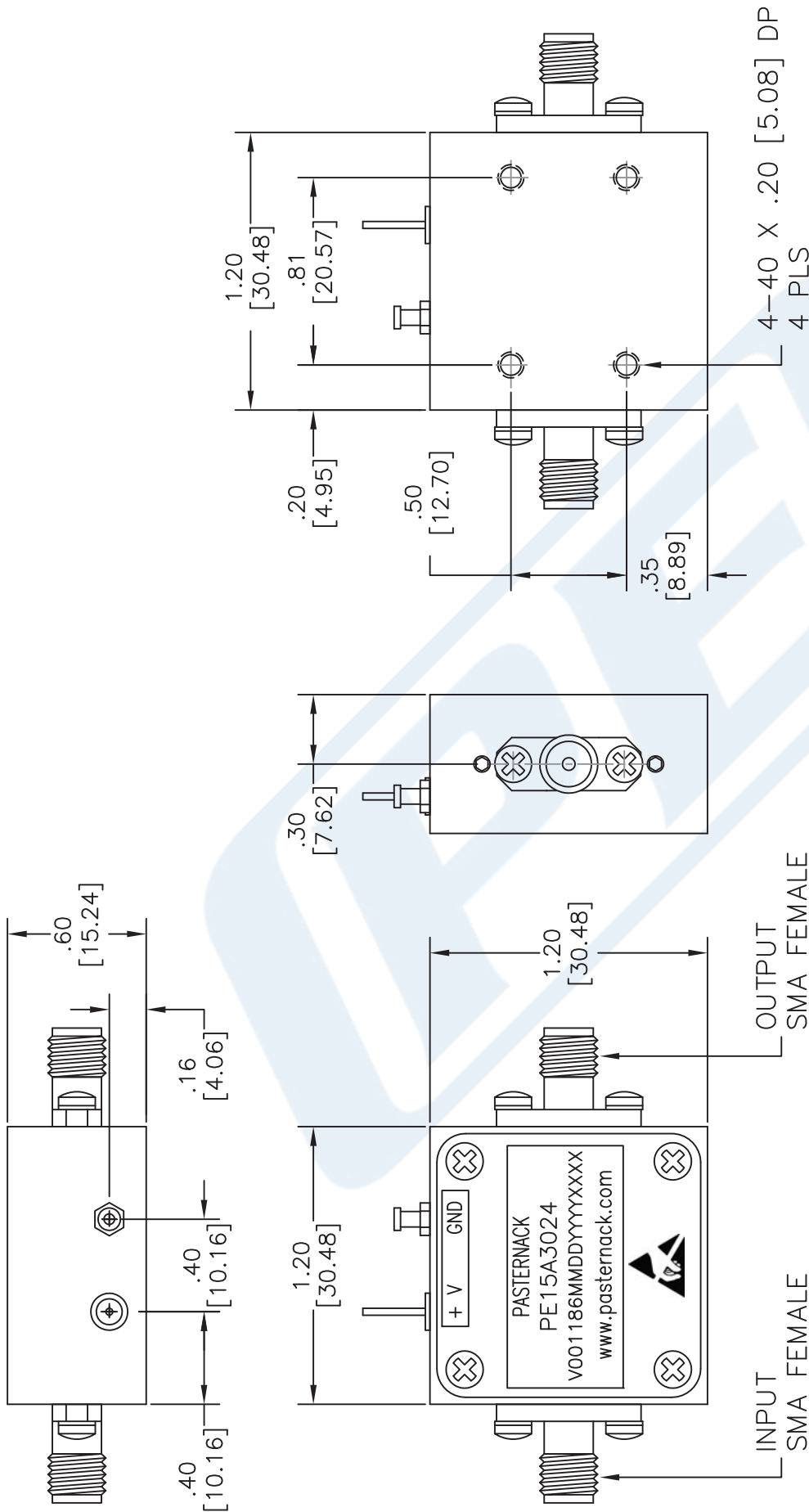
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [24.5 dBm P1dB, 12.4 GHz to 26.5 GHz, Medium Power Broadband Amplifier, 35 dB Gain, 3 dB NF, SMA PE15A3024](https://www.pasternack.com/26.5-ghz-medium-power-broadband-amplifier-30-db-gain-3-db-sma-pe15a3024-p.aspx)

URL: <https://www.pasternack.com/26.5-ghz-medium-power-broadband-amplifier-30-db-gain-3-db-sma-pe15a3024-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.

PE15A3024 CAD Drawing

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UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN: inches
TOLERANCES ARE: [mm]
.XX ± .01 [±.25]
.XX ± .001 [±.025]

* THESE DIMENSIONS AND TOLERANCES
SUPERSEDE NOTE #1 ON TITLE BLOCK.

NOTE:
HEAT SINK REQUIRED FOR PROPER OPERATION,
UNIT IS COOLED BY CONDUCTING TO HEAT SINK.

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].
4. FITS MIL-C-17 AND EQUIVALENT CABLES.

DWG TITLE
PE15A3024

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FSCM NO. 53919

CAD FILE 081815

SCALE N/A

SIZE A

2233