



5.5 dB NF, 16 dBm P1dB, 30 MHz to 26.5 GHz, Low Noise Broadband Amplifier, 15 dB Gain, SMA

TECHNICAL DATA SHEET

PE15A3312

The PE15A3312 is a broadband coaxial low noise amplifier, operating in the 0.03 to 26.5 GHz frequency range. The amplifier offers 16 dBm typical P1dB, and 15 dB typical small signal gain and ± 2.0 dB maximum gain flatness. This low noise amplifier requires a single positive DC voltage supply with internal voltage regulation, is unconditionally stable, and operates over the temperature range of -20°C to $+70^{\circ}\text{C}$. The compact package incorporates field replaceable SMA connectors and can be drop mounted onto a printed circuit board. The rugged design is guaranteed to meet MIL-STD-202 environmental test conditions for Over Temperature, Humidity, Shock, Altitude, and Temperature Cycle.

Features

- 0.03 to 26.5 GHz Frequency Range
- P1dB: 16 dBm
- Small Signal Gain: 15 dB typ
- Gain Flatness: ± 2.0 dB max
- Noise Figure: 5.5 dB typ
- 50 Ohm Input and Output Matched
- -20 to $+70^{\circ}\text{C}$ Operating Temperature
- Unconditionally Stable
- Single DC Positive Voltage Supply
- Built-in DC Voltage Regulator
- Field Replaceable SMA Connectors
- Compact Package can be Drop Mounted onto a PWB

Applications

- Laboratory Applications
- R&D Labs
- Test Instrumentation
- Military & Space
- Communication Systems
- Satellite Communications
- Wireless Communications
- Unmanned Systems
- Microwave Radio Systems
- Low Noise Amplifier
- General Purpose Amplification
- RF Front Ends

Electrical Specifications (TA= 25°C)

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.03		26.5	GHz
Gain		15		dB
Gain Flatness			± 2	dB
Output at 1 dB Compression Point	+16			dBm
Noise Figure (> 500 MHz)		5.5		dB
Input VSWR		2:1		
Output VSWR		2:1		
Operating DC Voltage 1	12		15	Volts
Operating DC Current		230		mA
Operating Temperature Range (OTR)	-20		+70	$^{\circ}\text{C}$

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [5.5 dB NF, 16 dBm P1dB, 30 MHz to 26.5 GHz, Low Noise Broadband Amplifier, 15 dB Gain, SMA PE15A3312](#)



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Mechanical Specifications

Size *Excluding Connectors*

Length 1.08 in [27.43 mm]

Width 0.71 in [18.03 mm]

Height 0.29 in [7.37 mm]

Connector Option Field Replaceable

Input Connector SMA Female

Output Connector SMA Female

Environmental Specifications

Temperature

Operating Range -20 to +70 deg C

Storage Range -55 to +125 deg C

Humidity

Shock

Altitude

Temperature Cycling

MIL-STD-202F, METHOD 103B COND. B

MIL-STD-202F, METHOD 213B COND. B

MIL-STD-202F, METHOD 105C COND. B

MIL-STD-202F, METHOD 107D COND. A

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

Plotted and Other Data

Notes:

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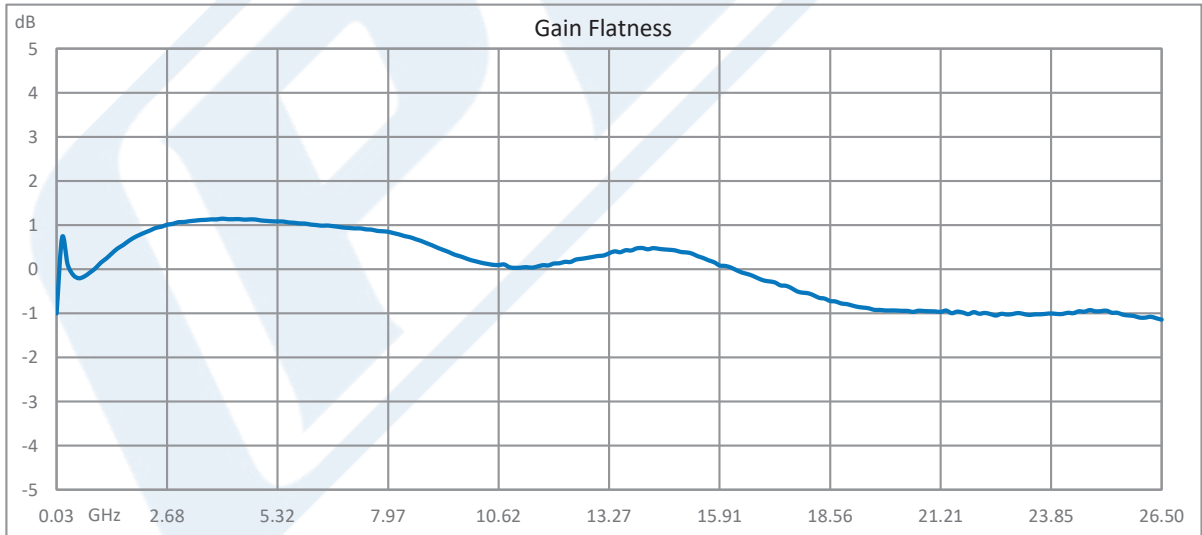
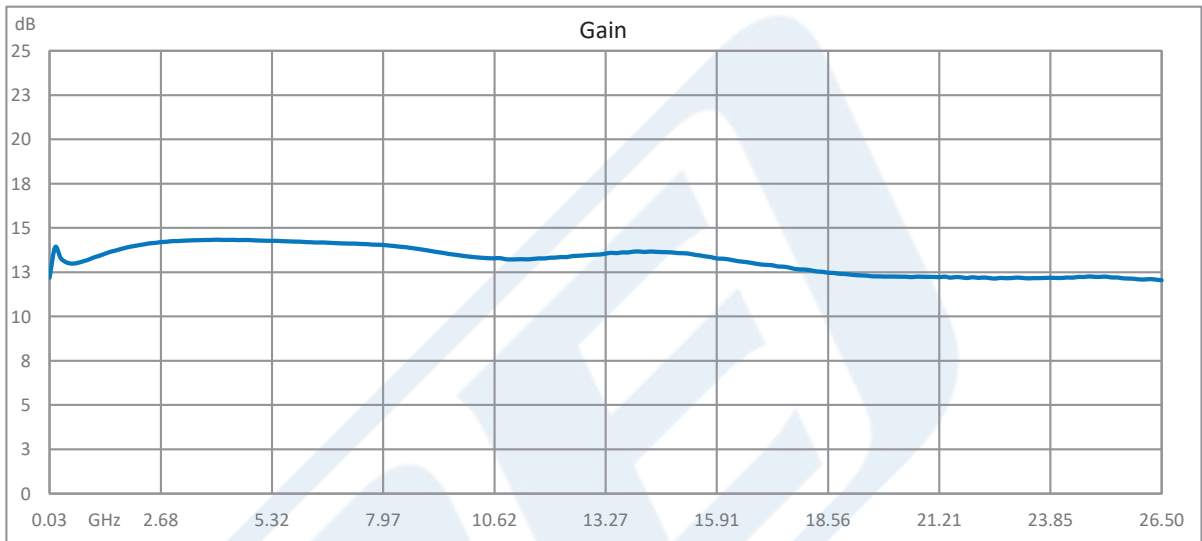


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Typical Performance Data



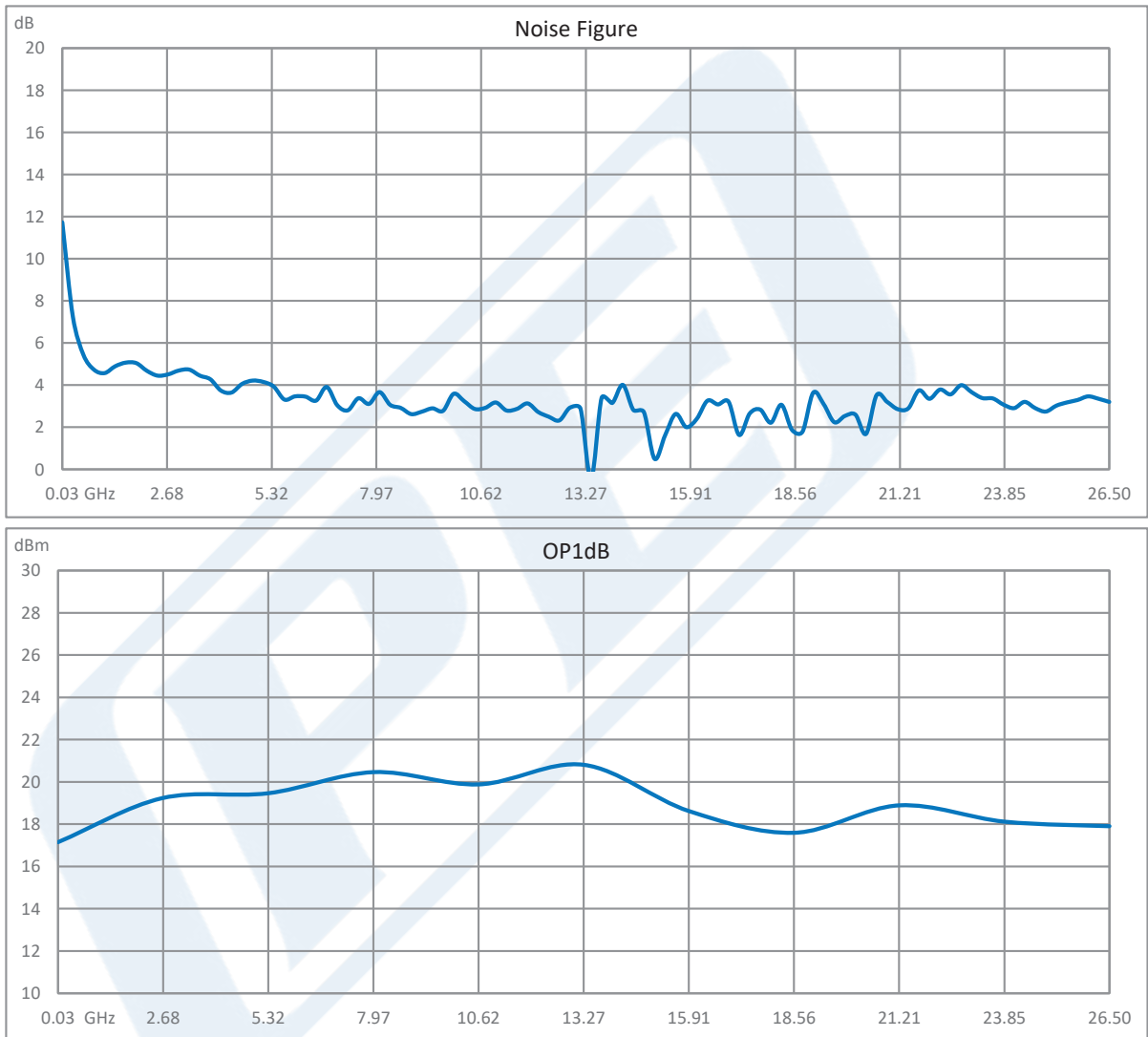
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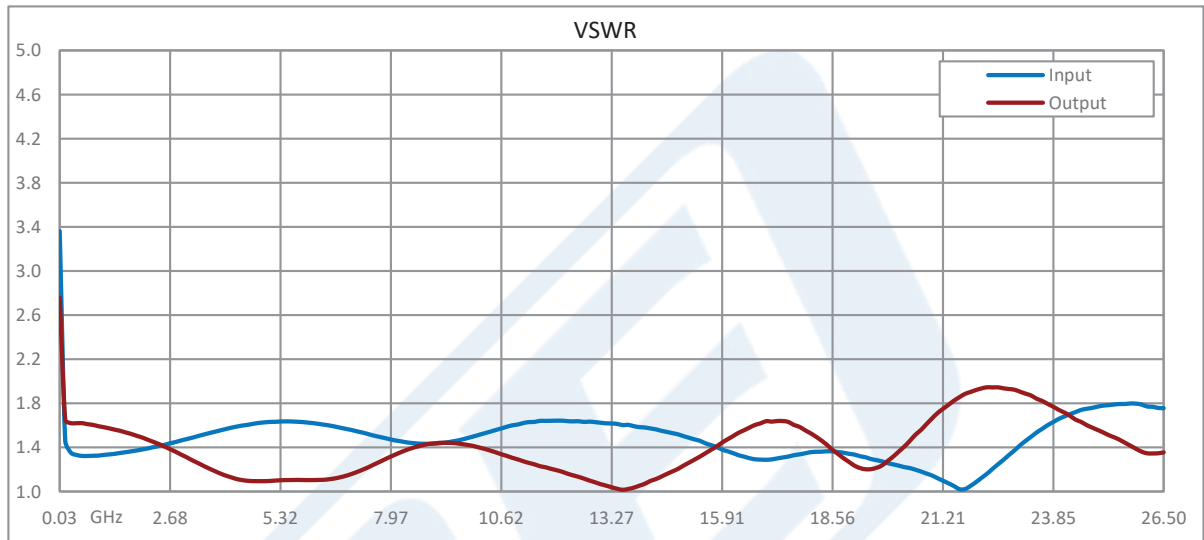
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5.5 dB NF, 16 dBm P1dB, 30 MHz to 26.5 GHz, Low Noise Broadband Amplifier, 15 dB Gain, SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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URL: <https://www.pasternack.com/5.5-db-26.5-ghz-low-noise-broadband-amplifier-15-db-gain-sma-pe15a3312-p.aspx>

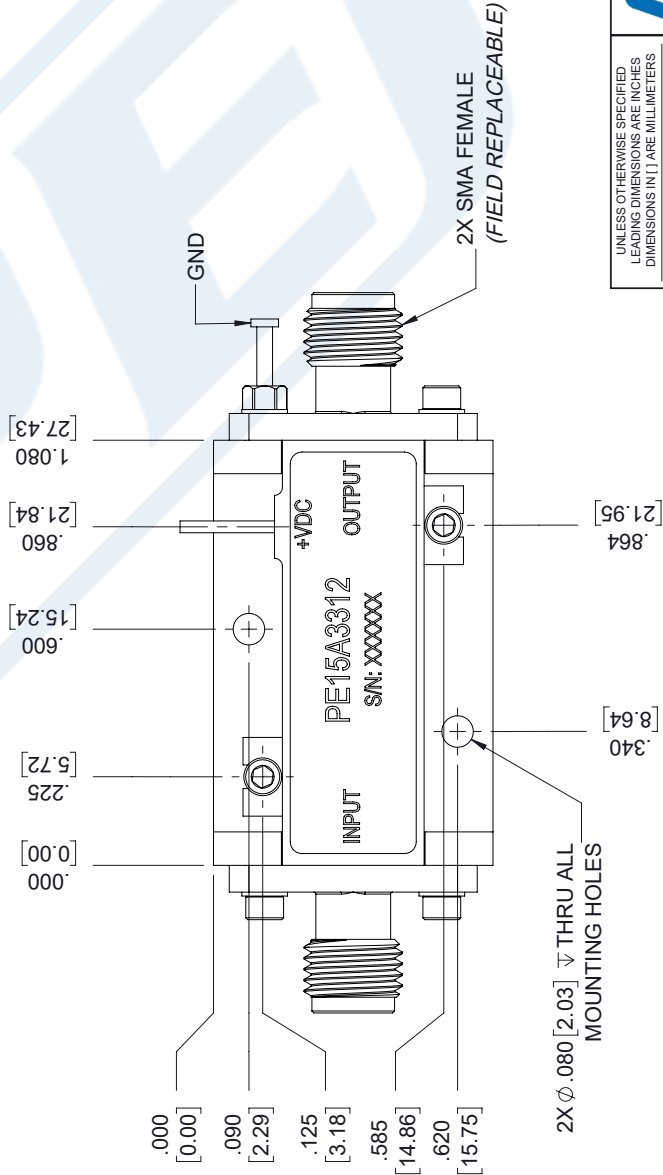
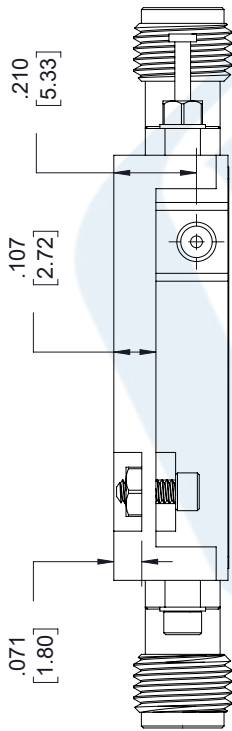
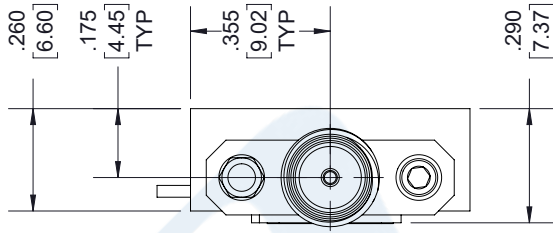
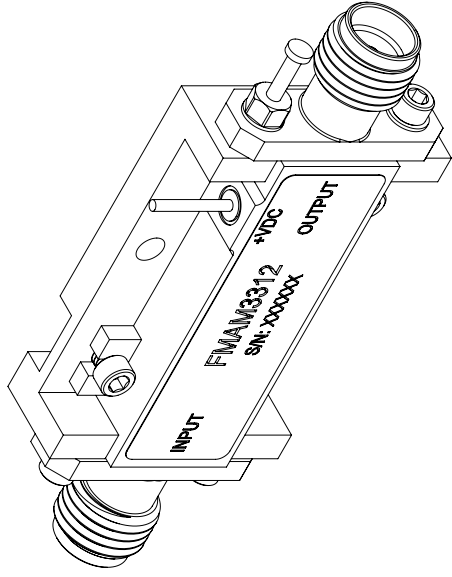
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PE15A3312 CAD Drawing

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REVISIONS

REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	03/13/19	M.MILLER



UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:
X±.2 [5.08] FRACTIONS
XX±.01 [.25] ±.132
XXX±.005 [.13] ANGLES ± 1°

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

PE PASTERNAK
an INFINITO brand

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SIZE [CAGE] DRAWN BY PART NUMBER
A 53919 K.DANG PE15A3312

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SHEET 1 OF 1
SCALE N/A

REV A

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