



16 dBm P1dB, 2 GHz to 18 GHz, Medium Power Broadband Amplifier, 12 dB Gain, SMA

TECHNICAL DATA SHEET

PE15A4051

The PE15A4051 is a broadband coaxial power amplifier, operating in the 2 to 18 GHz frequency range. This amplifier utilizes high power devices that provide excellent linearity and high gain. The amplifier offers 16 dBm of P1dB typical and 12 dB small signal gain typ, with the gain flatness of ± 1.5 dB max. This power amplifier requires a +12 Volt DC supply, is unconditionally stable, operates over the temperature range of -40°C to 85°C, and is Hermetically sealed.

Features

- 2 to 18 GHz Frequency Range
- P1dB: 16 dBm typ
- Small Signal Gain: 12 dB typ
- Gain Flatness: ± 1.5 dB max
- 50 Ohm Input and Output Matched
- -40 to +85°C Operating Temperature
- Unconditionally Stable
- Single DC Positive Supply

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, VDC1 = 12 Vdc)

Description	Minimum	Typical	Maximum	Units
Frequency Range	2		18	GHz
Gain		12		dB
Gain Flatness		± 1.5		dB
Gain Variance at OTR*		± 1		dB
Output at 1 dB Compression Point		+16		dBm
Spurious			-60	dBc
Input VSWR		2:1		
Output VSWR		2:1		
Operating DC Voltage 1		12		Volts
Operating DC Current		65		mA
Operating Temperature Range (OTR)	-40		+85	°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: [16 dBm P1dB, 2 GHz to 18 GHz, Medium Power Broadband Amplifier, 12 dB Gain, SMA PE15A4051](#)



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Mechanical Specifications

Size

Length	1.2 in [30.48 mm]
Width	0.85 in [21.59 mm]
Height	0.375 in [9.53 mm]
Weight	0.046 lbs [20.87 g]
Input Connector	SMA Female
Output Connector	SMA Female

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
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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.
- Heat Sink Required for Proper Operation, Unit is cooled by conduction to heat sink.

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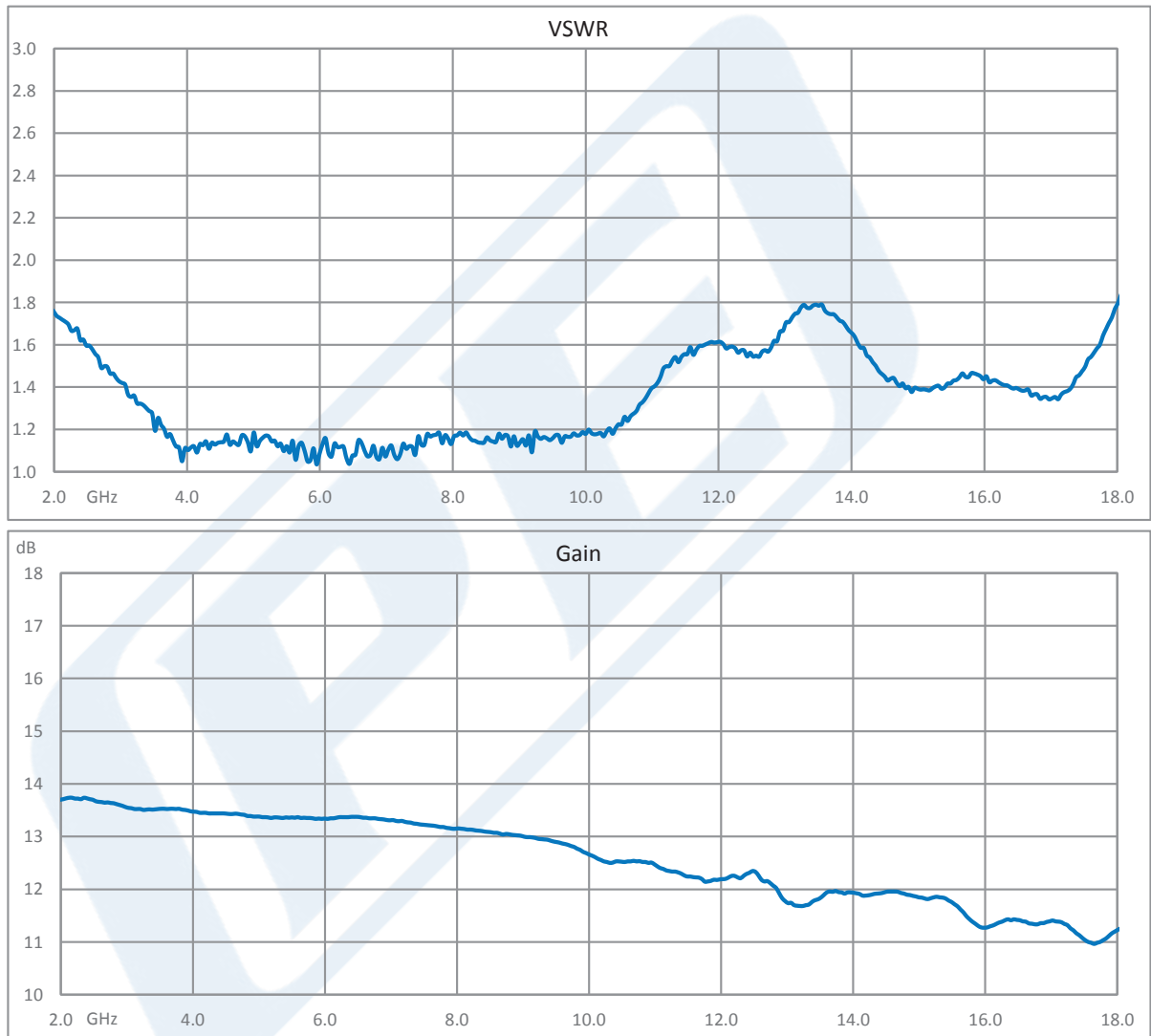


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Typical Performance Data



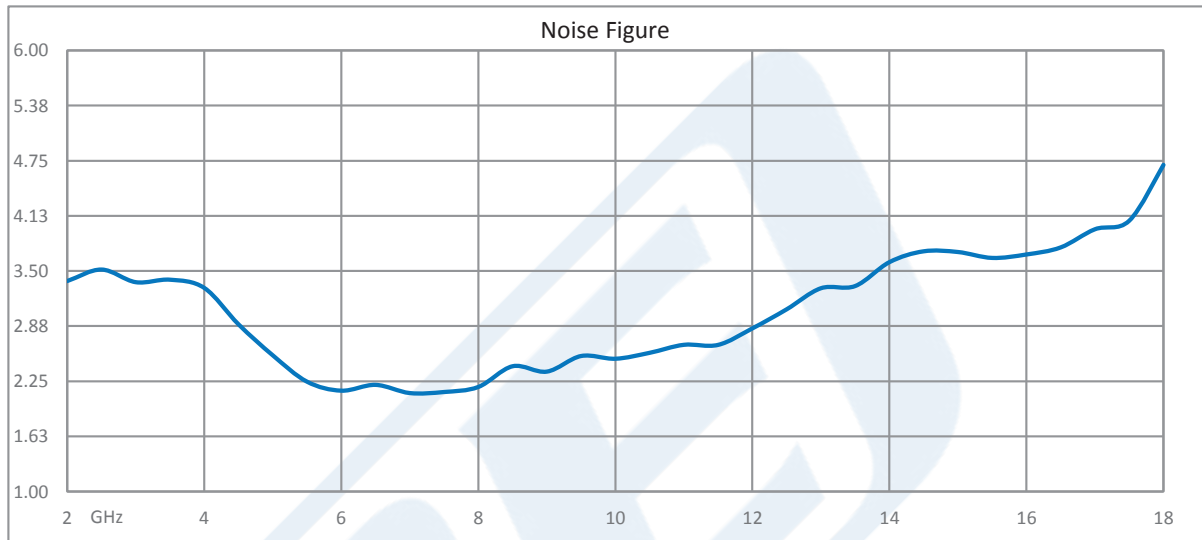
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16 dBm P1dB, 2 GHz to 18 GHz, Medium Power Broadband Amplifier, 12 dB Gain, SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

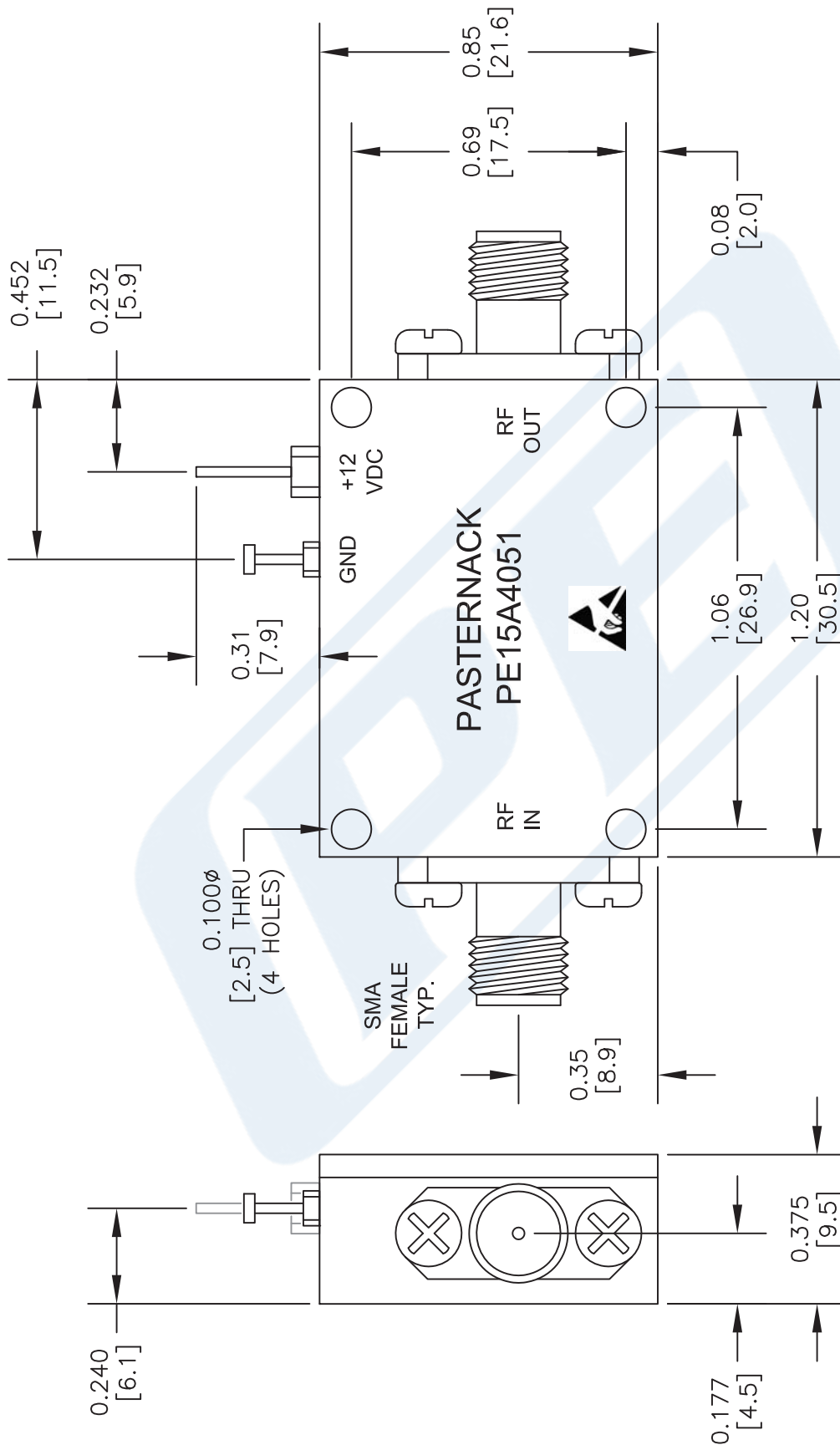
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements.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

PE15A4051 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
PE15A4051

FSCM NO. 53919

CAD FILE 071816

SCALE N/A

SIZE A

2233

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