



2 Watt Psat, 500 MHz to 6 GHz, Medium Power
Broadband Amplifier, 24 dB Gain, SMA

TECHNICAL DATA SHEET

PE15A4037

The PE15A4037 is a broadband coaxial power amplifier, operating in the 0.5 to 6 GHz frequency range. The amplifier offers 36 dBm of P1dB min and 28 dB small signal gain min, with the gain flatness of ± 2.0 dB max. This power amplifier requires only a single positive DC supply, in unconditionally stable, operates over the temperature range of -40°C to 75°C , and is Hermetically sealed.

Features

- 0.5 to 6 GHz Frequency Range
- P1dB: 36 dBm min
- Small Signal Gain: 28 dB min
- Gain Flatness: ± 2.0 dB max
- 50 Ohm Input and Output Matched
- -40 to $+75^{\circ}\text{C}$ Operating Temperature
- Unconditionally Stable
- Single DC Positive Supply
- Built-in DC Voltage Regulator

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 = 28 Vdc)

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.5		6	GHz
Gain	24			dB
Output at 1 dB Compression Point		+33		dBm
Saturation Output Power	+33			dBm
Input VSWR		2:1		
Output VSWR		2:1		
Operating DC Voltage 1	27	28	29	Volts
Operating DC Current		600		mA
Quiescent Current		300		mA
Operating Temperature Range (OTR)	-40		+75	$^{\circ}\text{C}$

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2 Watt Psat, 500 MHz to 6 GHz, Medium Power Broadband Amplifier, 24 dB Gain, SMA PE15A4037](#)



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Performance by Frequency

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.5		6	GHz
Gain				
Frequency = 0.5-2 GHz	25	28		dB
Frequency = 2-6 GHz	24	26		
Saturation Output Power				
Frequency = 0.5-2 GHz	+35	+36		dBm
Frequency = 2-6 GHz	+32.5	+34		

Absolute Maximum Rating

Parameter	Rating	Units
Source Voltage	+30	Volts
RF input Power	+20	dBm
Operating Temperature (base-plate)	-40 to +75	°C
Storage Temperature	-55 to +85	°C



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

Mechanical Specifications

Size

Length	2.4 in [60.96 mm]
Width	2.1 in [53.34 mm]
Height	0.5 in [12.7 mm]
Weight	0.249 lbs [112.94 g]
Input Connector	SMA Female
Output Connector	SMA Female

Environmental Specifications

Temperature

Operating Range	-40 to +75 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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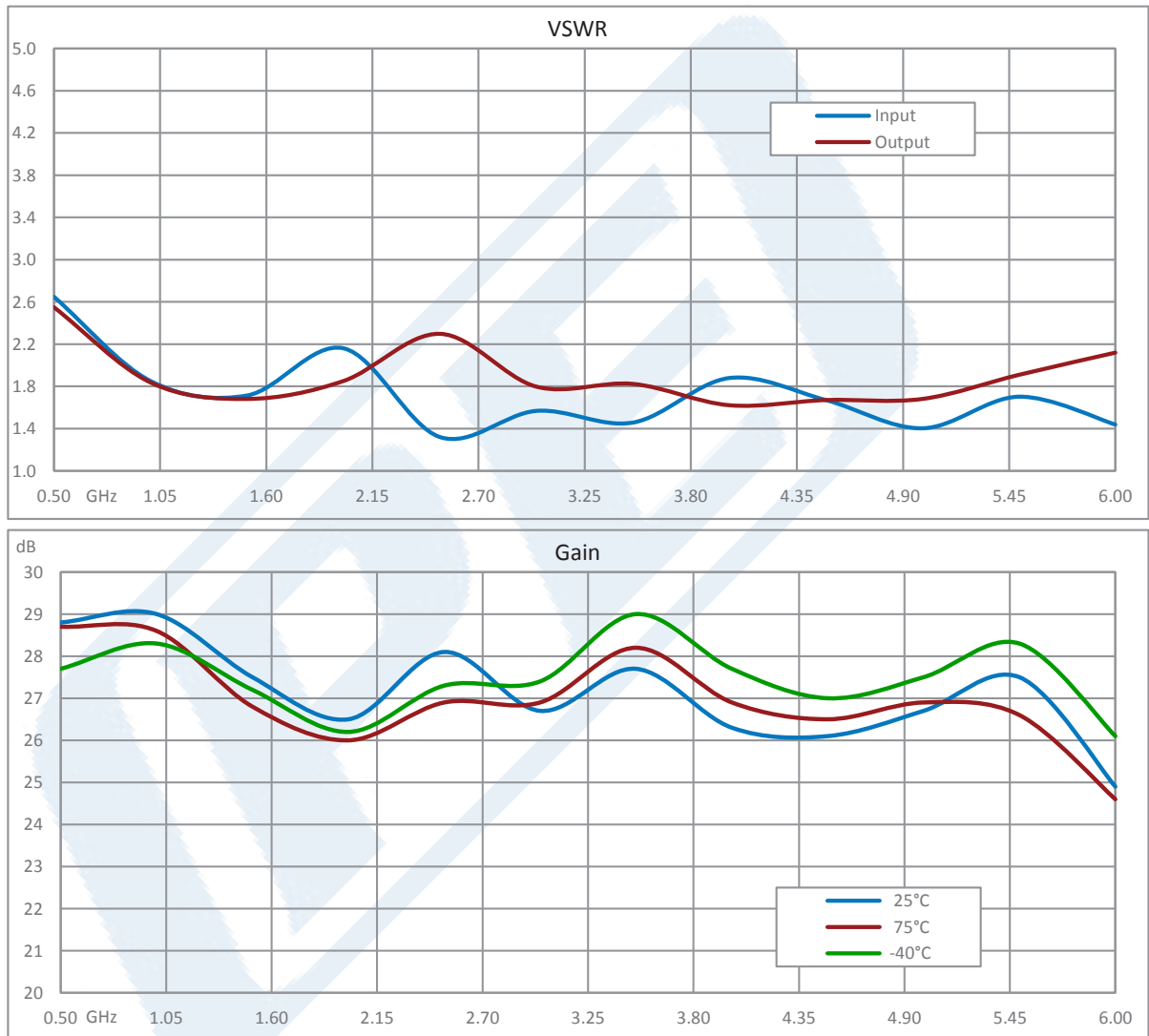


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Typical Performance Data



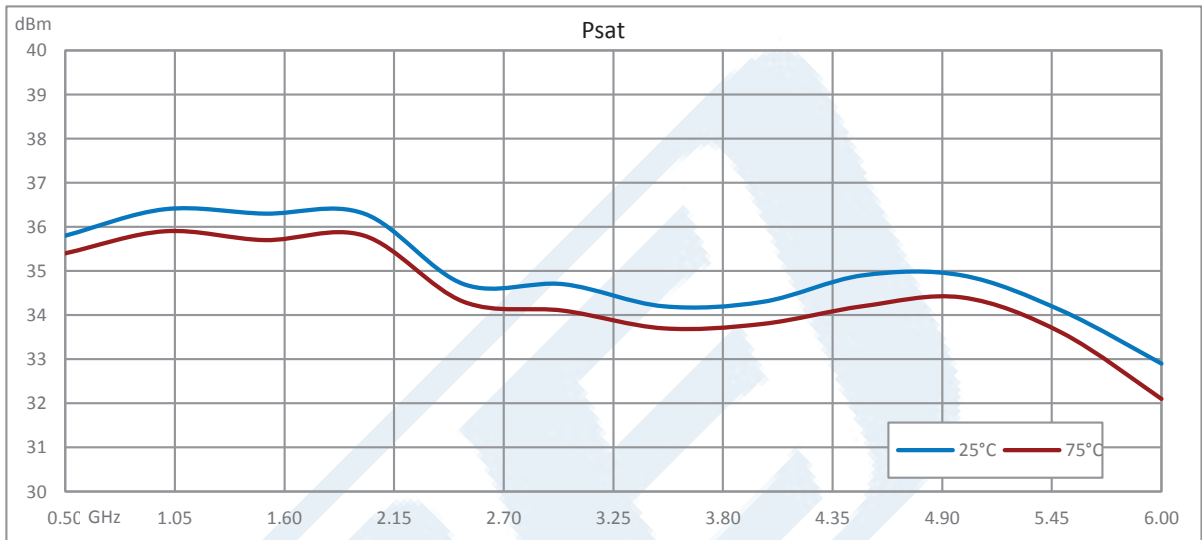
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2 Watt Psat, 500 MHz to 6 GHz, Medium Power Broadband Amplifier, 24 dB Gain, SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

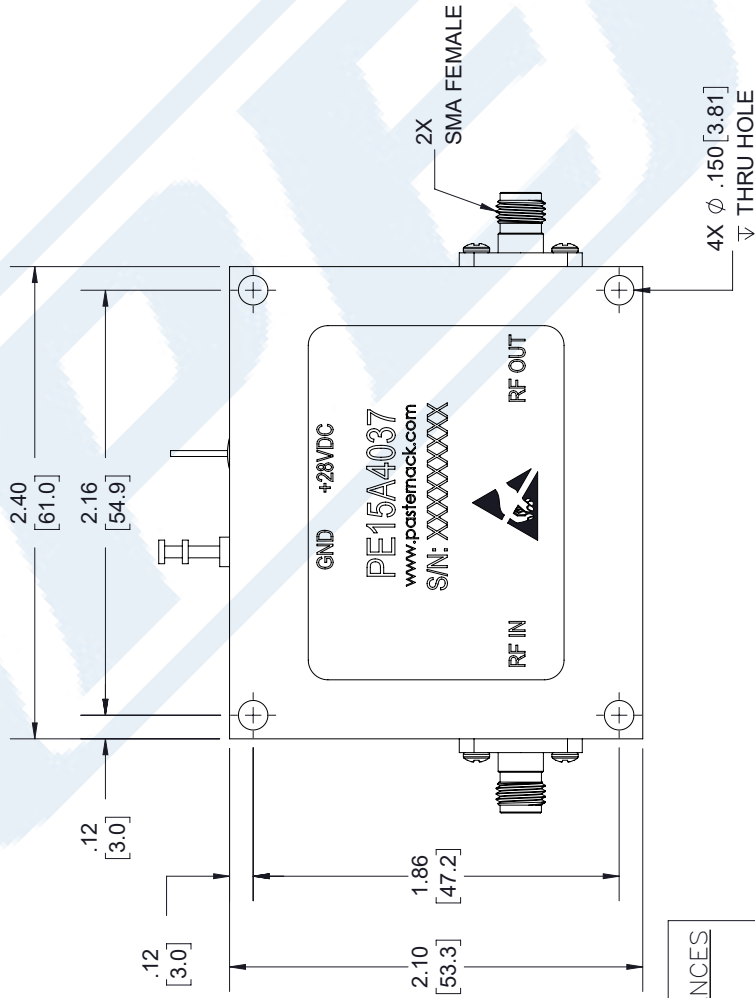
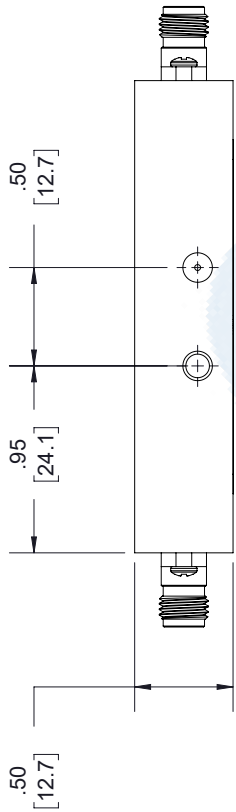
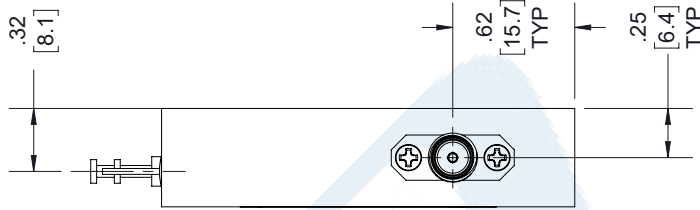
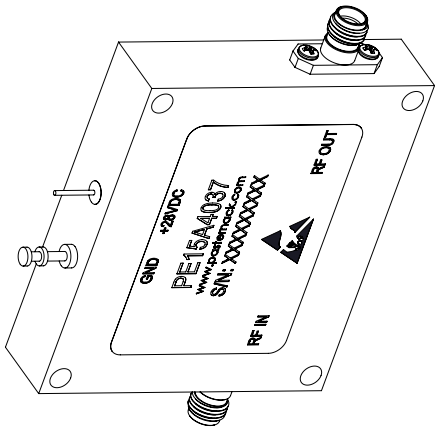
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2 Watt Psat, 500 MHz to 6 GHz, Medium Power Broadband Amplifier, 24 dB Gain, SMA PE15A4037](https://www.pasternack.com/6-ghz-medium-power-broadband-amplifier-24-db-gain-sma-pe15a4037-p.aspx)

URL: <https://www.pasternack.com/6-ghz-medium-power-broadband-amplifier-24-db-gain-sma-pe15a4037-p.aspx>

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PE15A4037 CAD Drawing

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STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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	PE15A4037
CAGE CODE	53919
CAD FILE	08/23/18
SCALE	N/A
SIZE	A
	7361

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