PASTERNACK®
THE ENGINEER'S RF SOURCE

35 dBm IP3, 2 dB NF, 20 dBm P1dB, 500 MHz to 3 GHz, Low Noise Amplifier, 14.5 dB Gain, SMA

TECHNICAL DATA SHEET PE15A1017

The PE15A1017 is a low noise RF coaxial power amplifier operating in the 500 MHz to 3 GHz frequency range. The amplifier offers Noise Figure of 2.0 dB typ, 20 dBm min of P1dB and 14.5 dB typ of small signal gain. This exceptional technical performance is achieved through the use of hybrid MIC design and advanced GaAs E-pHEMT devices. The low noise amplifier requires an operating voltage between +5 VDC and +12VDC power supply. The connectorized SMA module is unconditionally stable and includes built-in voltage regulation, bias sequencing.

Features

- 500 MHz to 3 GHz Frequency Range
- P1dB: 20 dBm typ
- Small Signal Gain: 14.5 dB typ
- Noise Figure: 2.0 dB typ
- 50 Ohm Input and Output Matched
- Unconditionally Stable
- Single DC Positive Supply
- Built-in Voltage Regulator

Applications

- Laboratory Applications
- R&D Labs
- Radar Systems
- Telecom Infrastructure
- Test Instrumentation
- 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 = 90mA)

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.5		3	GHz
Small Signal Gain		14.5		dB
Gain Flatness		±0.4		dB
Output at 1 dB Compression Point		+20		dBm
Output 3rd Intercept Point	+31	+35		dBm
Noise Figure		2	3	dB
Input VSWR	1.93:1			
Output VSWR	1.93:1			
Operating DC Voltage	5		12	Volts
Operating DC Current		90		mA

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 35 dBm IP3, 2 dB NF, 20 dBm P1dB, 500 MHz to 3 GHz, Low Noise Amplifier, 14.5 dB Gain, SMA PE15A1017

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

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Mechanical Specifications

Size

Length	1.38 in [35.05 mm]
Width	1.18 in [29.97 mm]
Height	0.5 in [12.7 mm]
Input Connector	SMA Female
Output Connector	SMA Female

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.

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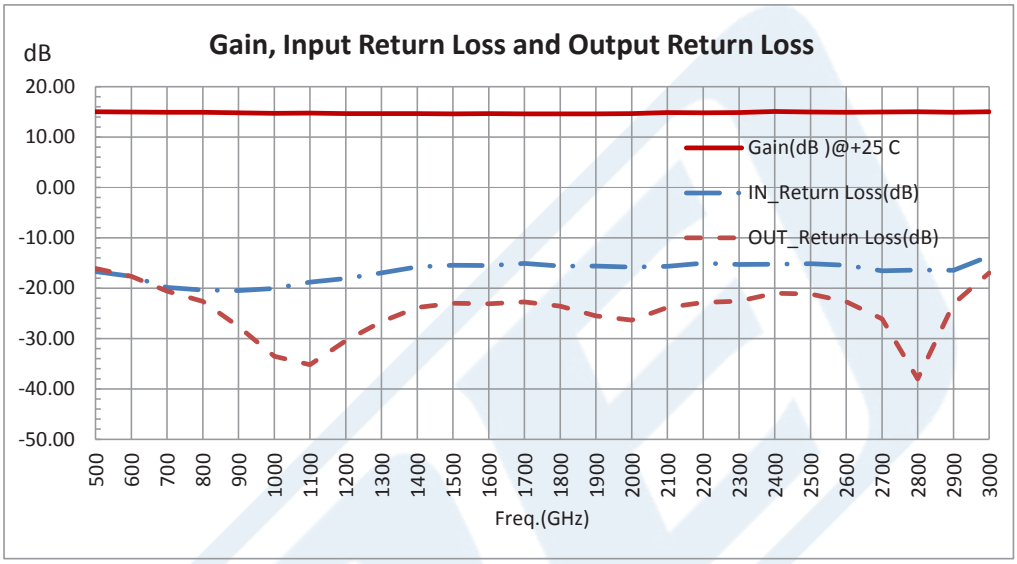
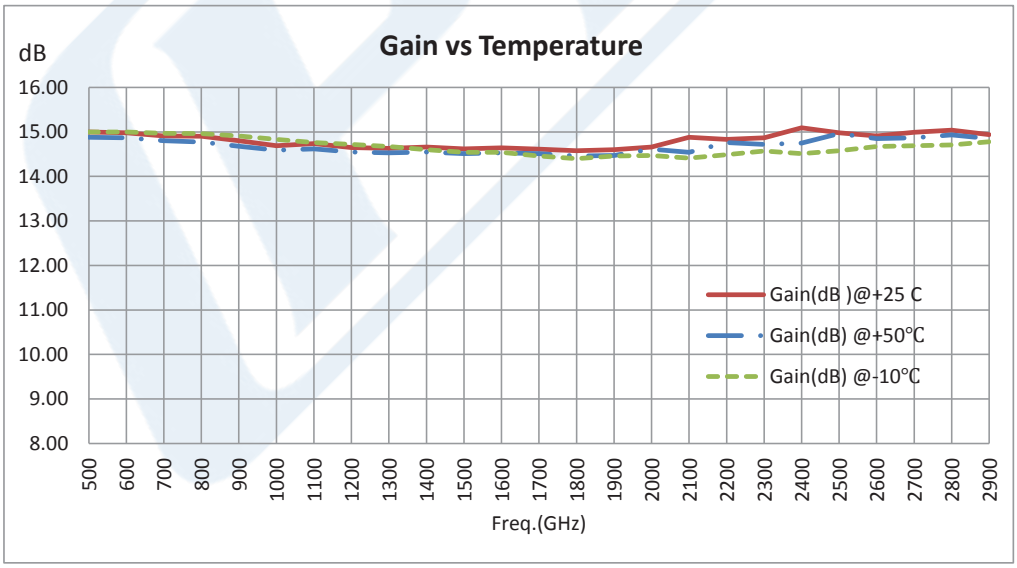
Typical Performance Data





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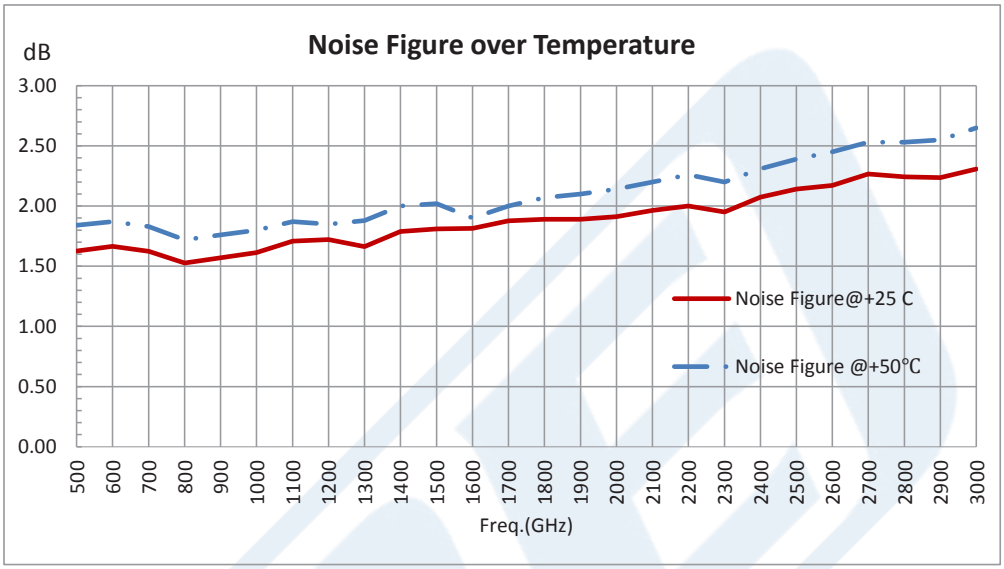

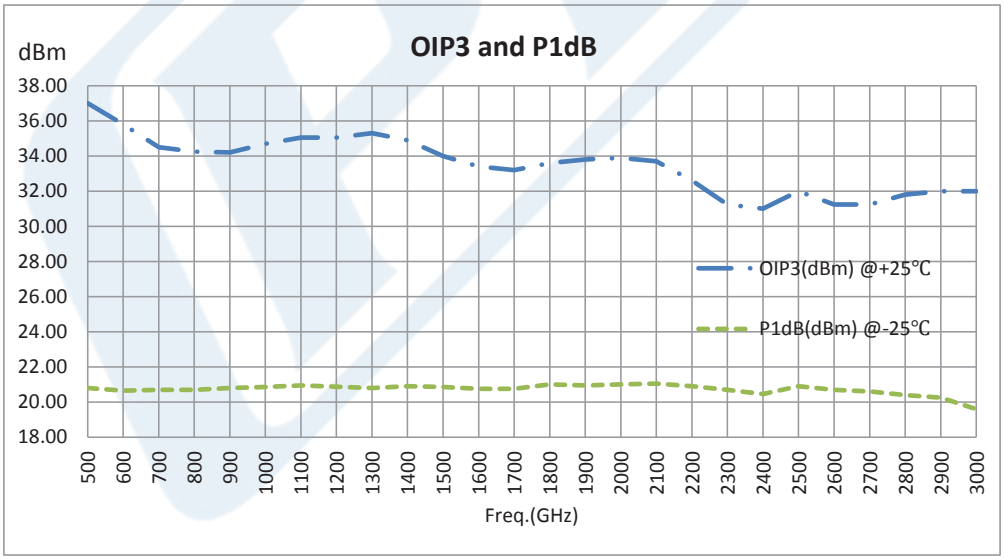

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35 dBm IP3, 2 dB NF, 20 dBm P1dB, 500 MHz to 3 GHz, Low Noise Amplifier, 14.5 dB Gain, SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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URL: http://www.pasternack.com/2.5-db-3-ghz-low-noise-amplifier-15-db-gain-sma-pe15a1017-p.aspx

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PE15A1017 CAD Drawing

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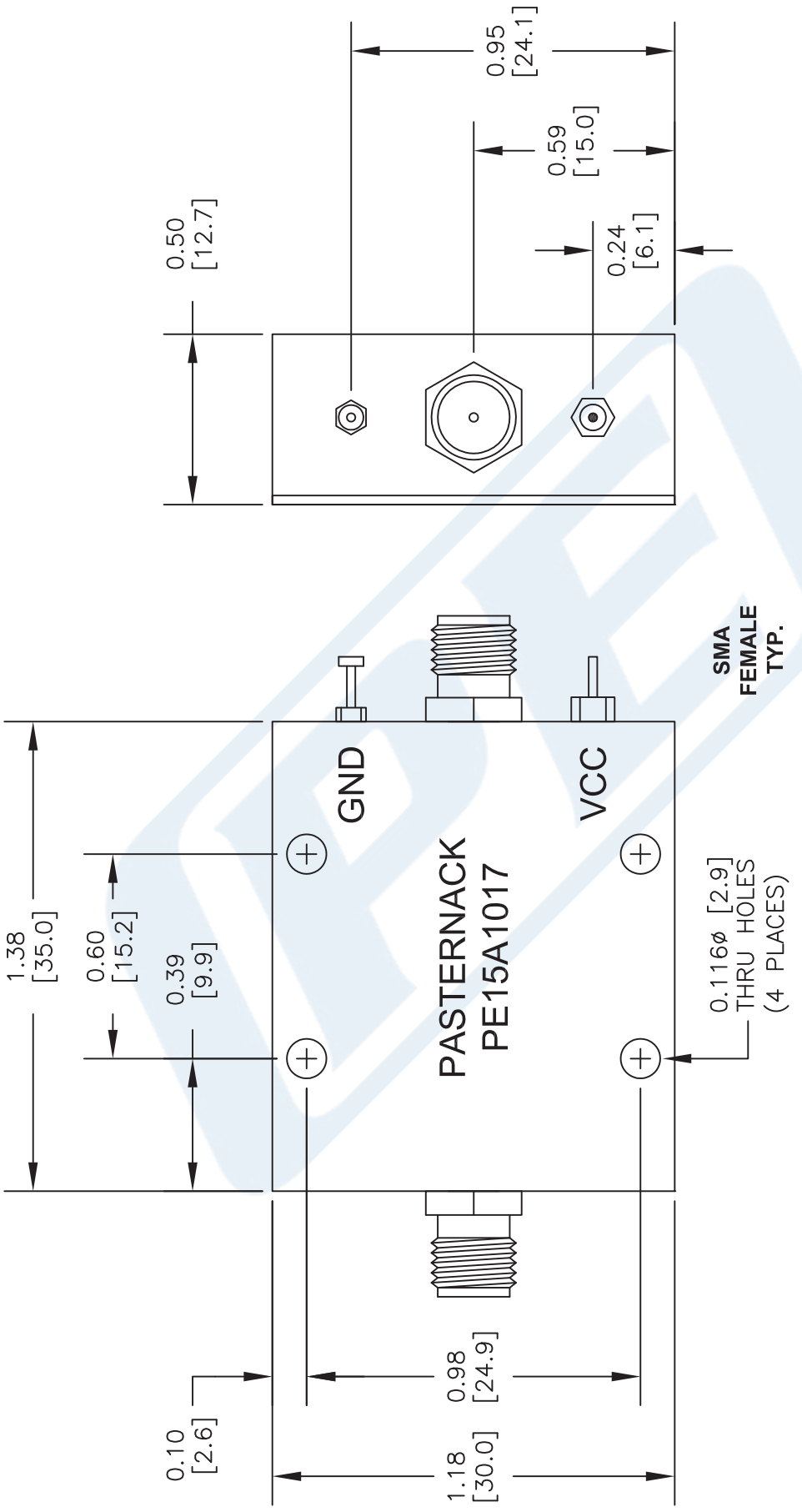

NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE: PE15A1017

FSCM NO. 53919 | CAD FILE 072814 | SCALE N/A | SIZE A | 150

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