PASTERNACK®
THE ENGINEER'S RF SOURCE

43 dB Gain, 10 Watt Psat, 700 MHz to 6 GHz, High Power High Gain Amplifier, GaN, SMA

TECHNICAL DATA SHEET PE15A5017

PE15A5017 is a Class AB, GaN 10W broadband amplifier module operating in the 0.7 to 6 GHz frequency range. The amplifier offers 39 dBm min of saturated power and high 43 dB typical small signal gain with the gain flatness of ±2 dB max. The PE15A5017 offers high linear transmit power with superior EVM performance and efficiency over 40% to maintain the highest data rate possible. The driver amplifier requires typically a +28V DC power supply, provides TTL amplifier enable control for ease of use. The connectorized SMA module is unconditionally stable and operates over the temperature range of -20°C and +80°C.

Features

- 0.7 GHz to 6 GHz Frequency Range
- P1dB 39 dBm min
- Small Signal Gain: 43 dB min
- 50 Ohms Input and Output Matched
- Unconditionally Stable

Applications

- L-band Military Radar
- Commercial Air Traffic Control
- Weather & Earth Observation Satellites
- Radar & Communication Systems
- High Gain Driver Power Amplifier
- High Gain Output Power Amplifier

Electrical Specifications (TA = +25°C, DC Voltage = 32Volts, DC Current = 2,000mA)

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.7		6	GHz
Small Signal Gain		43		dB
Gain Flatness			±2	dB
Psat	+39	+40		dBm
Input Return Loss		-13		dB
Operating DC Voltage	9		32	Volts
Operating DC Current		2,000		mA
Operating Temperature Range	-20		+80	°C

Mechanical Specifications

Size	
Length	3.75 in [95.25 mm]
Width	1.75 in [44.45 mm]
Height	1.06 in [26.92 mm]
Weight	0.47 lbs [213.19 g]
Input Connector	SMA Female
Output Connector	SMA Female
Cooling	HEATSINK REQUIRED use PE15C5013 or PE15G5011F

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 43 dB Gain, 10 Watt Psat, 700 MHz to 6 GHz, High Power High Gain Amplifier, GaN, SMA PE15A5017

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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Environmental Specifications

Temperature

Operating Range	-20 to +80 deg C
Storage Range	-65 to +150 deg C
Humidity	95% Non-Condensing
Shock	MIL-STD-810F Method 516.5
Vibration	MIL-STD-810F Method 516.5
Altitude	0-30,000 Feet feet Above Sea Level

Compliance Certifications (visit www.Pasternack.com for current document)

Not 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.
- Heat Sink Required for Proper Operation, Unit is cooled by conduction to heat sink.

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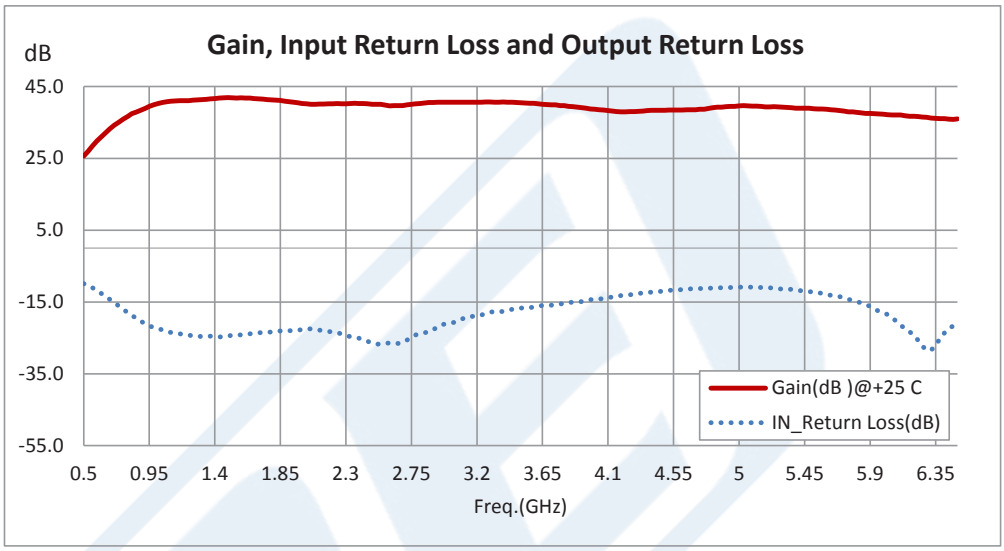
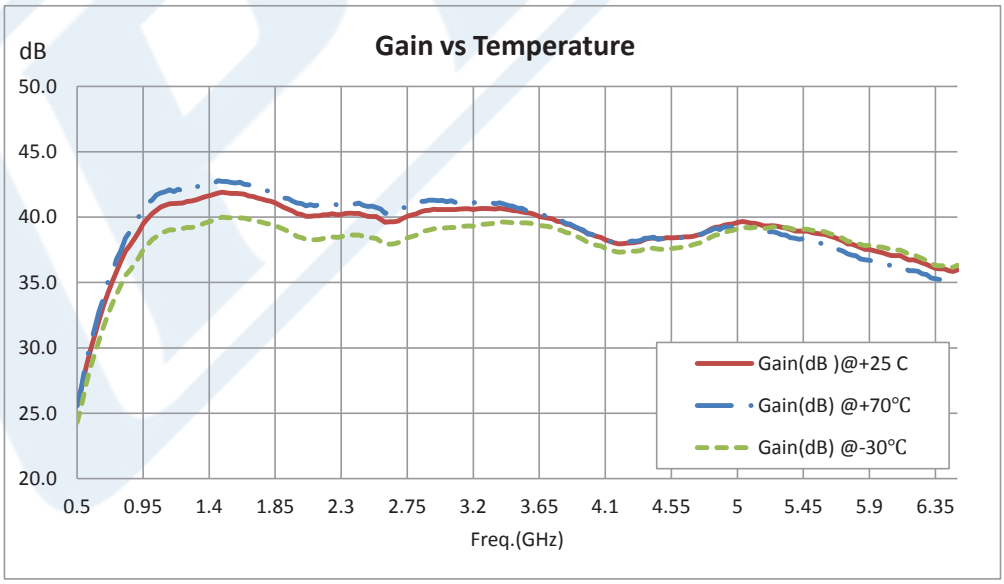
Typical Performance Data





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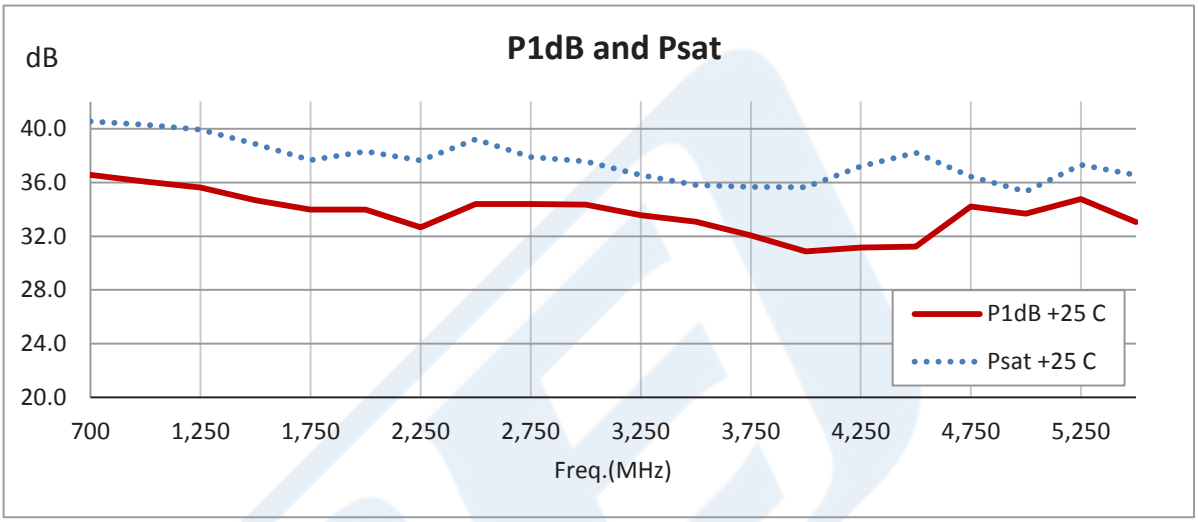

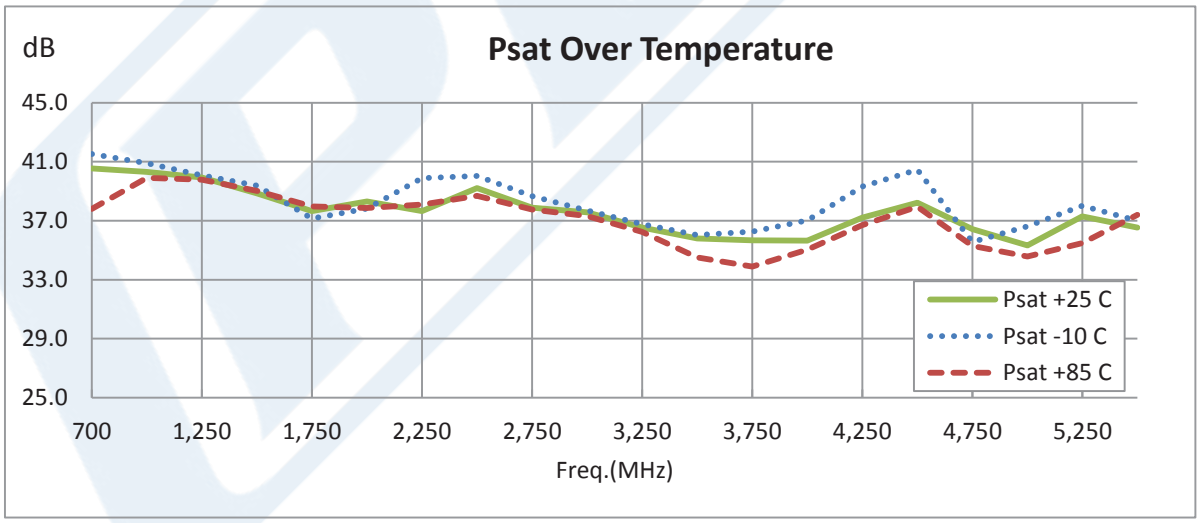

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43 dB Gain, 10 Watt Psat, 700 MHz to 6 GHz, High Power High Gain Amplifier, GaN, SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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URL: http://www.pasternack.com/43-db-gain-6-ghz-high-power-high-gain-amplifier-sma-pe15a5017-p.aspx

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PE15A5017 CAD Drawing

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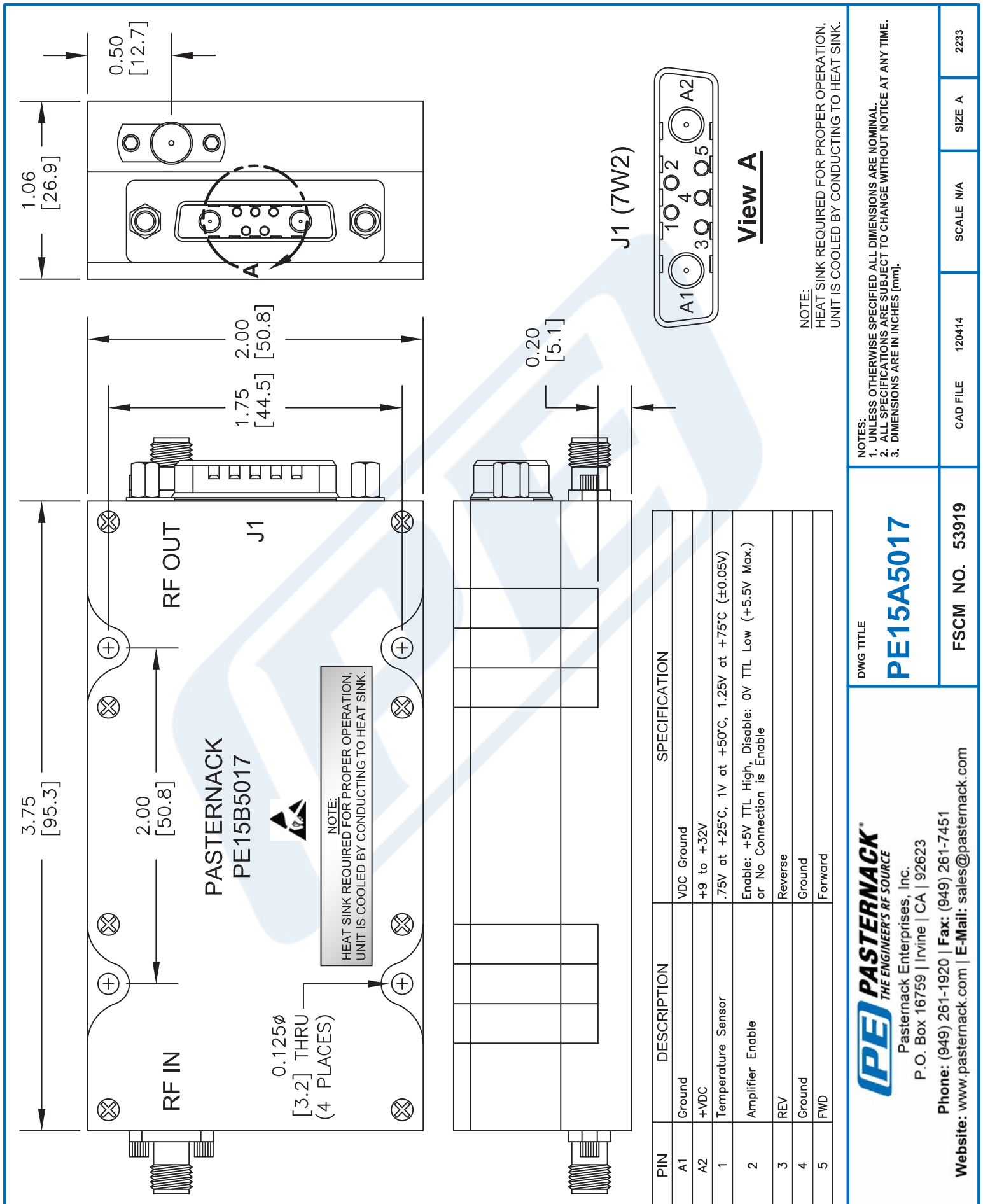

PIN	DESCRIPTION	SPECIFICATION
A1	Ground	VDC Ground
A2	+VDC	+9 to +32V
1	Temperature Sensor	.75V at +25°C, 1V at +50°C, 1.25V at +75°C (±0.05V)
2	Amplifier Enable	Enable: +5V TTL High, Disable: 0V TTL Low (+5.5V Max.) or No Connection is Enable
3	REV	Reverse
4	Ground	Ground
5	FWD	Forward

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: PE15A5017

FSCM NO. 53919 | CAD FILE 120414 | SCALE N/A | SIZE A | 2233

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