PASTERNACK®
THE ENGINEER'S RF SOURCE



2 Watt, 2 GHz to 6 GHz, Medium Power Broadband Amplifier, 32 dB Gain, 42 dBm IP3, 5 dB NF, SMA

TECHNICAL DATA SHEET PE15A4003

PE15A4003 is a 2W coaxial wideband power amplifier operating in the 2 to 6 GHz frequency range. The amplifier offers 33 dBm min of P1db and 30 dB min small signal gain with the excellent gain flatness of ±1.0dB max and the output IP3 performance of 39 dBm. This performance is achived through the use of hybrid MIC design and advanced GaAs PHEMT devices. The amplifier requires typically a +12V DC power supply. The connectorized SMA module is unconditionally stable and includes built-in voltage regulation, bias sequencing, and reverse bias protection for added reliability. The amplifier operates over the temperature range of -55°C and +85°C.

Features

- 2 GHz to 6 GHz Frequency Range
- P1dB: 33 dBm min
- Small Signal Gain: 32 dB Typical
- Gain Flatness: ±1.0 dB max
- High output IP3: 42 dBm
- Noise Figure: 5 dB
- Reverse Isolation: 50 dB
- 50 Ohms Input and Output Matched
- -55 to +85°C Operating Temperature
- Unconditionally Stable
- Regulated Supply & Bias Sequencing
- Hermetically Sealed Module
- Overvoltage External Protection for Easy Repair

Applications

- Electronic Warfare
- Electronic Countermeasures
- Radar Systems
- Telecom Infrastructure
- Test Instrumentation
- Military & Space
- Communication Systems
- Satellite Communications/ Microwave Radio Systems
- Driver Amplifier
- High Power Output Amplifier

Electrical Specifications (TA = +25°C, DC Voltage = 12Volts, DC Current = 1,700mA)

Description	Minimum	Typical	Maximum	Units
Frequency Range	2		6	GHz
Gain	31	32		dB
Small Signal Gain at OTR*	30		dB	
Gain Flatness			±1	dB
Output at 1 dB Compression Point	+33			dBm
Output 3rd Intercept Point		+42		dBm
Reverse Isolation		50		dB
Noise Figure		5	5.5	dB
Noise Figure at OTR*			6	dB
Input VSWR			2:1	
Output VSWR			2:1	
Operating DC Voltage	11	12	15	Volts
Operating DC Current		1,700		mA
Operating Temperature Range (OTR)	-55		+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: 2 Watt, 2 GHz to 6 GHz, Medium Power Broadband Amplifier, 32 dB Gain, 42 dBm IP3, 5 dB NF, SMA PE15A4003

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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Absolute Maximum Rating

Parameter	Rating	Units
Source Voltage	+15	Volts
RF input Power	+17	dBm
Operating Temperature (base-plate)	-55 to +85	°C
Storage Temperature	-65 to +95	°C



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

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.
- Heat Sink Required for Proper Operation, Unit is cooled by conduction to heat sink.

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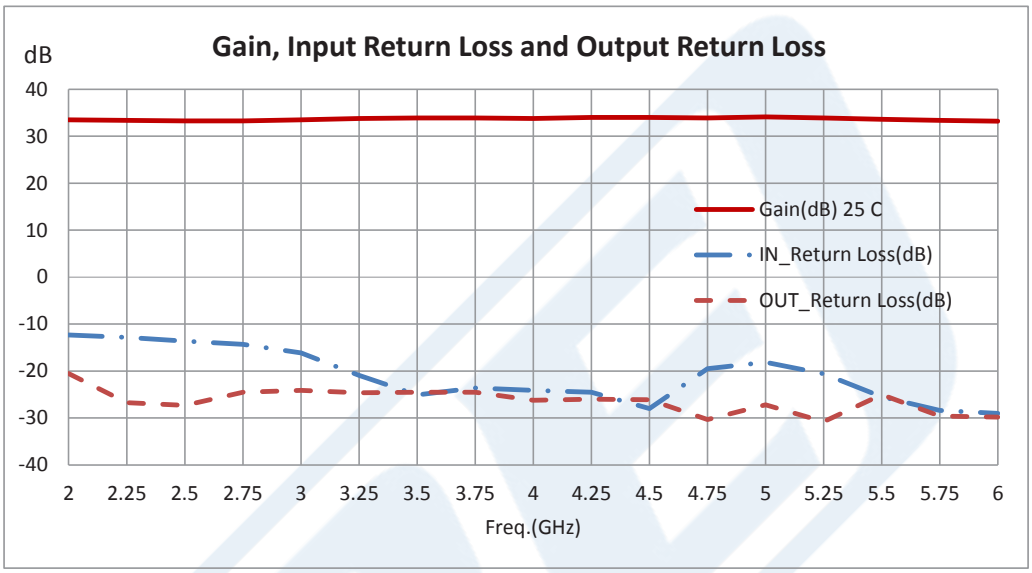
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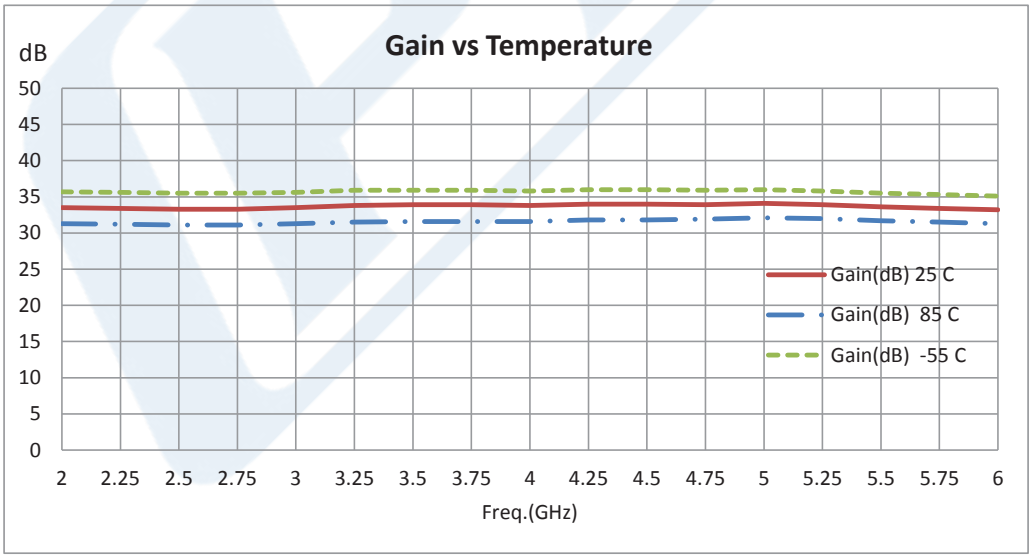


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Power Data





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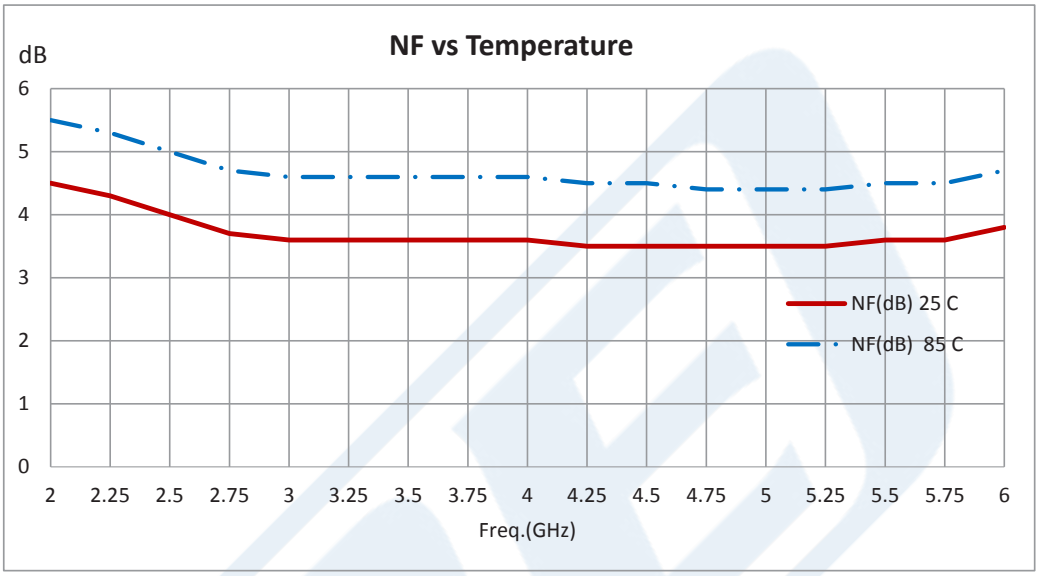
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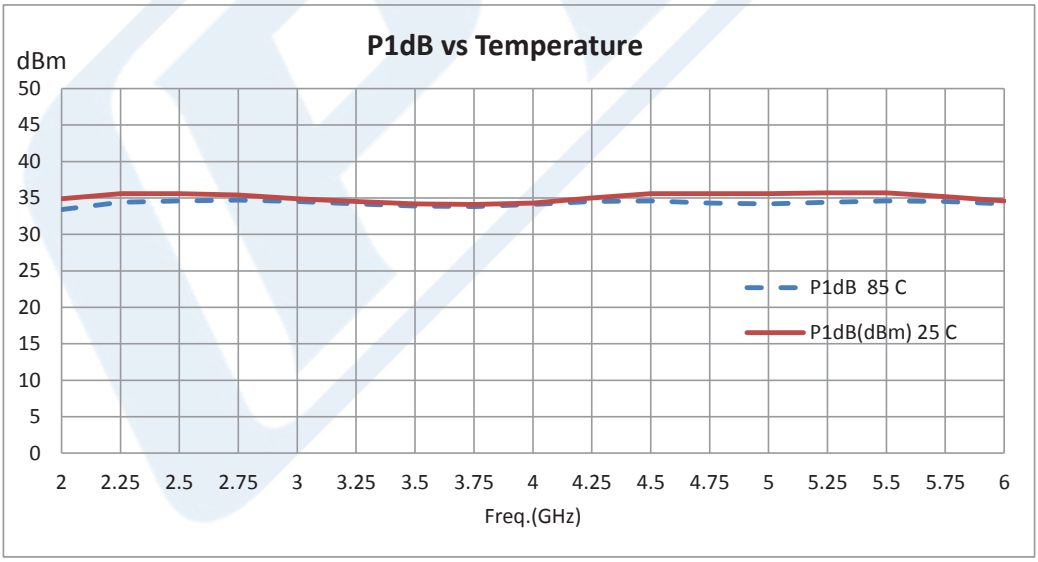
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URL: http://www.pasternack.com/6-ghz-medium-power-broadband-amplifier-32-db-gain-5-db-sma-pe15a4003-p.aspx

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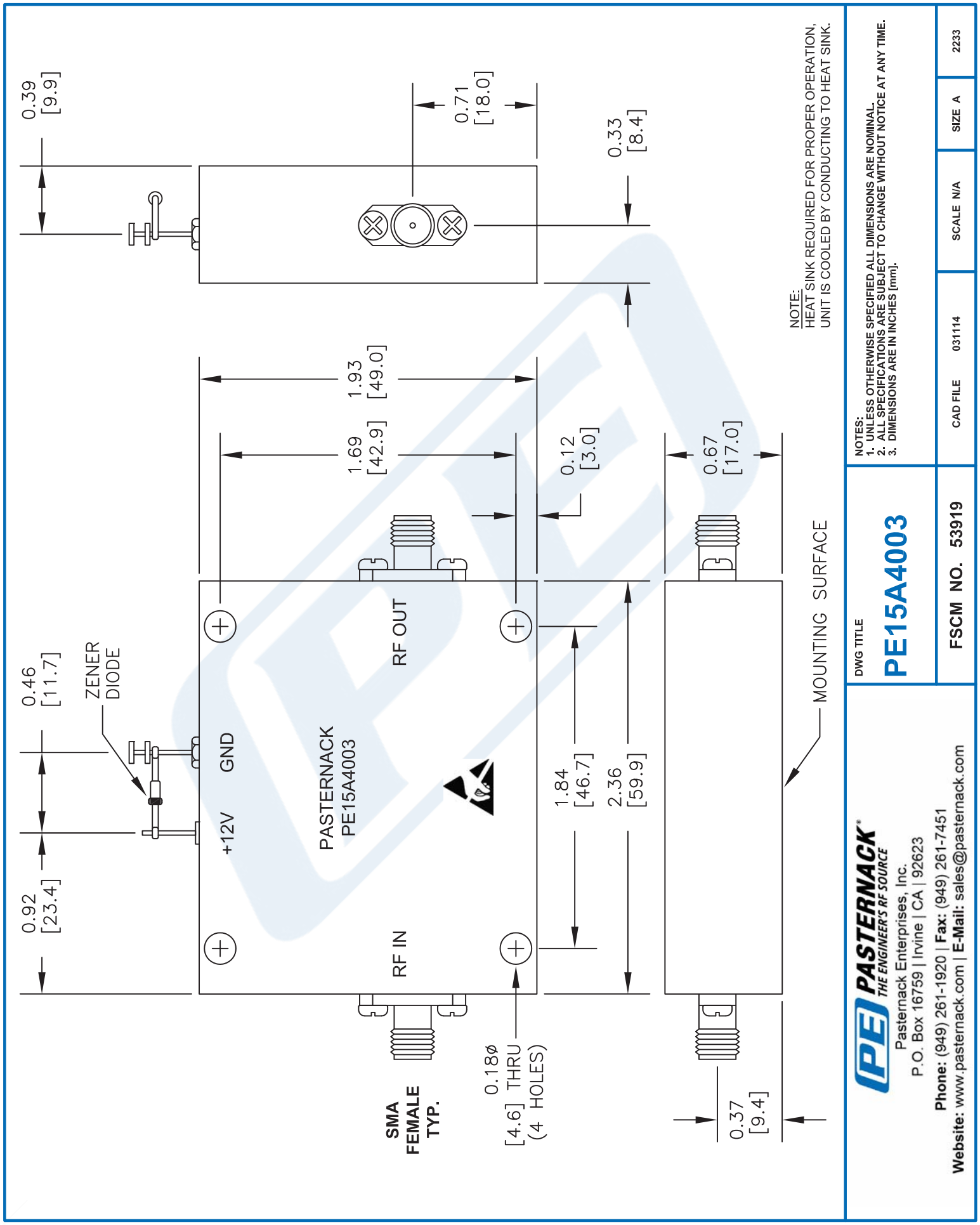
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PE15A4003 CAD Drawing

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