PASTERNACK®
THE ENGINEER'S RF SOURCE

80 dB Gain, 15 dBm, 2 GHz to 6 GHz, Limiting Amplifier, -61 to 10 dBm Pin, SMA

TECHNICAL DATA SHEET PE15A6007

Model Number PE15A6007 is a 2 to 6 GHz high gain wide-band coaxial limiting amplifier. The model operates with an input power range of -61 to +10 dBm and maintains a limited output of +15 dBm minimum. This amplifier offers a flat high 80 dB gain and a gain flatness of ±3.0 dB independent of the input. This excellent technical performance is achieved through the use of hybrid MIC design and advanced GaAs PHEMT devices, and supplied the power typically from a +12V DC power supply. The connectorized SMA module includes built-in voltage regulation, bias sequencing, and reverse bias protection for added reliability. The module is hermetically sealed for extreme environmental conditions.

Features

- 2 GHz to 6 GHz Frequency Range
- Wide Input Dynamic Range: -61 to +10 dBm
- Psat: 15dBm Min.
- High Small Signal Gain: 80 dB Min.
- Gain Flatness: ±3 dB max
- Noise Figure: 4 dB maximum
- VSWR (In/Out) 2:1
- 50 Ohm Input and Output Matched
- -30 to 70°C Operating Temperature
- Unconditionally Stable
- Regulated Supply & Bias Sequencing
- Hermetically Sealed Module
- Overvoltage External Protection for Easy Repair

Applications

- Electronic Warfare
- Test & Measurements
- Military & Space
- Military Communication Systems
- Broadband Communication
- Microwave Receivers
- Instantaneous Frequency Measurement Receivers

Electrical Specifications (TA = +25°C, DC Voltage = 12Volts, DC Current = 550mA)

Description	Minimum	Typical	Maximum	Units
Frequency Range	2		6	GHz
Small Signal Gain	80			dB
Gain Flatness		±3		dB
Input Power	-61		+10	dBm
Psat	+15			dBm
Psat Flatness			±1	dB
Noise Figure			4	dB
Input VSWR		2:1		
Output VSWR		2:1		
Operating DC Voltage	11	12	13	Volts
Operating DC Current			550	mA
Operating Temperature Range	-30		+70	°C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 80 dB Gain, 15 dBm, 2 GHz to 6 GHz, Limiting Amplifier, -61 to 10 dBm Pin, SMA PE15A6007

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)	-30 to +70	°C
Storage Temperature	-55 to +85	°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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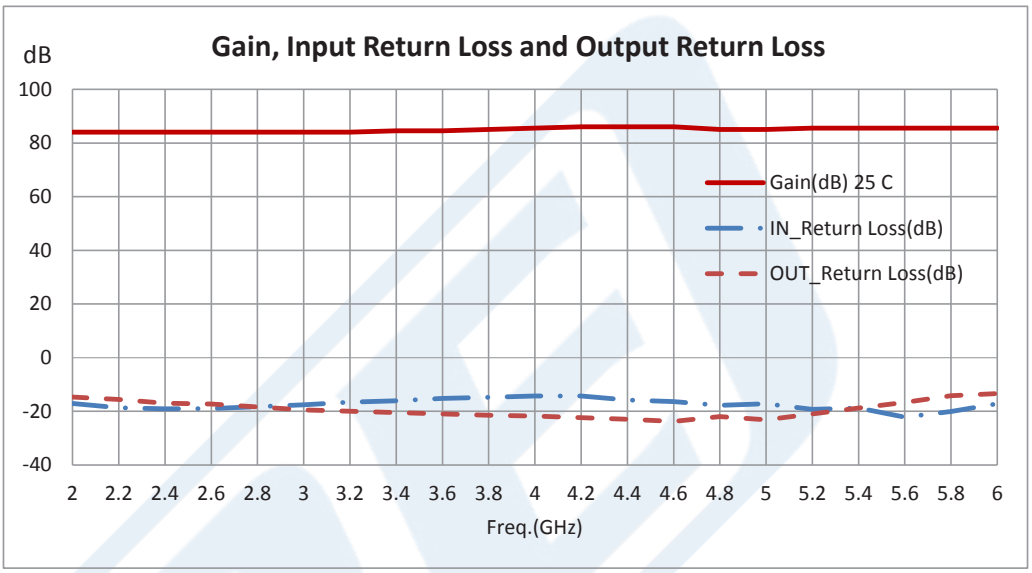
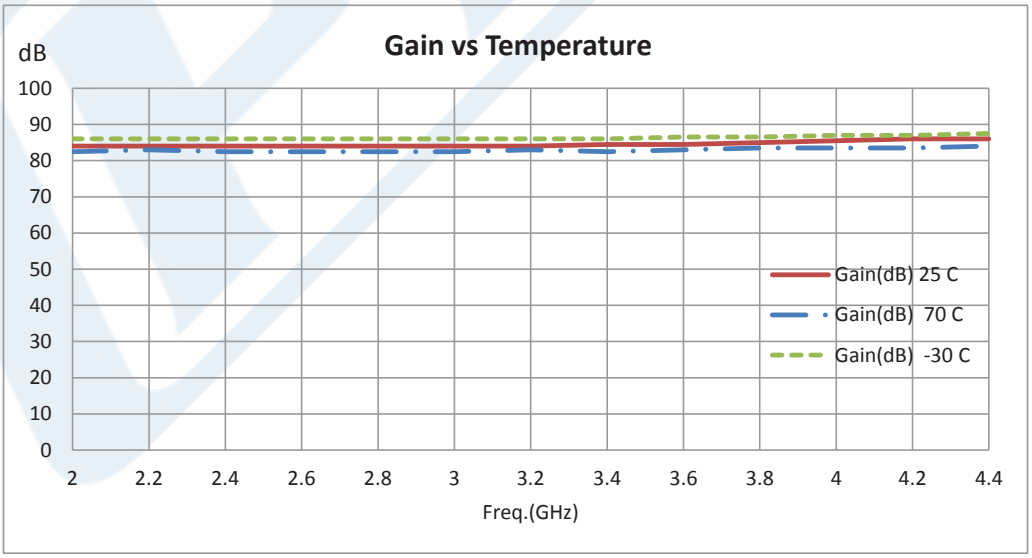
Power Data





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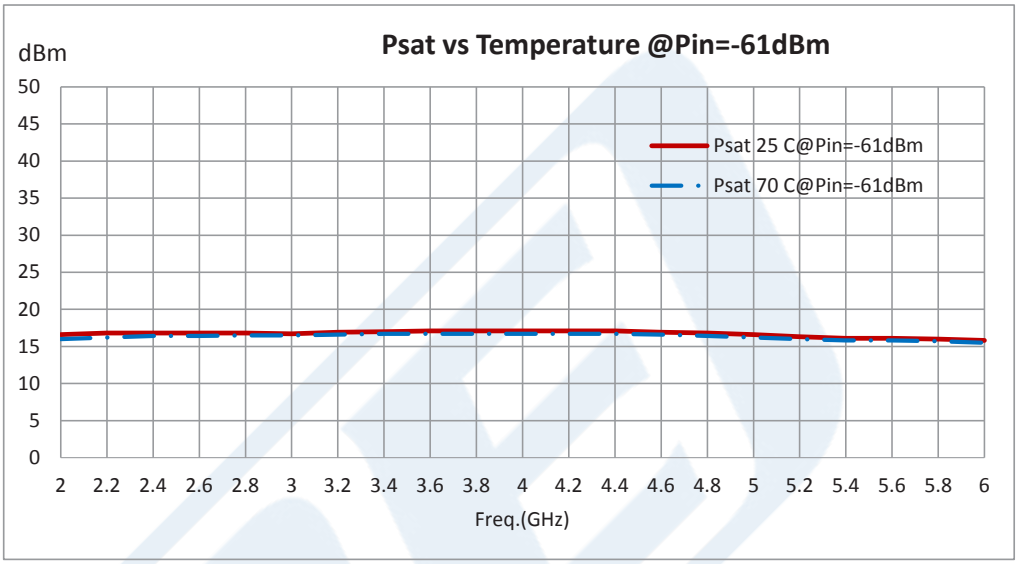

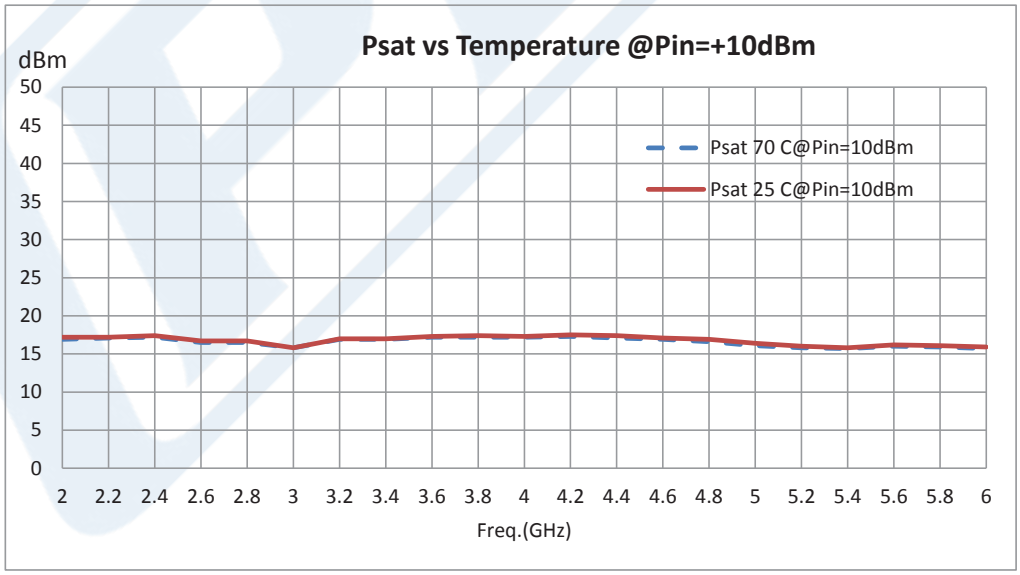

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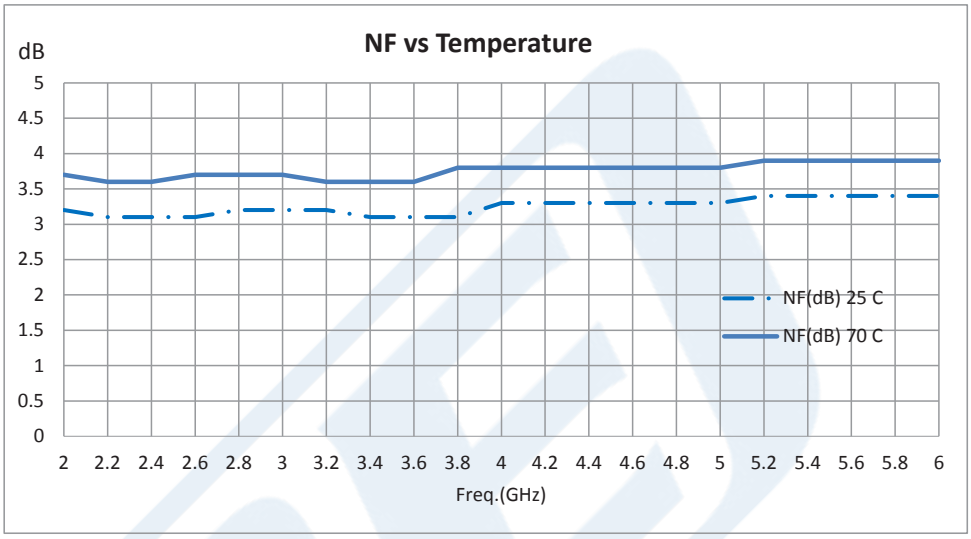

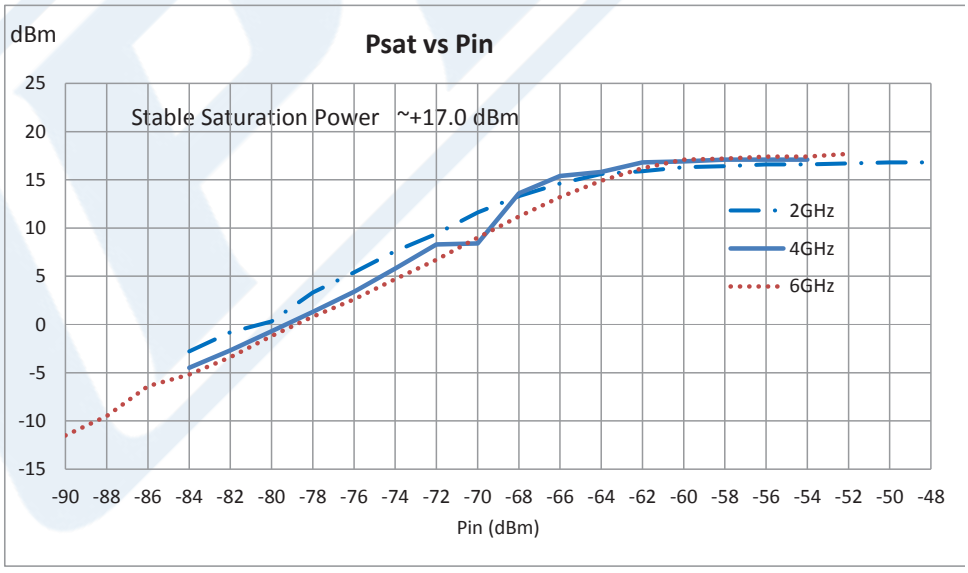

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are part of the broadest selection in the industry.

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URL: http://www.pasternack.com/80-db-gain-6-ghz-limiting-amplifier-61-10-dbm-pin-sma-pe15a6007-p.aspx

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.

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PE15A6007 CAD Drawing

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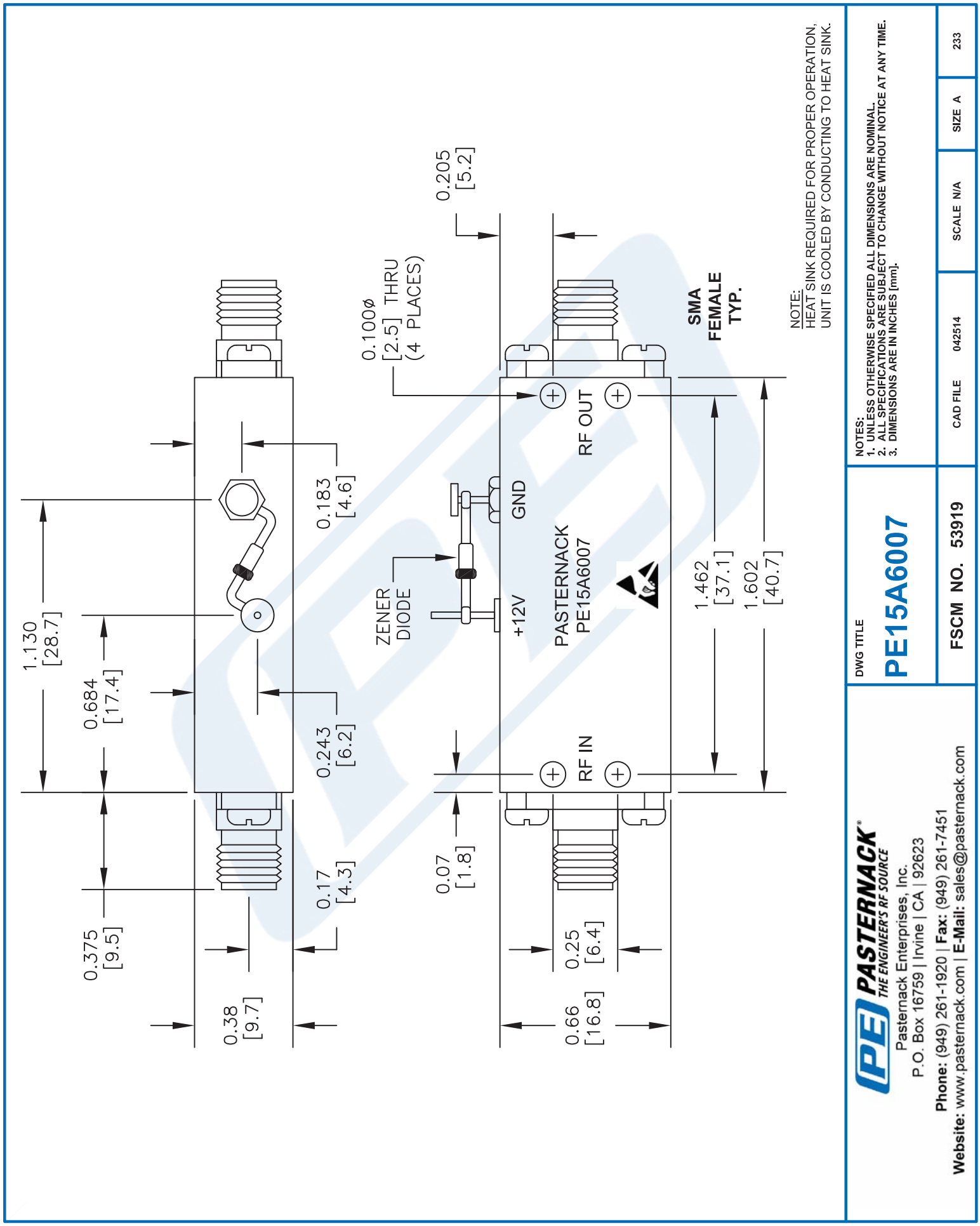

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