PASTERNACK®
THE ENGINEER'S RF SOURCE



50 dB Gain, 79 Watt Psat, 2.2 GHz to 2.7 GHz, High Power High Gain Amplifier, SMA

TECHNICAL DATA SHEET PE15A5022

PE15A5022 is a class AB LDMOS amplifier module that is ideal for both military and commercial applications. The amplifier is capable of supporting any signal type and modulation format, including but not limited to 3-4G telecom, WLAN, OFDM, DVB, and CW/AM/FM. The amplifier produces a Psat of 79 Watts and offers 50 dB typical small signal gain with ±1.5 dB typical, gain flatness. The high gain power coaxial amplifier operates in the 2.2 to 2.7 GHz frequency range. The amplifier has several protection circuits including load VSWR protection, low and high bias protection, reverse bias protection and thermal protection. The connectorized SMA module is unconditionally stable and includes built-in voltage regulation, bias sequencing, and requires typically a +28V DC power supply. The amplifier operates over the temperature range of -40°C and +85°C.

Features

- 2.2 GHz to 2.7 GHz Frequency Range
- Linear Power 40 dBm typ
- Small Signal Gain: 50 dB typ
- Gain Flatness: ±1.5 typical
- 50 Ohms Input and Output Matched
- Unconditionally Stable
- Regulated Supply & Bias Sequencing
- Overvoltage Protection
- Thermal Protection
- Modulation Formats: 3-4 G Telecom, WLAN, OFDM, DVB, and CW/AM/FM

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 = 28Volts, DC Current = 11,000mA)

Description	Minimum	Typical	Maximum	Units
Frequency Range	2.2		2.7	GHz
Small Signal Gain		50		dB
Gain Flatness		±1.5	±2	dB
Psat	+47	+49		dBm
Linear COFDM Power Output		+40		dBm
Input Return Loss	-16	-18		dB
Switching Speed for On/Off Switch Gate		1	2	usec
Operating DC Voltage	27	28	32	Volts
Operating DC Current		11,000		mA
Quiescent Current		2,200		mA
Operating Temperature Range	-40		+85	°C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 50 dB Gain, 79 Watt Psat, 2.2 GHz to 2.7 GHz, High Power High Gain Amplifier, SMA PE15A5022

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

Size

Length	7.7 in [195.58 mm]
Width	6.7 in [170.18 mm]
Height	0.985 in [25.02 mm]
Weight	3 lbs [1.36 Kg]
Input Connector	SMA Female
Output Connector	N Female

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
Storage Range	-60 to +100 deg C
Humidity	0-100% Non-Condensing

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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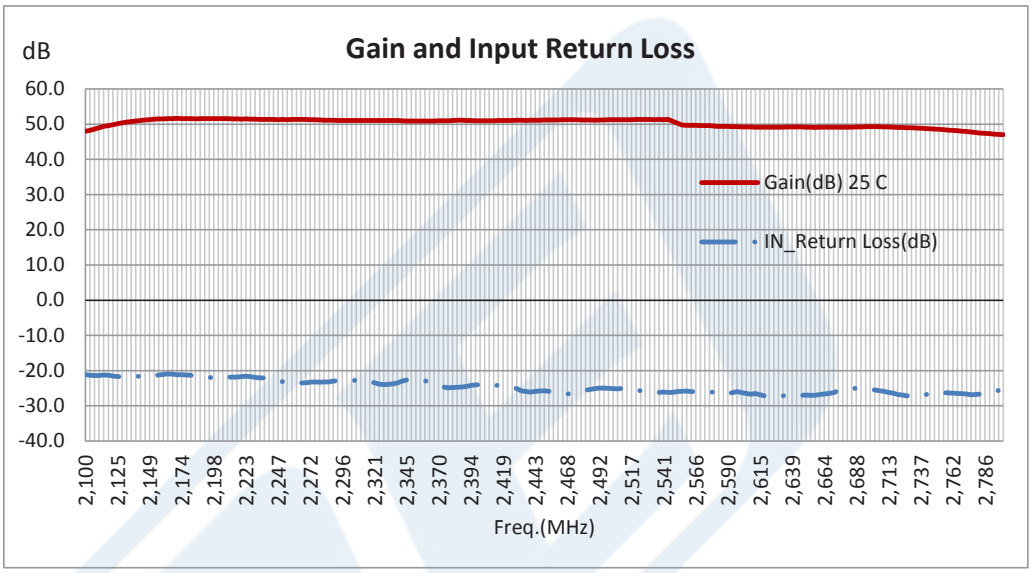
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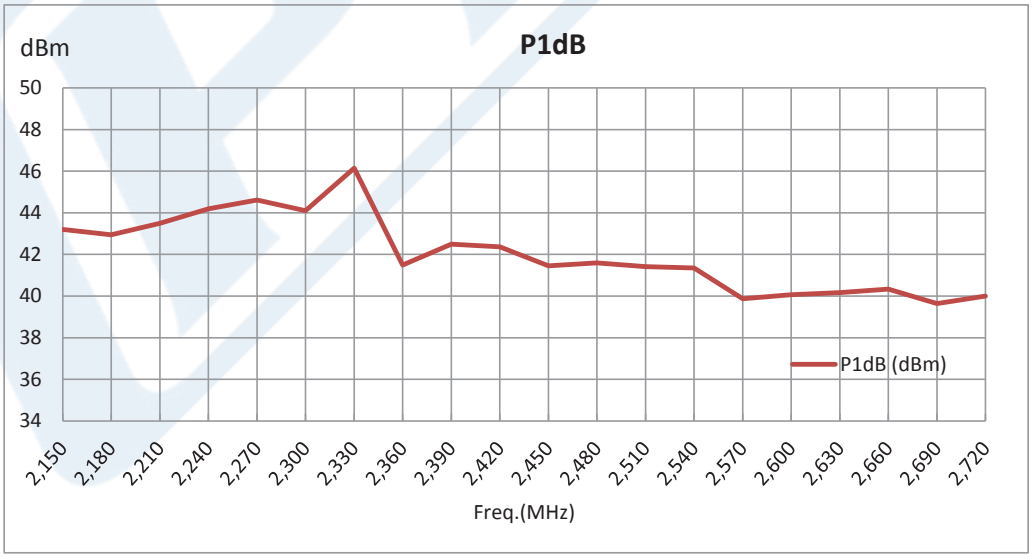


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Typical Performance Data





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50 dB Gain, 79 Watt Psat, 2.2 GHz to 2.7 GHz, High Power High Gain Amplifier, 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/50-db-gain-2.7-ghz-high-power-high-gain-amplifier-sma-pe15a5022-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.

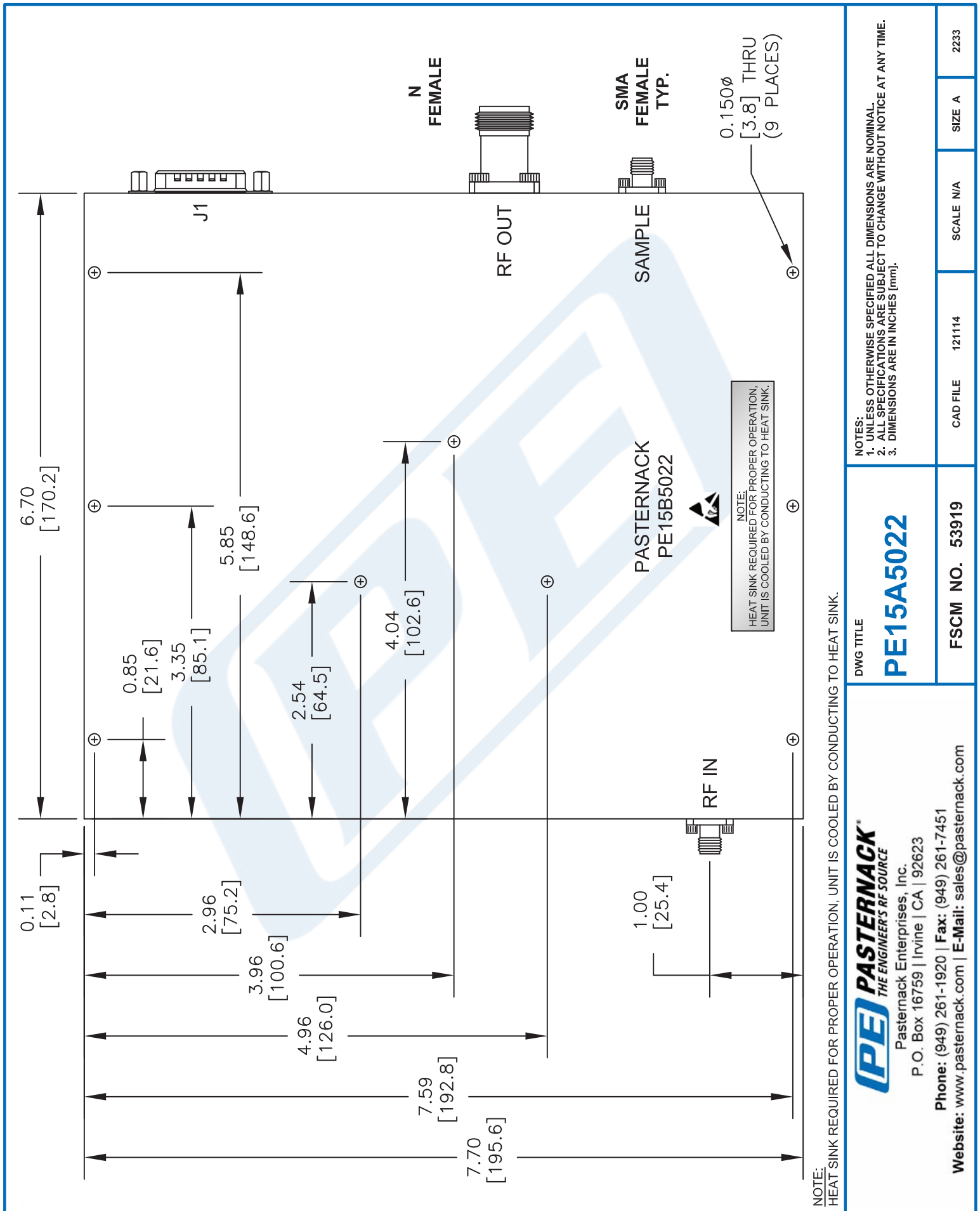
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PE15A5022 CAD Drawing

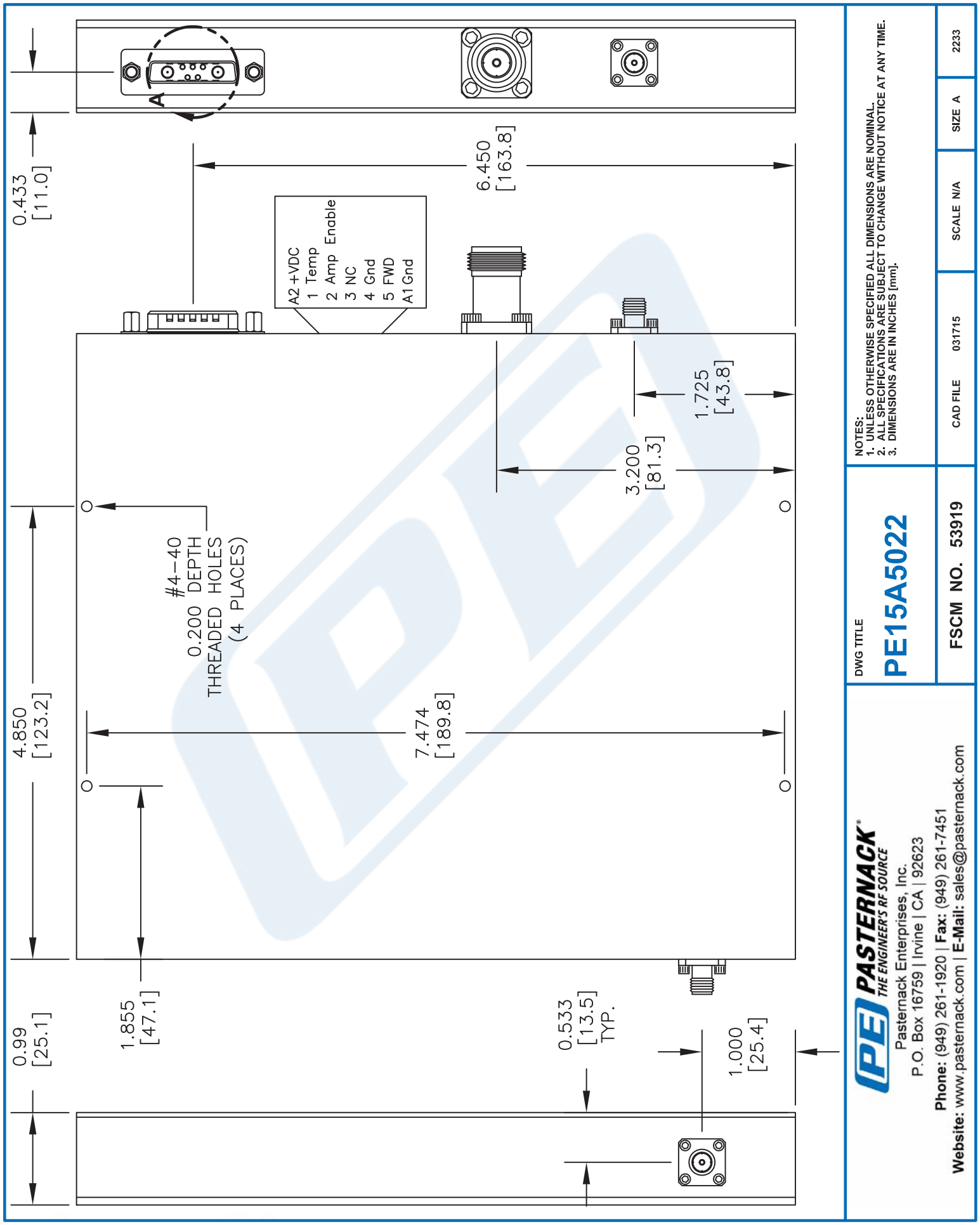
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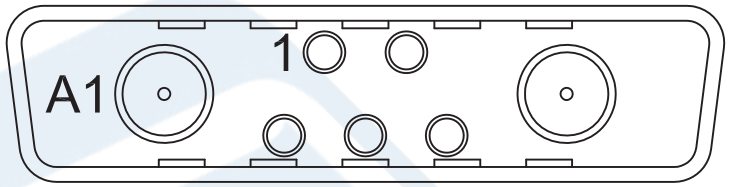


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View A

PIN	DESCRIPTION
1	Temperature
2	Amplifier Enable
3	NC
4	Ground
5	FWD
A1	Ground
A2	+VDC

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DWG TITLE

PE15A5022

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].

FSCM NO. 53919	CAD FILE 121114	SCALE N/A	SIZE A	2233