



8 Watt Psat, 2 GHz to 4 GHz, High Power Amplifier, 39 dB Gain, 48 dBm IP3, SMA

TECHNICAL DATA SHEET

PE15A5038F

The PE15A5038F is a 8 W high gain Class A/AB coaxial power amplifier operating in the 2 to 4 GHz frequency range. The amplifier offers 8 Watts typical of saturated power and 39 dB minimum small signal gain with ± 1.5 dB maximum of gain flatness. The amplifier requires typically a +13V DC power supply. The connectorized SMA module is unconditionally stable and operates over the temperature range of 0°C and +50°C. Heat Sink Included

Features

- 2 GHz to 4 GHz Frequency Range
- Psat 8 Watts typ
- Small Signal Gain: 39 dB min
- Gain Flatness ± 1.5 dB max
- IP3 48 dBm typ
- 50 Ohms Input and Output Matched
- Unconditionally Stable
- Regulated Supply
- Heat Sink Included
- RF Input Signal Format: CW/AM/FM/Pulse

Applications

- Military Radio
- Communication Systems
- High Gain Driver Power Amplifier
- High Gain Output Power Amplifier

Electrical Specifications (TA = +25°C, DC Voltage = 13Volts, DC Current = 5,500mA)

Description	Minimum	Typical	Maximum	Units
Frequency Range	2		4	GHz
Small Signal Gain	39			dB
Gain Flatness			± 1.5	dB
Input Power			+10	dBm
Psat		+39		dBm
Output Power at 1 dB Compression Point	+37.8			dBm
Output 3rd Order Intercept Point		+48		dBm
Harmonics @6 Watts		-20		dBc
Spurious @6 Watts		-60		dBc
Input VSWR			2:1	
Operating DC Voltage		13		Volts
Operating DC Current			5,500	mA
Operating Temperature Range	0		+50	°C

Mechanical Specifications

Size

Length	8.7 in [220.98 mm]
Width	5.2 in [132.08 mm]
Height	3.5 in [88.9 mm]
Weight	8 lbs [3.63 Kg]
Input Connector	SMA Female
Output Connector	SMA Female

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [8 Watt Psat, 2 GHz to 4 GHz, High Power Amplifier, 39 dB Gain, 48 dBm IP3, SMA PE15A5038F](#)



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Environmental Specifications

Temperature

Operating Range

0 to +50 deg C

Humidity

95% Non-Condensing

Shock

Normal Truck Transport

Vibration

Normal Truck Transport

Altitude

10000 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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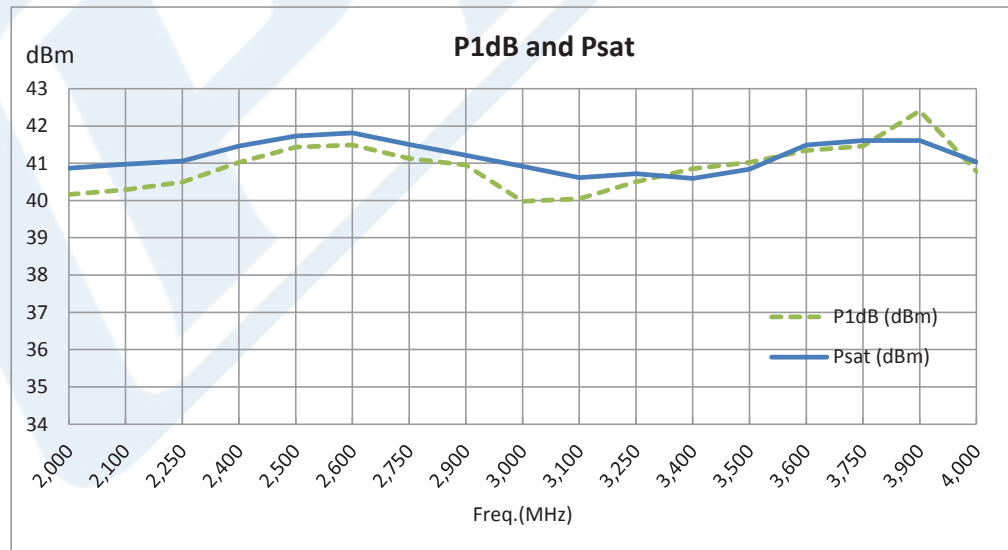
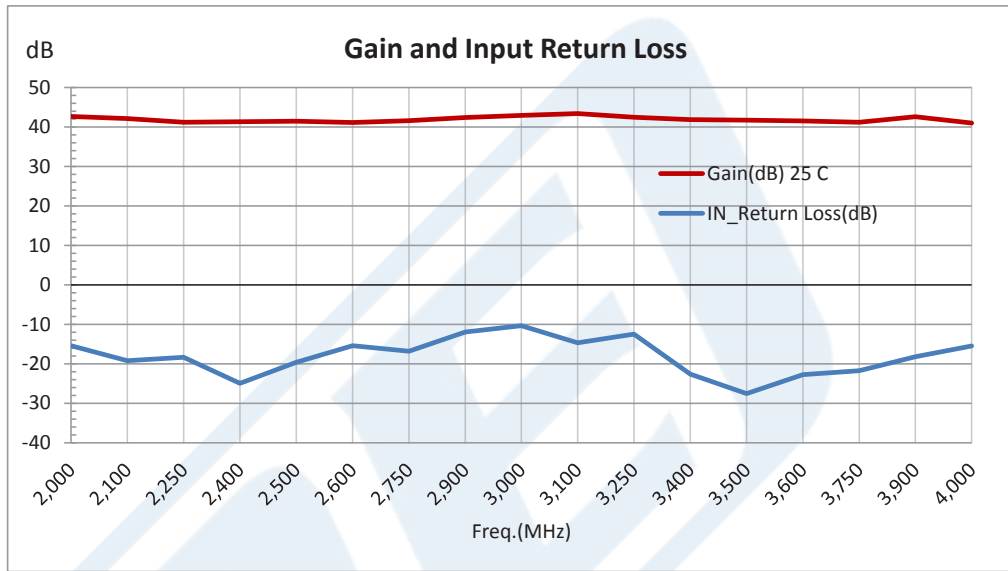


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Typical Performance Data



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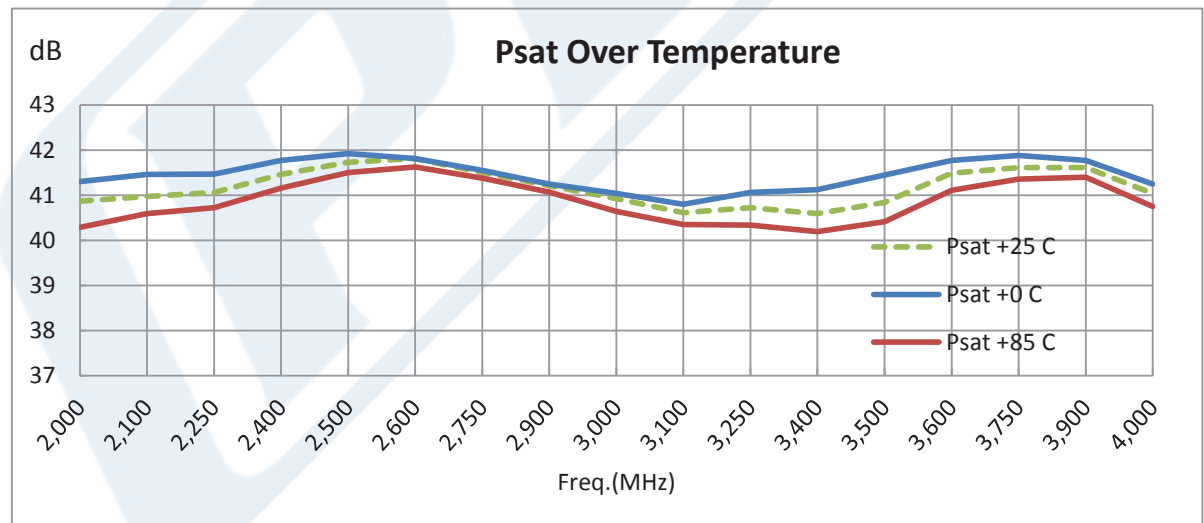
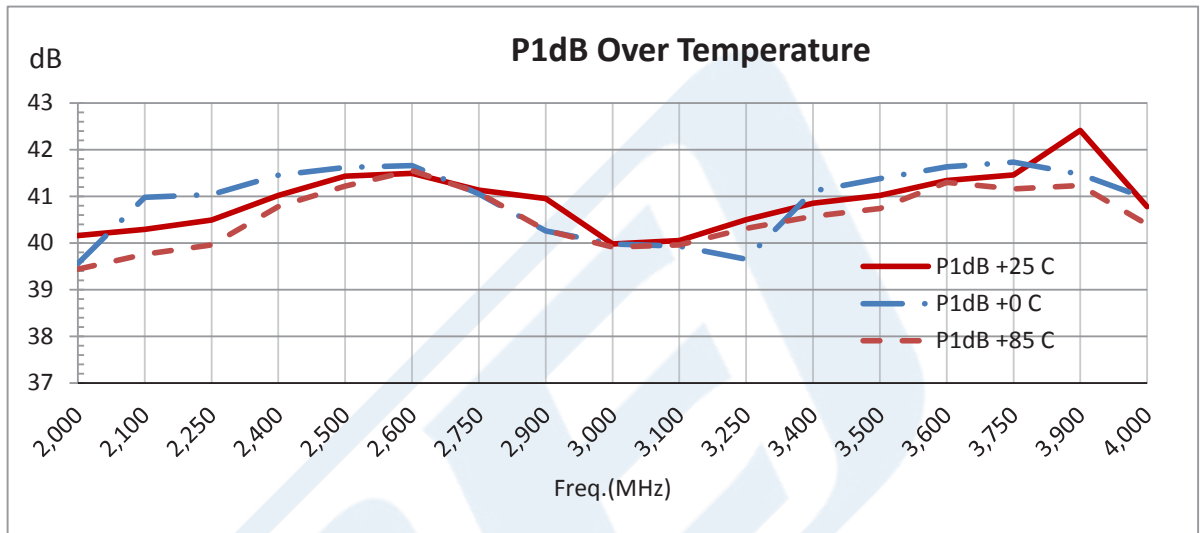




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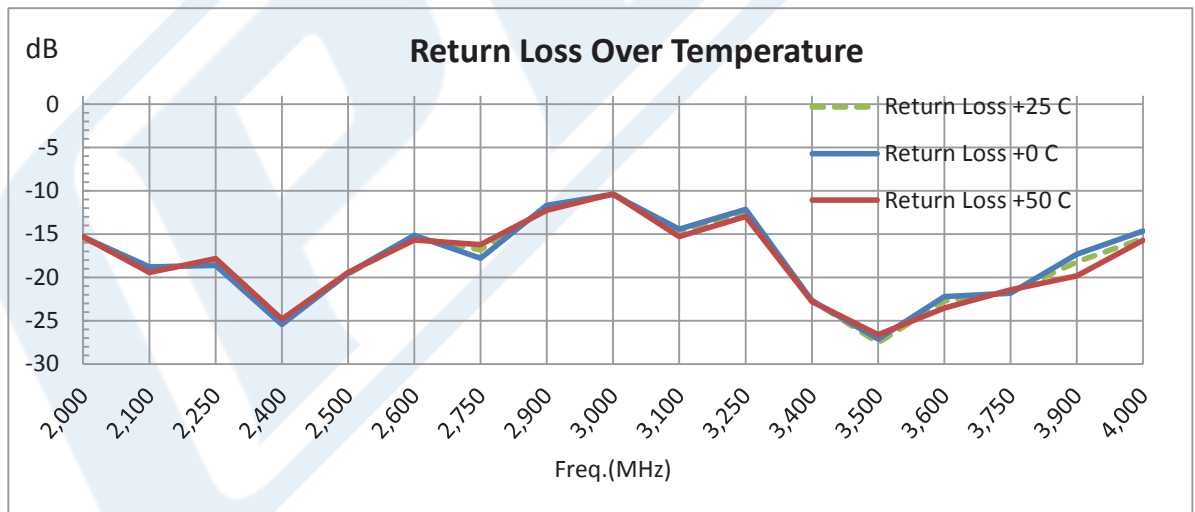
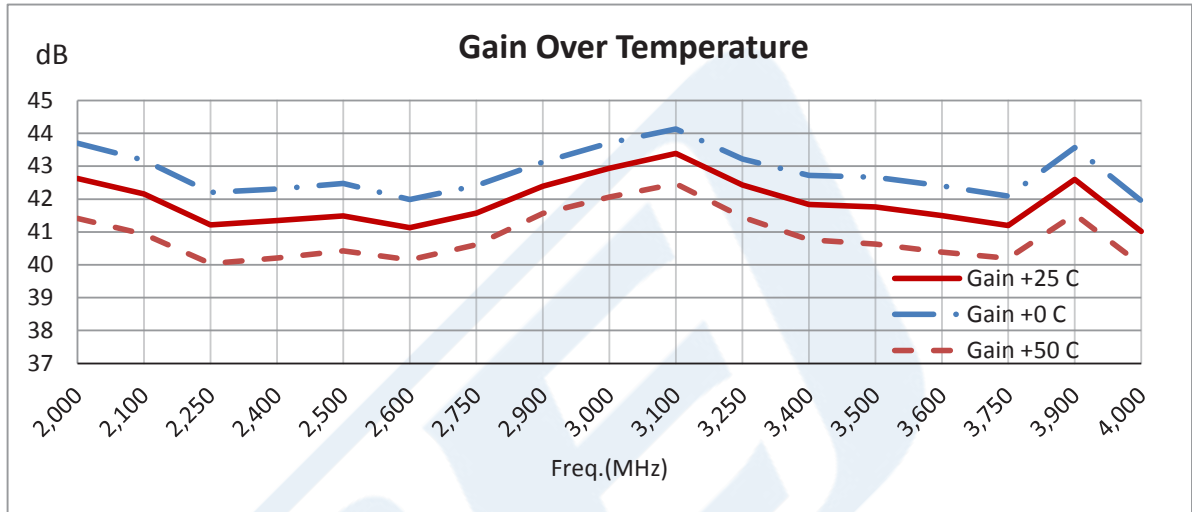
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8 Watt Psat, 2 GHz to 4 GHz, High Power Amplifier, 39 dB Gain, 48 dBm IP3, SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

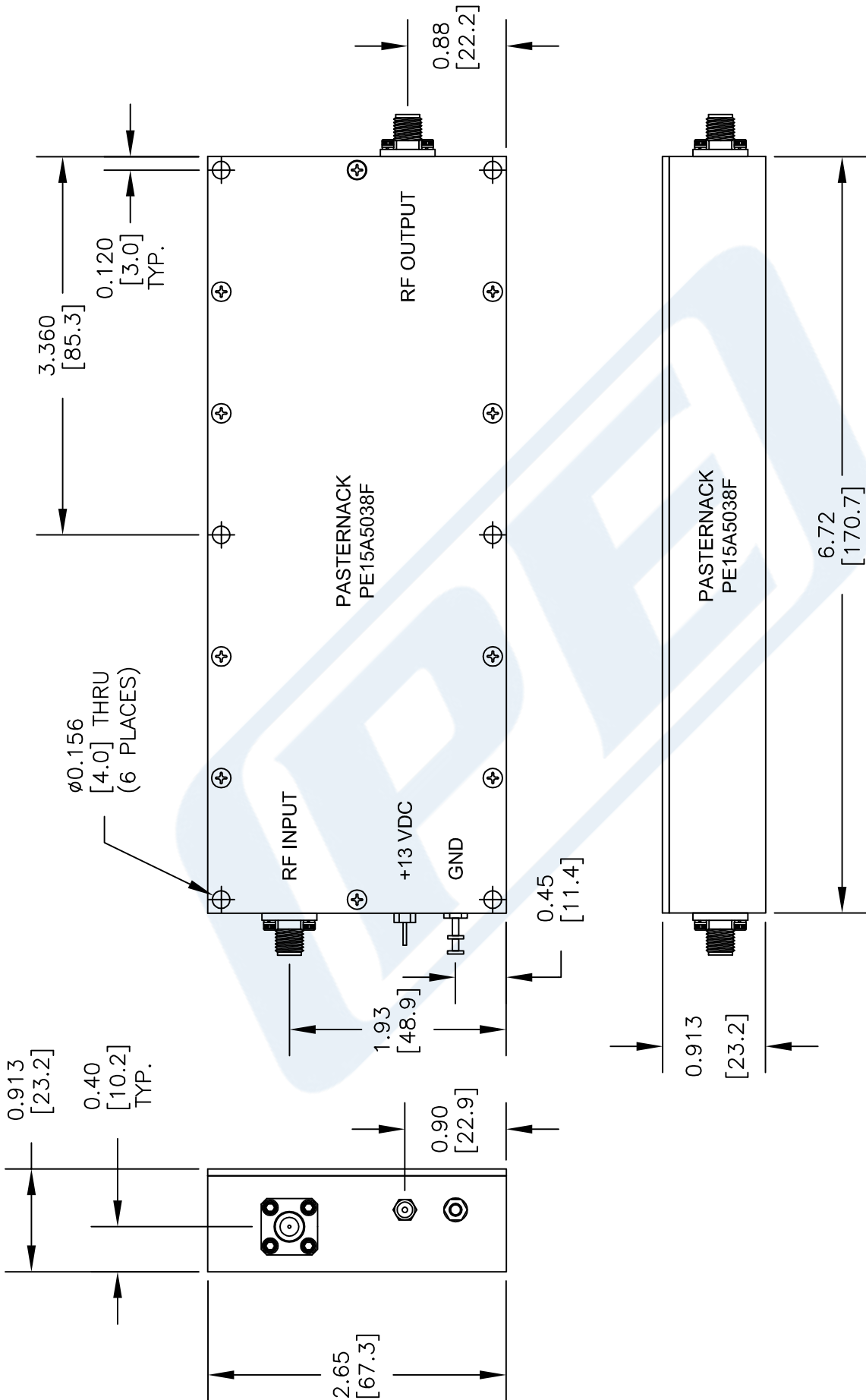
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PE15A5038F CAD Drawing

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NOTES:
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DWG TITLE
PE15A5038F

FSCM NO. 53919

CAD FILE 100314

SCALE N/A

SIZE A

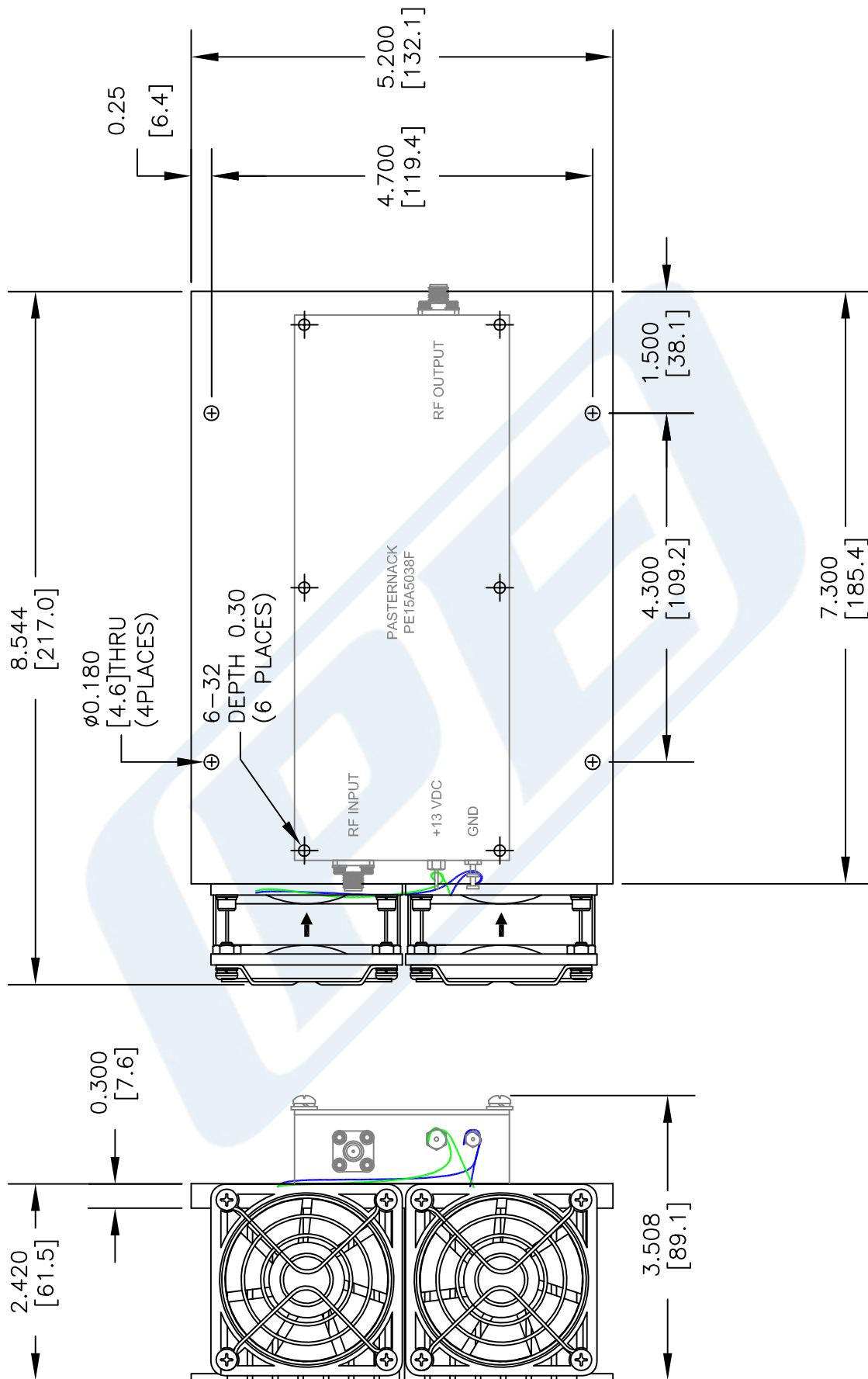
Website: www.pasternack.com | E-Mail: sales@pasternack.com

PE PASTERNAK
 THE ENGINEER'S RF SOURCE
 Pasternack Enterprises, Inc.
 P.O. Box 16759 | Irvine | CA | 92623

Phone: (949) 261-1920 | Fax: (949) 261-7451

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150

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