



48 dB Gain, 50 Watt Psat, 500 MHz to 3 GHz, High Power High Gain Amplifier, GaN, 52 dBm IP3, SMA

## TECHNICAL DATA SHEET

PE15A5032F

The PE15A5032F is a high gain Class A/AB coaxial Linear Power Amplifier operating in the 500 to 3000 MHz frequency range. The amplifier offers a Wide Dynamic Range with 50 Watts typical saturated power, 48 dB minimum small signal gain, and  $\pm 2.0$  dB gain flatness maximum. The amplifier requires typically a +36V DC power supply, is unconditionally stable, and operates over the temperature range of  $-20^{\circ}\text{C}$  and  $+75^{\circ}\text{C}$ . Pinouts include TTL Blanking, Remote ON/OFF, DC Current Monitoring, Reset, And Temperature Sensor Monitoring. RF Input/Output Connectors are SMA Female. The unit has a Heatsink and Fan.

### Features

- 500 MHz to 3000 MHz Frequency Range
- Psat 50 Watts typ
- Small Signal Gain: 48 dB min
- Gain Flatness  $\pm 2.0$  dB max
- Class A/AB
- TTL Blanking
- Remote ON/OFF
- 50 Ohms Input and Output Matched
- Unconditionally Stable
- Regulated Supply
- RF Input Signal Format CW/AM/FM/PM/Pulse
- SMA Female RF Connectors
- Heatsink and Fan
- DC Current Monitoring
- Rest Control
- Temperature Sensor Monitoring

### Applications

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

### Electrical Specifications (TA = $+25^{\circ}\text{C}$ , DC Voltage = 36Volts)

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.5		3	GHz
Small Signal Gain	48			dB
Gain Flatness			$\pm 2$	dB
Input Power			+0	dBm
Psat		+47		dBm
Output 3rd Order Intercept Point		+52		dBm
Harmonics @20 Watts		-15		dBc
Spurious @20 Watts		-70	-60	dBc
Input VSWR			2:1	
TTL Control	"1": Off, "0": On (Blanking), Enable: 0V, Disable: 5V			
Operating DC Voltage	28	36	48	Volts
DC Consumption			300	Watts
Operating Temperature Range	-20		+50	$^{\circ}\text{C}$
Temperature Indication: Analog Voltage Reporting with LM 35 or Equivalent				
Current Indication: Analog Voltage Reporting				

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [48 dB Gain, 50 Watt Psat, 500 MHz to 3 GHz, High Power High Gain Amplifier, GaN, 52 dBm IP3, SMA PE15A5032F](#)



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### Mechanical Specifications

#### Size

Length	9.8 in [248.92 mm]
Width	9.744 in [247.5 mm]
Height	4.1 in [104.14 mm]
Weight	12 lbs [5.44 Kg]
Input Connector	SMA Female
Output Connector	SMA Female

### Environmental Specifications

#### Temperature

Operating Range	-20 to +50 deg C
Humidity	95% Non-Condensing
Shock	MIL-STD-810F Method 516.5
Vibration	MIL-STD-810F Method 516.5
Altitude	10000 feet Above Sea Level

### Compliance Certifications (visit [www.Pasternack.com](http://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.



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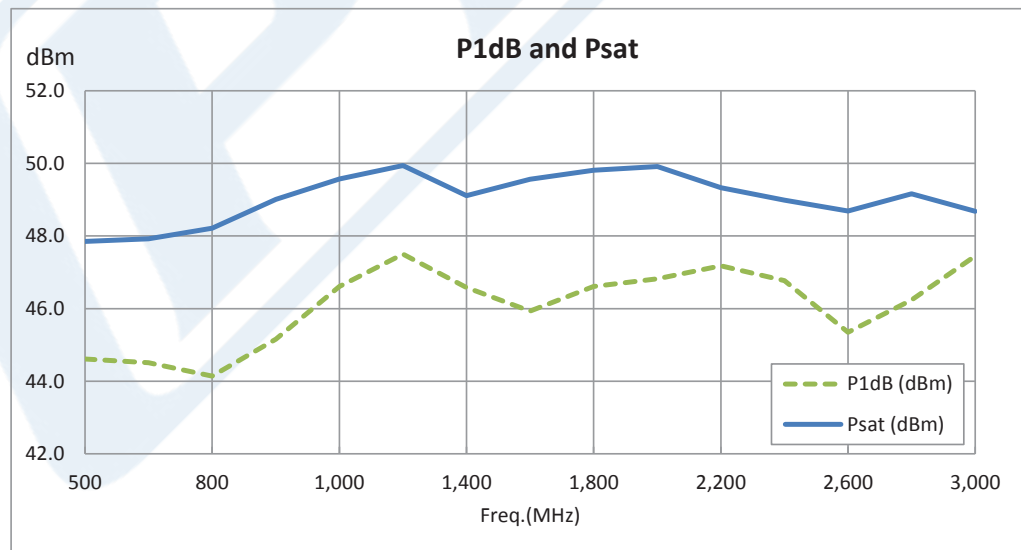
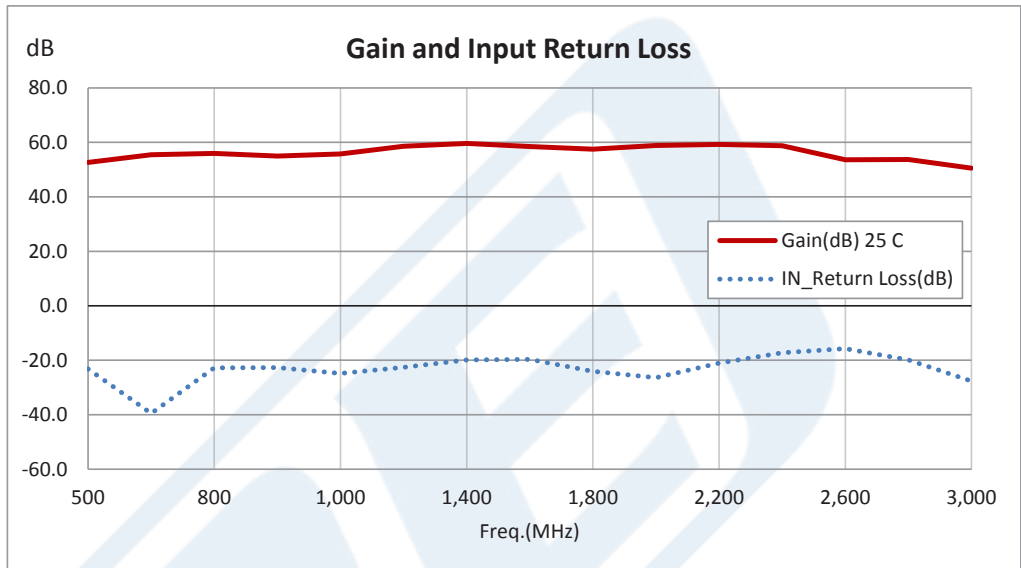


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### Typical Performance Data



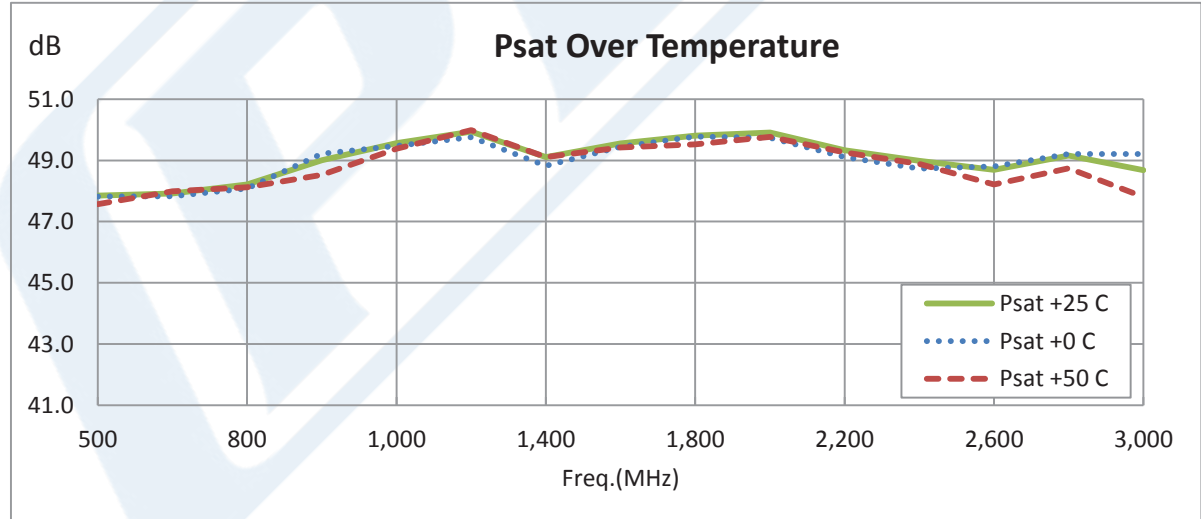
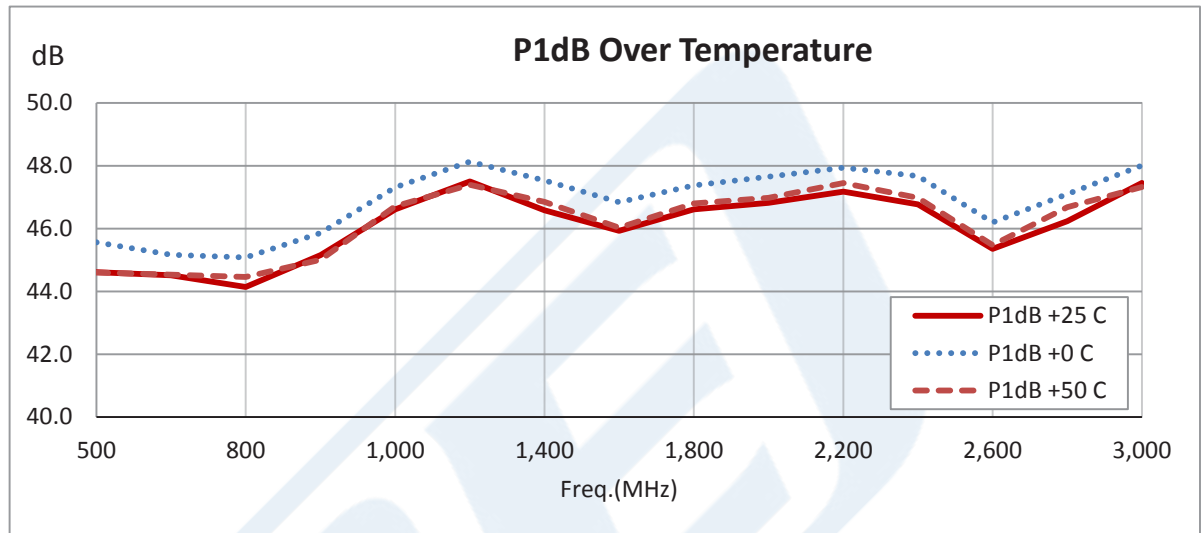
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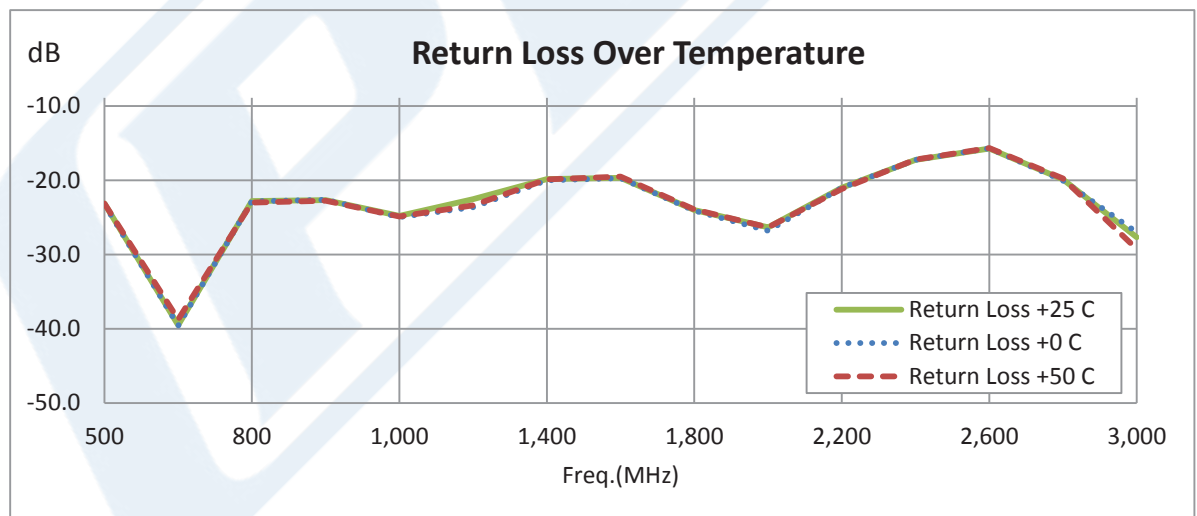
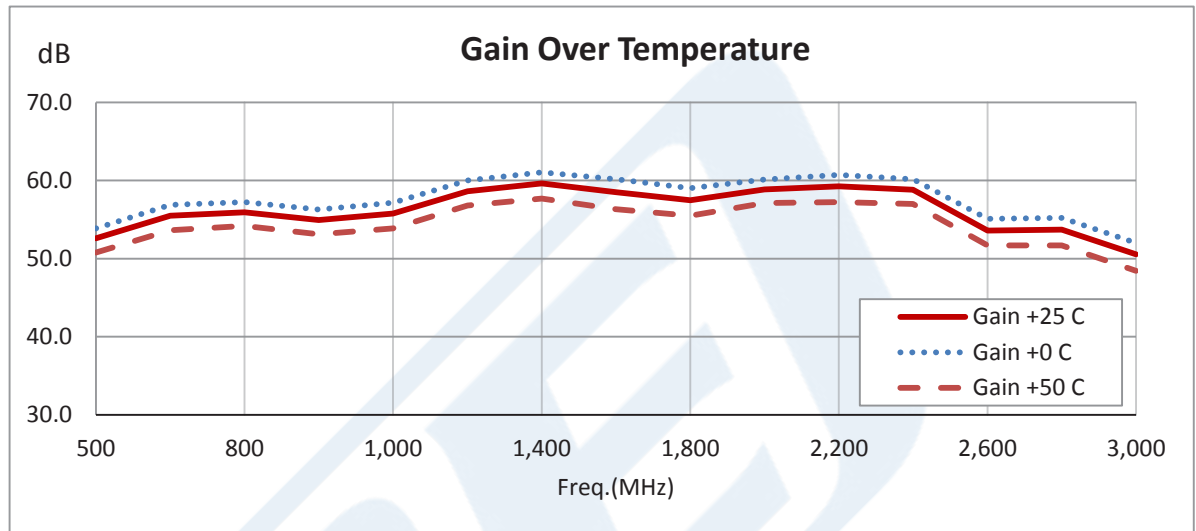
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48 dB Gain, 50 Watt Psat, 500 MHz to 3 GHz, High Power High Gain Amplifier, GaN, 52 dBm IP3, SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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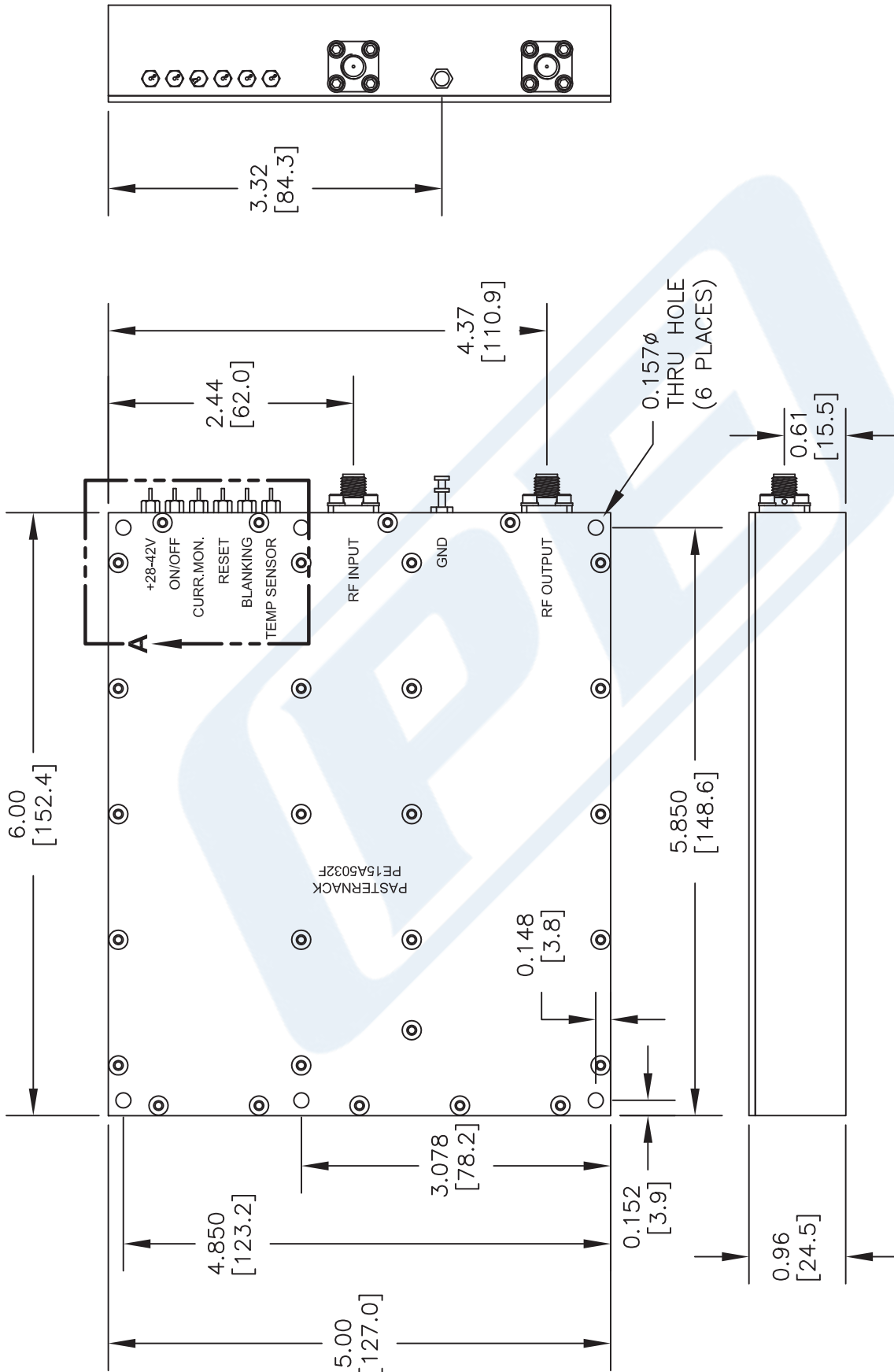
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# PE15A5032F CAD Drawing

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DWG TITLE

**PE15A5032F**

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].

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FSCM NO. 53919

CAD FILE 051215

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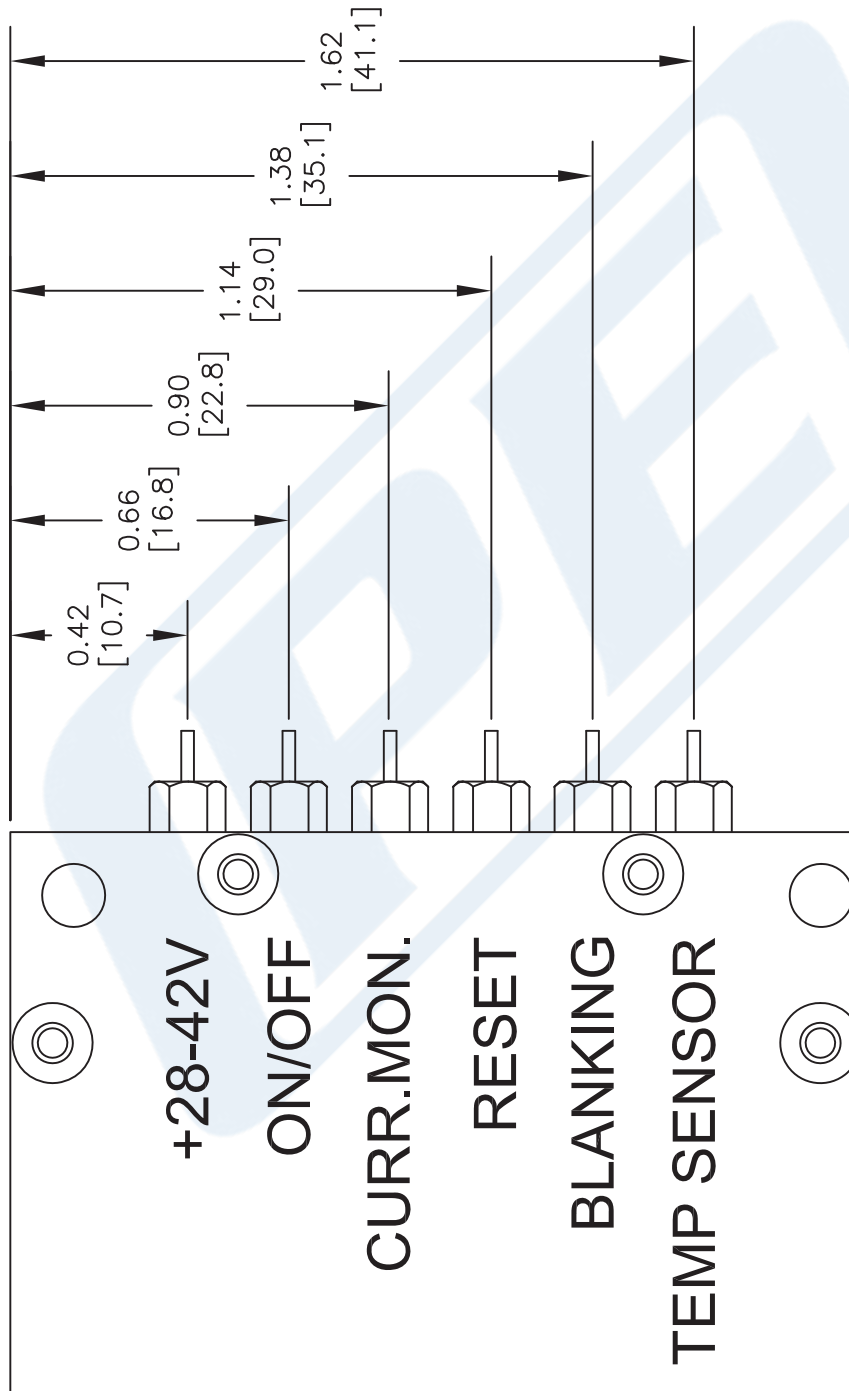
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**View A**



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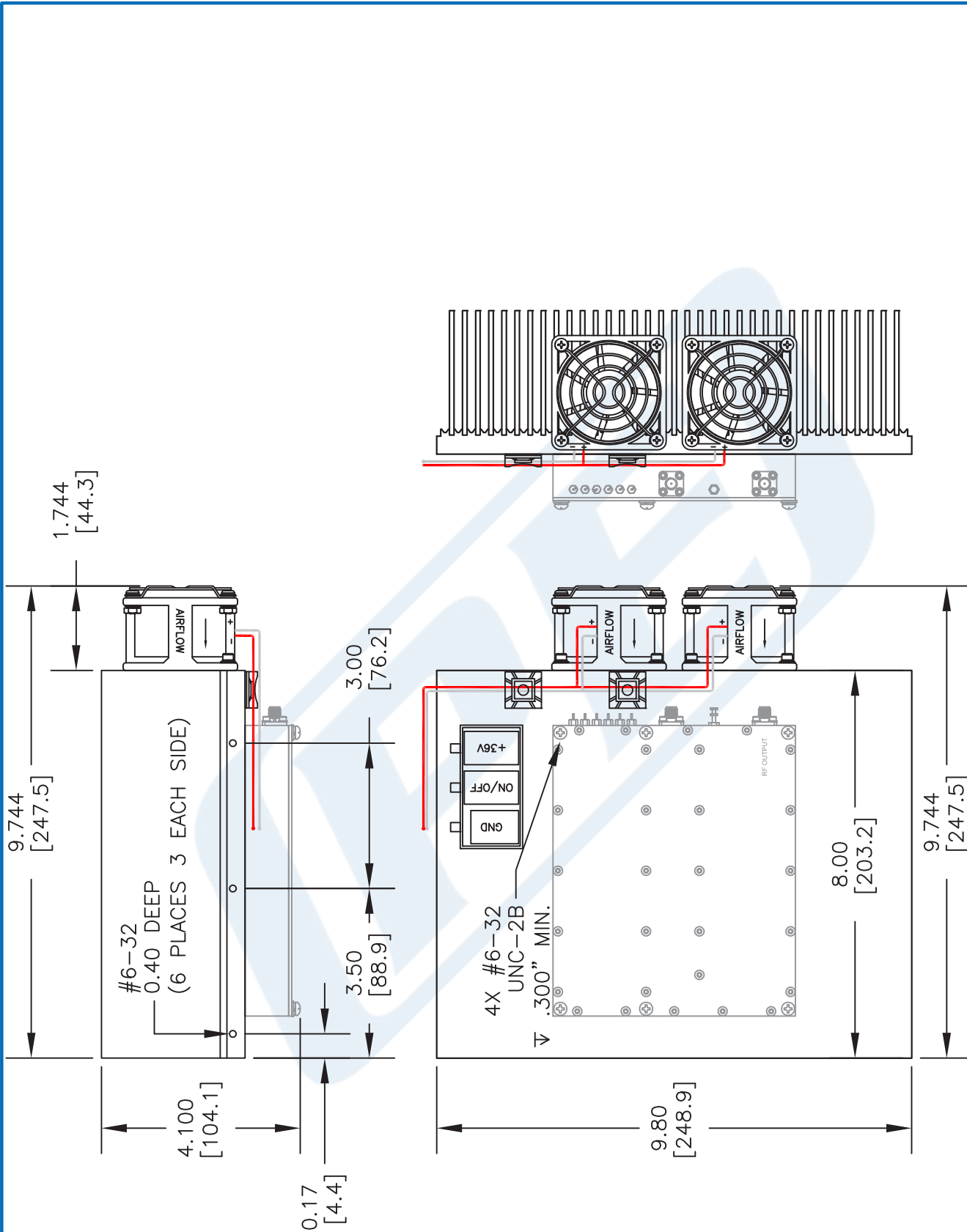
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