



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

TECHNICAL DATA SHEET

PE15A5032

The PE15A5032 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 ± 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°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.

Features

- 500 MHz to 3000 MHz Frequency Range
- Psat 50 Watts typ
- Small Signal Gain: 48 dB min
- Gain Flatness ± 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
- 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			± 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 PE15A5032](#)



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Mechanical Specifications

Size

Length	6 in [152.4 mm]
Width	5 in [127 mm]
Height	1.1 in [27.94 mm]
Weight	2 lbs [907.18 g]
Input Connector	SMA Female
Output Connector	SMA Female
Cooling	ADEQUET HEATSINK REQUIRED

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 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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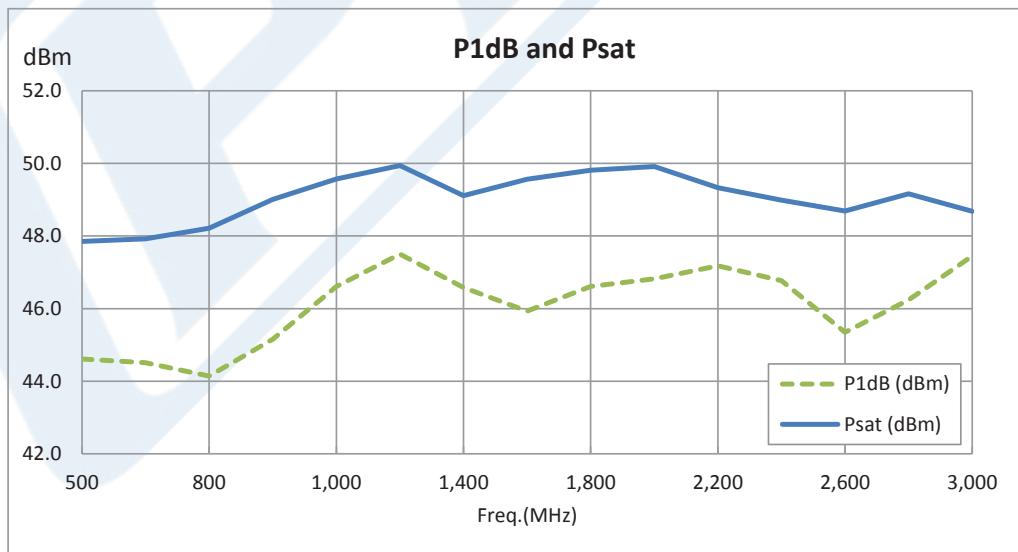
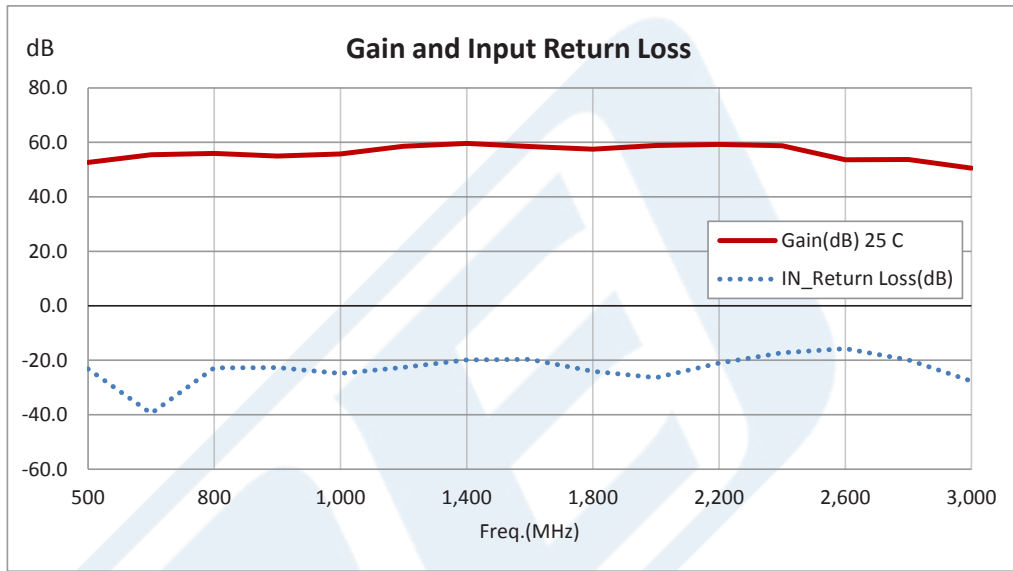


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Typical Performance Data



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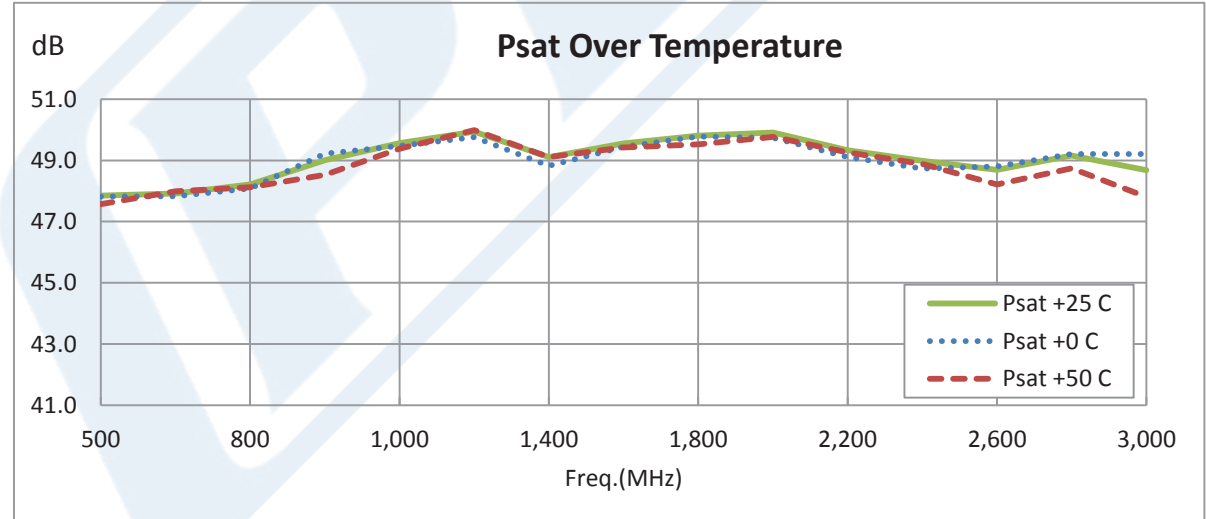
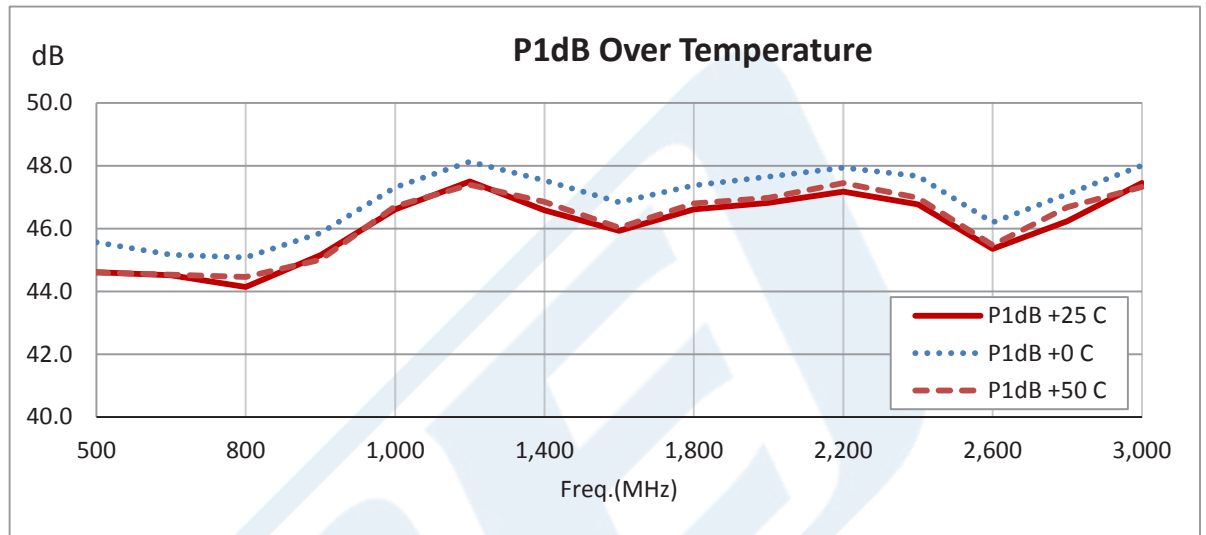




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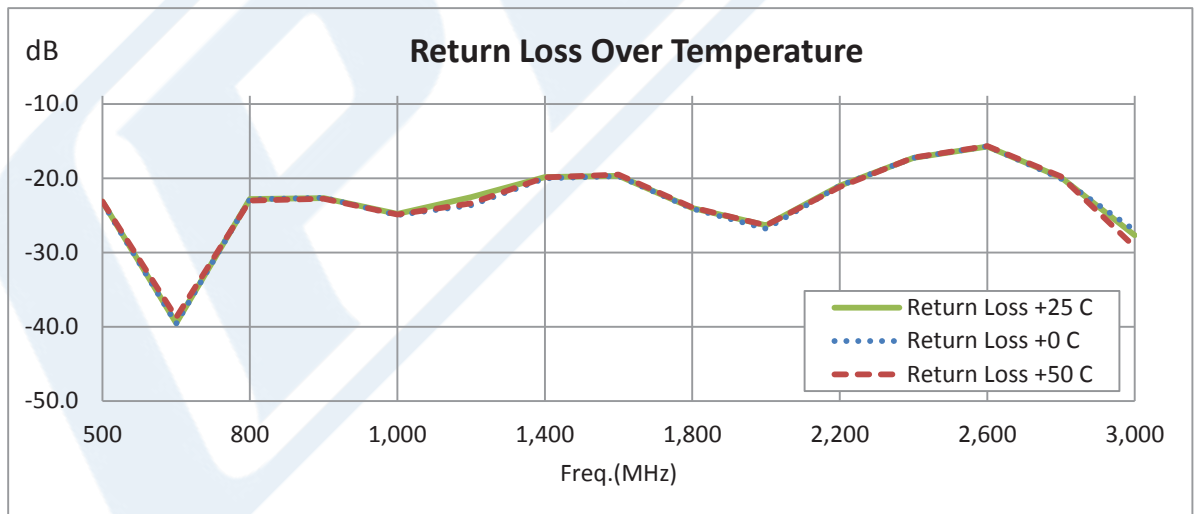
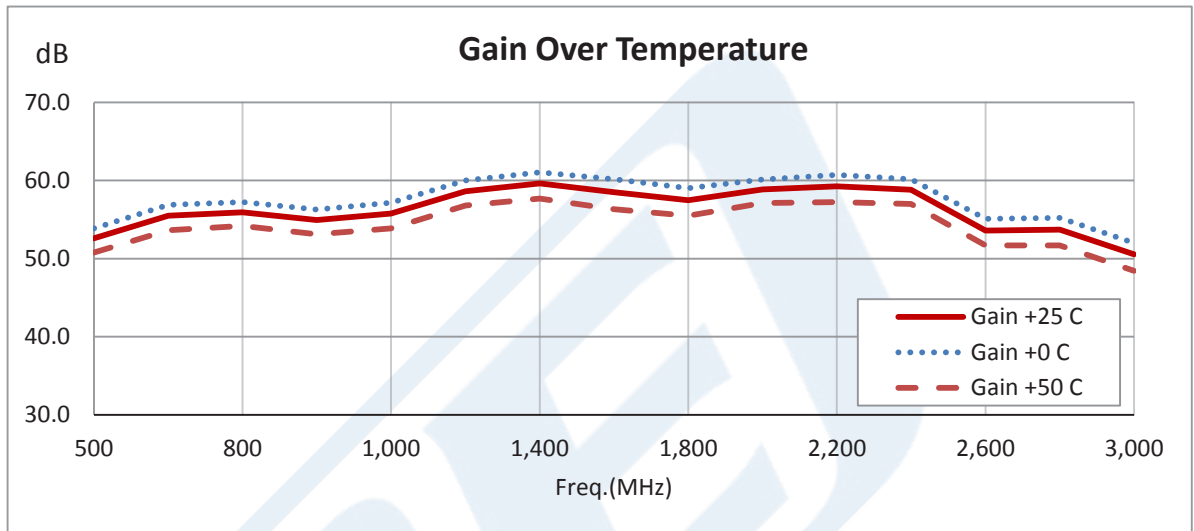




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48 dB Gain, 50 Watt Psat, 500 MHz to 3 GHz, High Power High Gain Amplifier, GaN, 52 dBm IP3, SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99%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

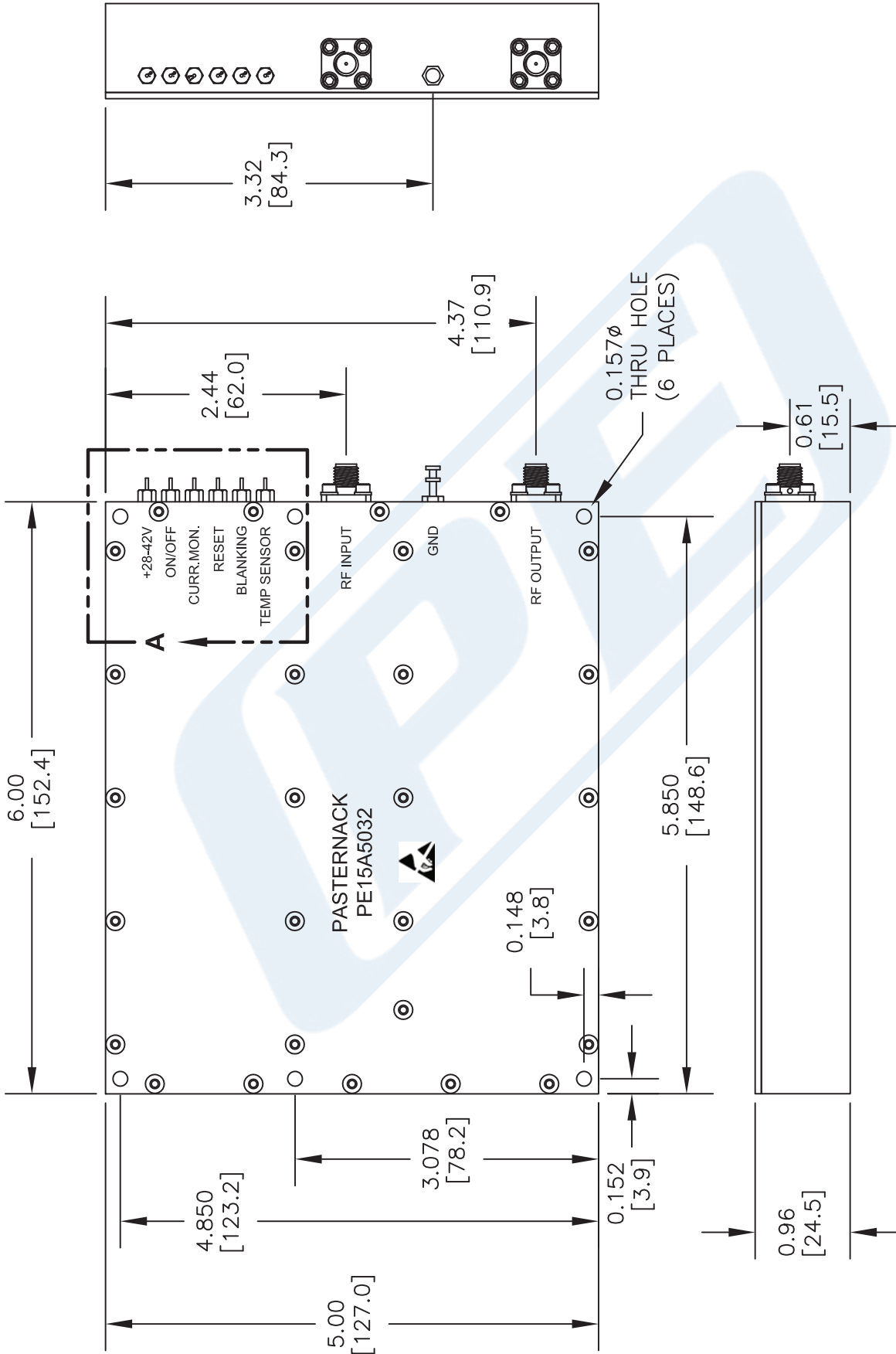
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PE15A5032 CAD Drawing

48 dB Gain, 50 Watt Psat, 500 MHz to 3 GHz, High Power
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NOTE:
HEAT SINK REQUIRED FOR PROPER OPERATION,
UNIT IS COOLED BY CONDUCTING TO HEAT SINK.

DWG TITLE

PE15A5032

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 042815

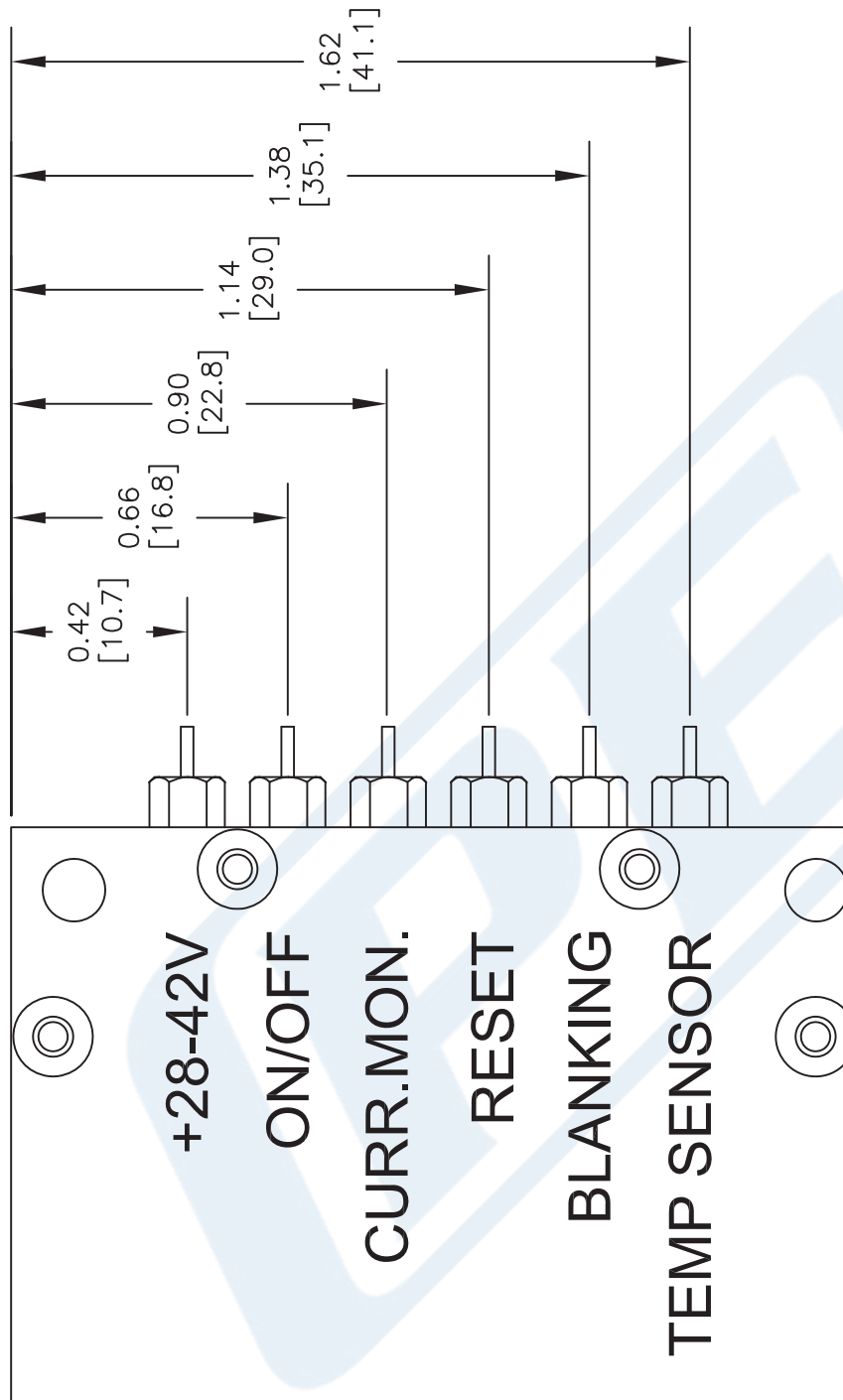
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SIZE A

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View A

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