



46 dB Gain, 25 Watt Psat, 20 MHz to 1,000 MHz, High Power High Gain Amplifier, 48 dBm IP3, SMA

TECHNICAL DATA SHEET

PE15A5031F

The PE15A5031F is a 25W high gain coaxial power amplifier operating in the 20 to 1000 MHz frequency range. The amplifier offers 25 Watts typical saturated power and 46 dB typical small signal gain with ± 1.5 dB maximum gain flatness. The amplifier requires typically a +28V DC power supply. The connectorized SMA module is unconditionally stable, operates over the temperature range of 0°C and +50°C, and has a heatsink and fan for proper operation..

Features

- 20 MHz to 1000 MHz Frequency Range
- Psat 25 Watts typ
- Small Signal Gain: 46 dB min
- Gain Flatness ± 1.5 dB max
- IP3 48 dBm typ
- 50 Ohms Input and Output Matched
- Unconditionally Stable
- Regulated Supply
- Heatsink and Fan

Applications

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

Electrical Specifications (TA = +25°C, DC Voltage = 28Volts, DC Current = 5,800mA)

Description	Minimum	Typical	Maximum	Units
Frequency Range	20		1,000	MHz
Small Signal Gain	46			dB
Gain Flatness			± 1.5	dB
Input Power			+0	dBm
Psat		+44		dBm
Output Power at 1 dB Compression Point	+40			dBm
Output 3rd Order Intercept Point		+48		dBm
Harmonics		-20		dBc
Spurious		-60		dBc
Input VSWR			2:1	
TTL Control		"1" = On; "0" = Off		
TTL Control Enable		5		Volts
TTL Control Disable		0		Volts
Operating DC Voltage		28		Volts
Operating DC Current			5,800	mA
Operating Temperature Range	0		+50	°C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [46 dB Gain, 25 Watt Psat, 20 MHz to 1,000 MHz, High Power High Gain Amplifier, 48 dBm IP3, SMA PE15A5031F](#)

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Size

6 in [152.4 mm]

3 in [76.2 mm]

1.1 in [27.94 mm]

5 lbs [2.27 Kg]

SMA Female

SMA Female

ADEQUATE HEATSINK REQUIRED

Temperature

0 to +50 deg C

95% Non-Condensing

Normal Truck Transport

Normal Truck Transport

10000 feet Above Sea Level

Not RoHS Compliant

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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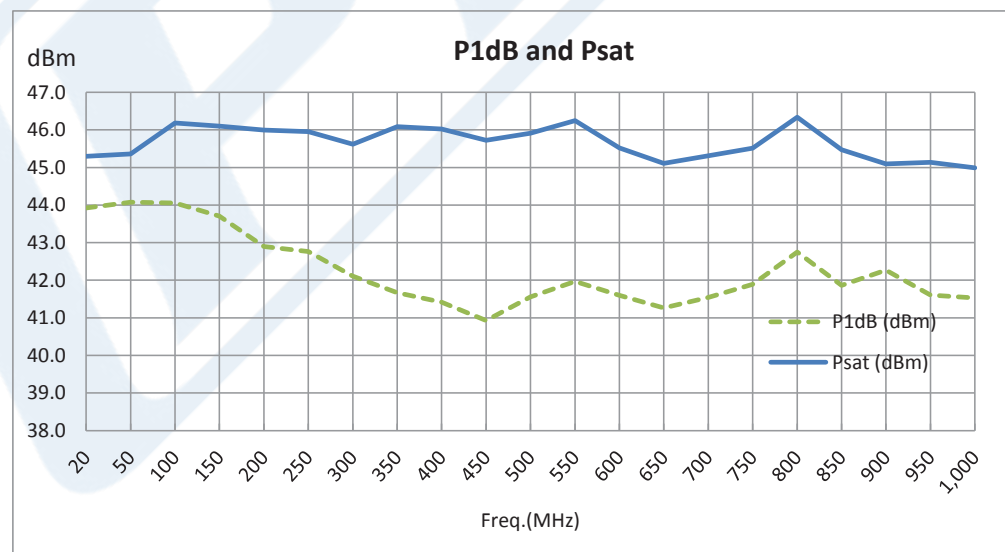
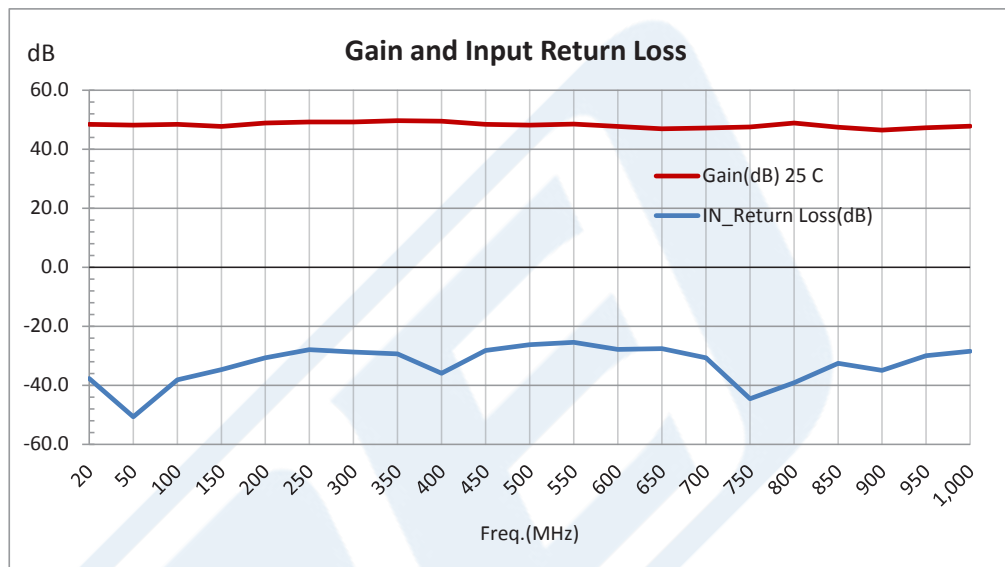


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Typical Performance Data



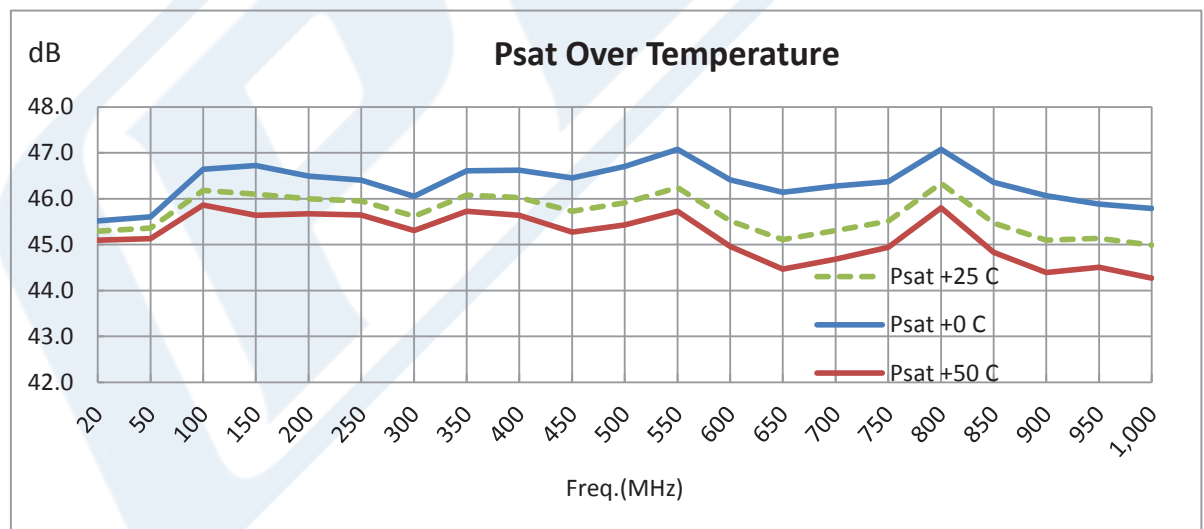
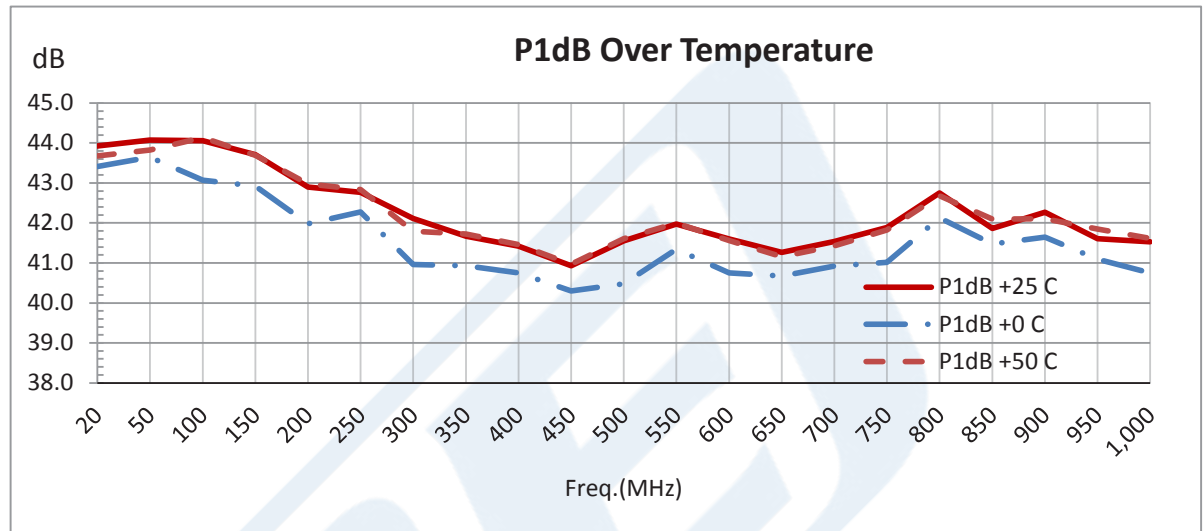
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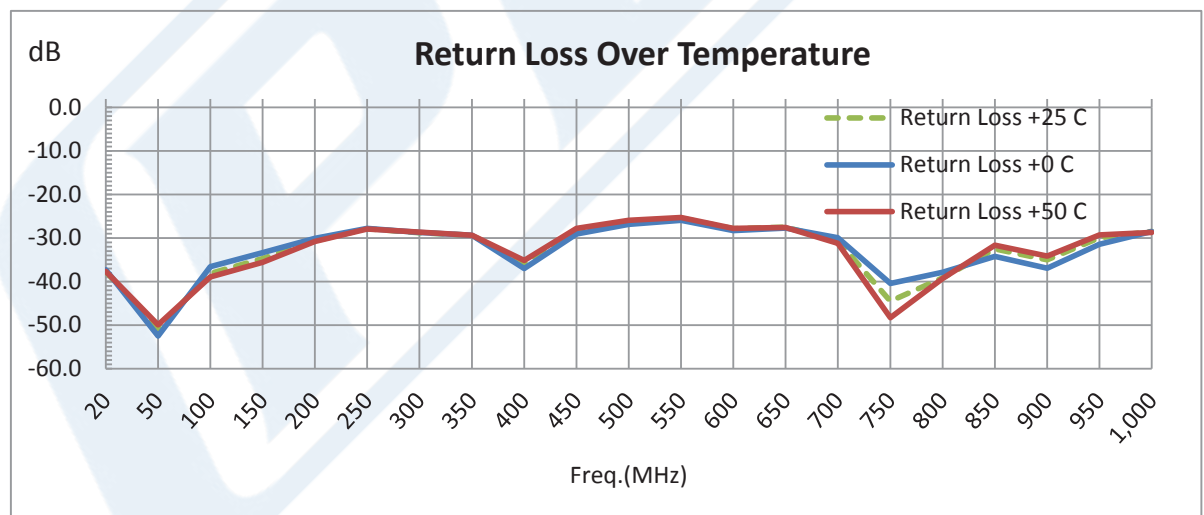
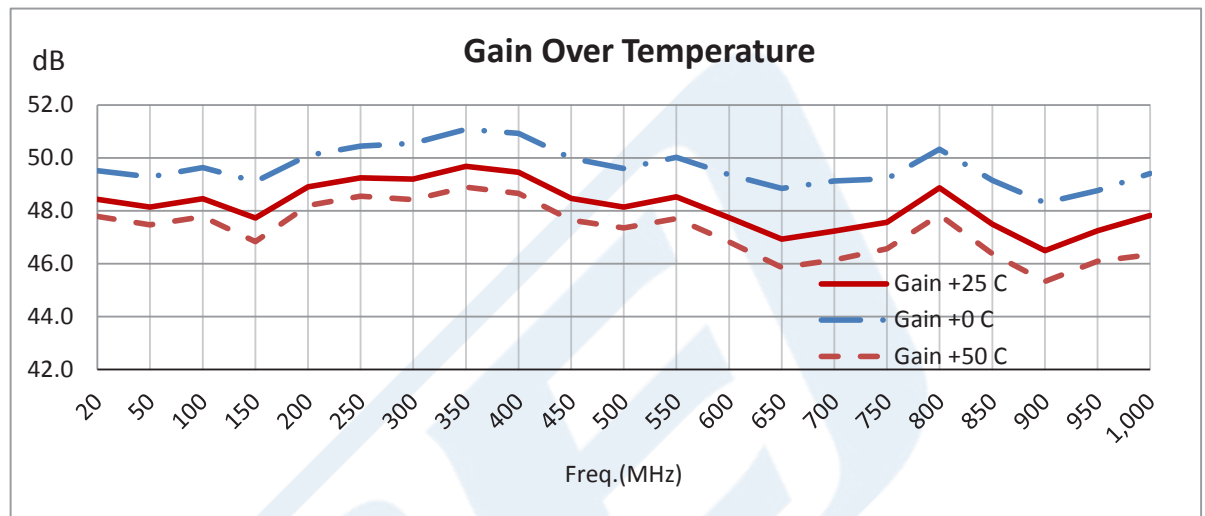
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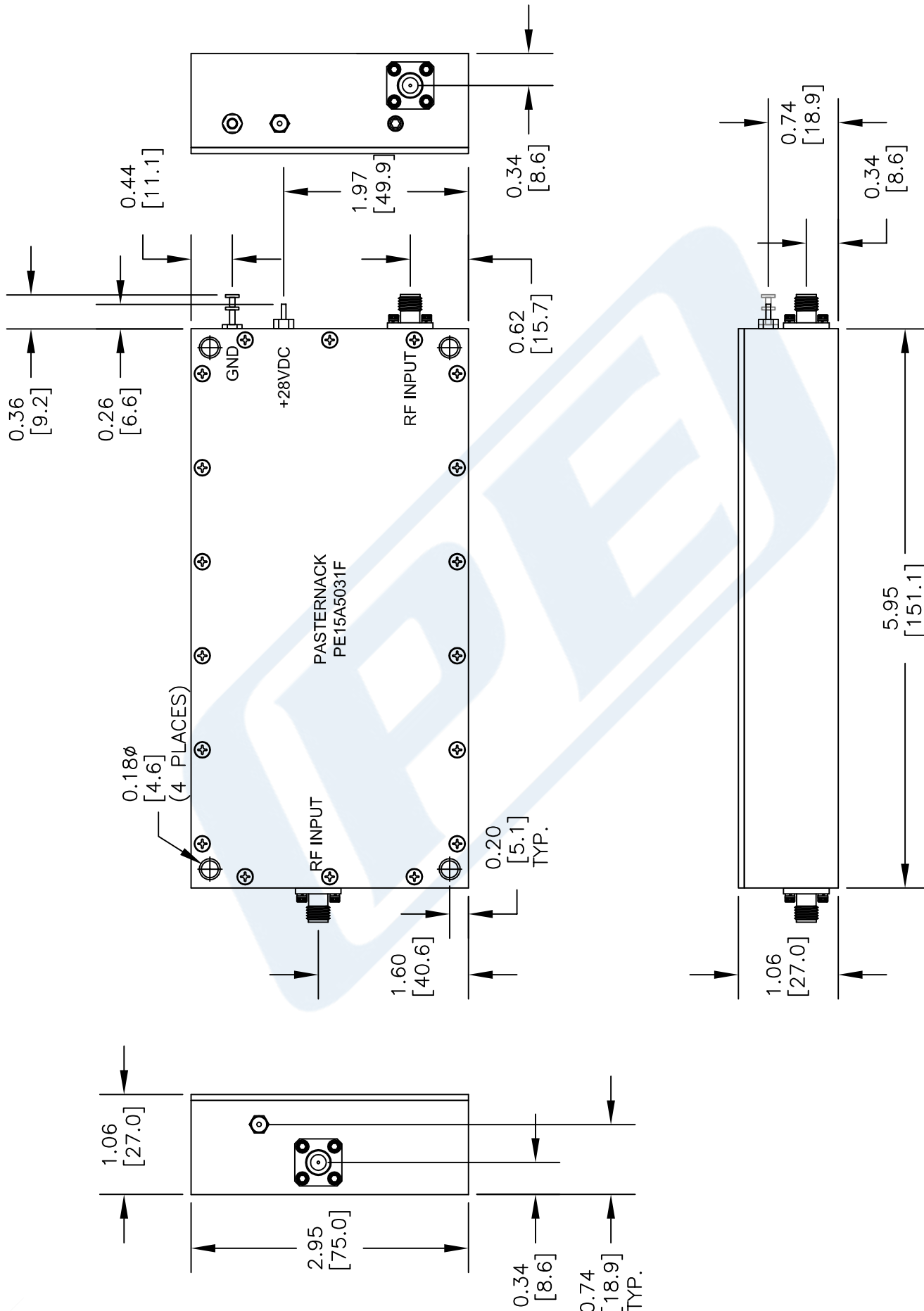
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The UL Registered Firm logo consists of a circular emblem. The outer ring contains the text "PASTERNAK ENTERPRISES, INC." at the top and "REGISTERED FIRM" at the bottom. Inside the circle, the letters "UL" are prominently displayed in a bold, sans-serif font. Below "UL", there is smaller text that reads "CERTIFICATE NO. T000007 CHGO". To the left of the circle, the text "E986-1-2008" is visible.

PE15A5031F CAD Drawing

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Power High Gain Amplifier, 48 dBm IP3, SMA



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].

DWG TITLE
PE15A5031F

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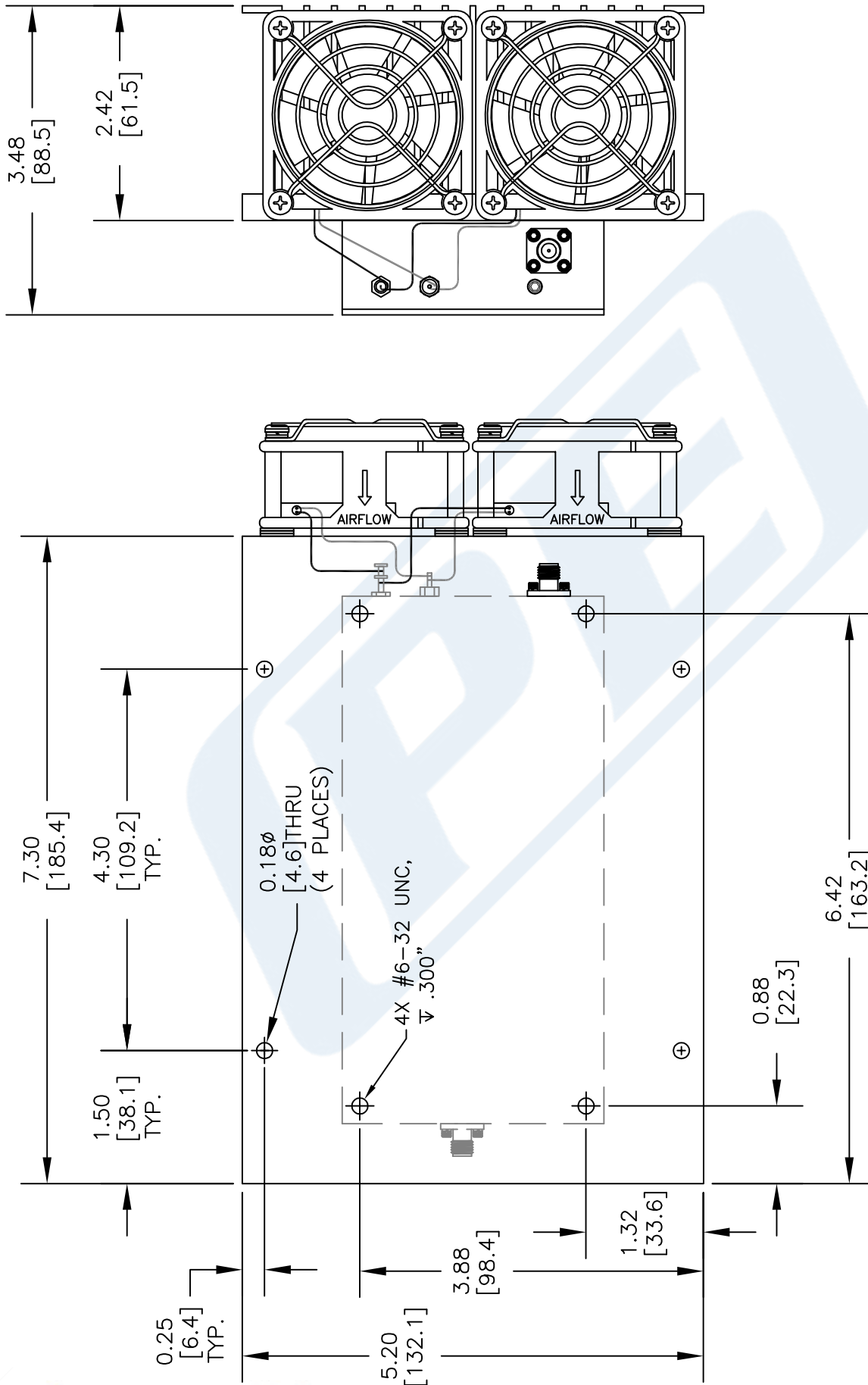
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CAD FILE 093014

FSCM NO. 53919

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