



## General Description:

This amplifier is a broadband power amplifier designed for CW/Digital/Pulse signals and general-purpose amplification.

Using advanced high power density GaN semiconductor devices, these high-performance amplifiers achieve high efficiency, high gain, and wide dynamic range.

Like all Elite RF amplifiers, the product comes with an industry leading warranty.

## Features

Wide Freq. Range  
High Output Power  
High Gain  
High Reverse Isolation  
Built-in Protection  
Enable/Disable input (ground to disable)

## Indicator options

DC Power  
Temp Fault

## Protections

Thermal Overload  
Over Voltage  
Reverse Polarity

## ELECTRICAL SPECIFICATIONS

| Parameter                                  | Symbol     | Min | Typ   | Max  | Unit  |
|--------------------------------------------|------------|-----|-------|------|-------|
| Frequency Range                            | BW         | 20  |       | 6000 | MHz   |
| Output Power CW                            | Psat       |     | 20    |      | Watt  |
| Output Power at 1 dB Compression           | P1dB       |     | 5     |      | Watt  |
| Small Signal Gain                          | Gp         |     | 48    |      | dB    |
| Gain Flatness                              | Delta Gp 1 |     | +/- 3 |      | dB    |
| Input VSWR                                 | S11        |     | 2:1   |      | Ratio |
| IMD @ 2 GHz @ .1 watt/tone / 1 MHz spacing | IP3        |     | 48    |      | dBm   |
| Harmonics                                  | H          |     | -20   |      | dBc   |
| Spurious Signals                           | Spur       |     | -60   |      | dBc   |
| Operating Voltage                          | VDC        | 49  | 50    | 51   | VDC   |
| Current at 20 watts                        | Current    |     | 3.0   |      | Amps  |
| Class of Operation                         | C          |     | AB    |      | Class |
| Noise Figure                               | NF         |     | 5     |      | dB    |
| Large Signal Gain                          | Lsg        |     | 40    |      | dB    |
| Max Load VSWR @ 20 Watts                   | ML         |     | 6:1   |      | Ratio |

## ENVIRONMENTAL CHARACTERISTICS

| Parameter                          | Symbol | Min | Typ                    | Max    | Unit   |
|------------------------------------|--------|-----|------------------------|--------|--------|
| Operating Case Temperature         | Tc     | -20 |                        | +60    | Deg. C |
| Storage Temperature                | Tstg   | -40 |                        | +85    | Deg. C |
| Relative Humidity (non-condensing) | RH     |     |                        | 95     | %      |
| Altitude                           | ALT    |     |                        | 10,000 | Feet   |
| Vibration/Shock                    | VI /SH |     | Normal Truck Transport |        |        |

## MECHANICAL CHARACTERISTICS

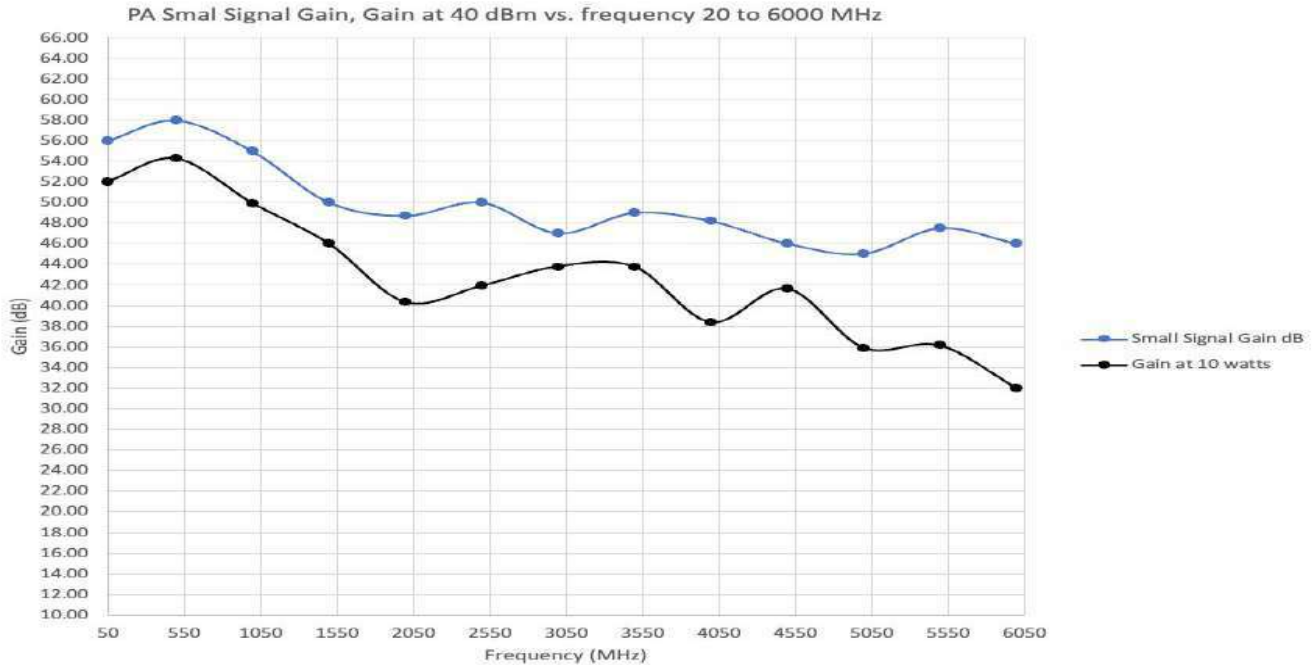
| Parameter         | Symbol  | Min | Typ                | Max | Unit   |
|-------------------|---------|-----|--------------------|-----|--------|
| Dimensions        | Dim     |     | 6.0 x 4.0 x 1.0    |     | Inches |
| Weight            | Wt.     |     | 1                  |     | lbs.   |
| Connectors In/Out | RF Conn |     | SMA/SMA            |     | -      |
| Cooling           | Th      |     | Heat sink required |     | -      |

## OPTIONS

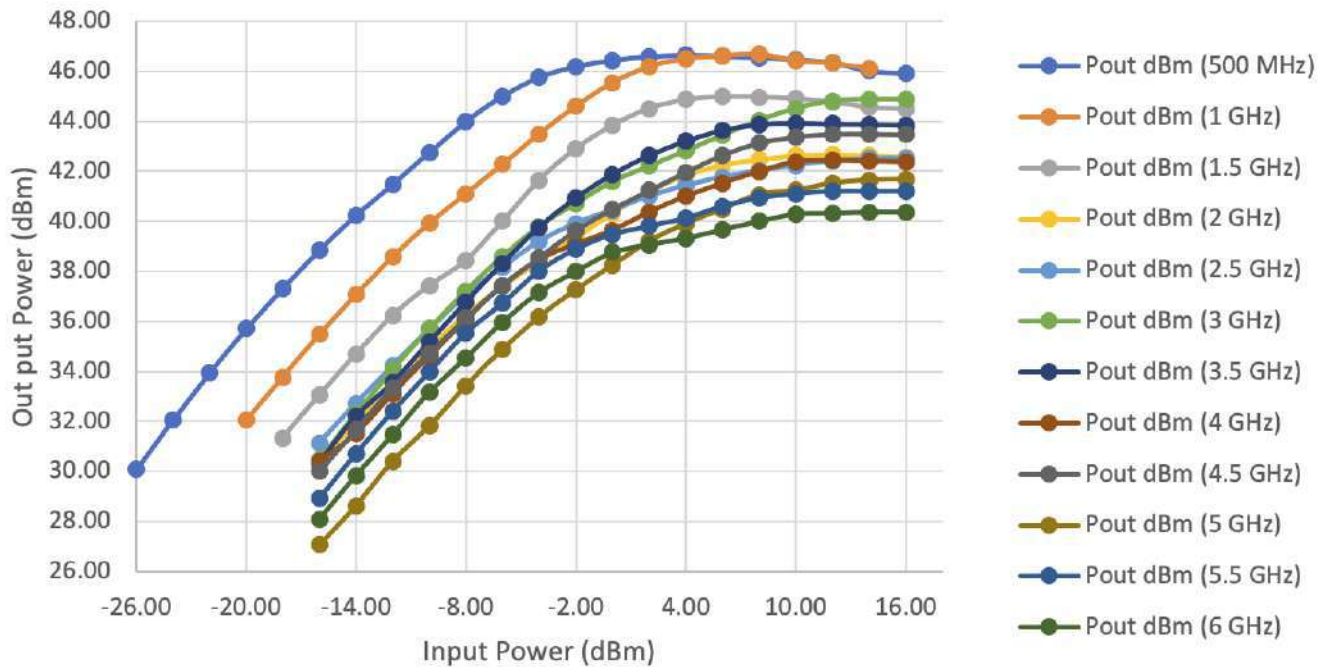
| Parameter                                         | Add suffix to part number |
|---------------------------------------------------|---------------------------|
| Heat sink and fans                                | - H                       |
| Isolator with forward and reverse voltage outputs | N/A                       |
| TTL Input Trigger                                 | - T                       |



**Test Data Conditions: +25 degrees ambient / 50 VDC**



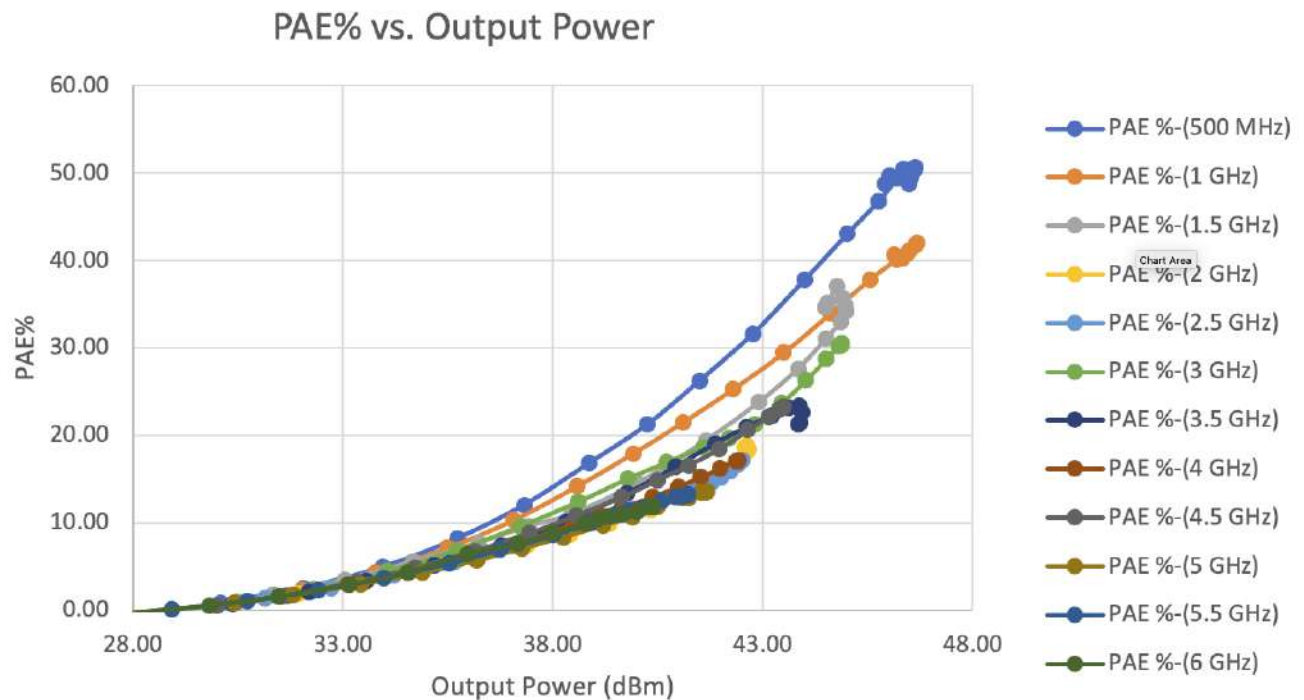
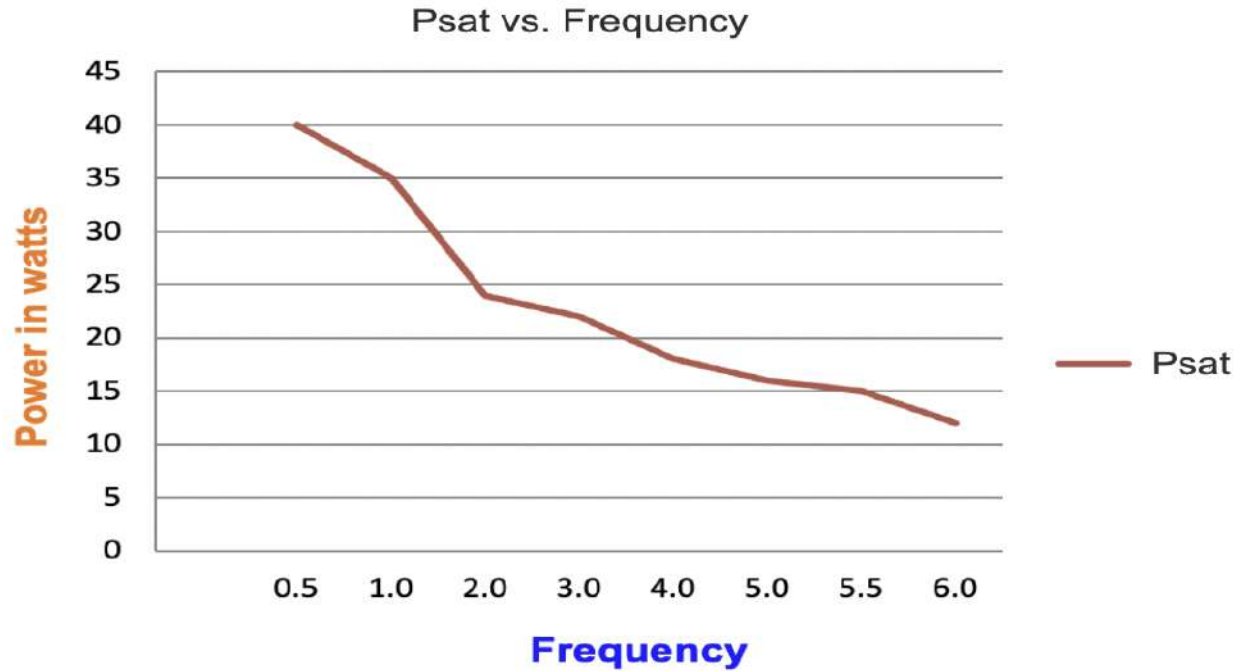
### Output Power vs. Input Power



**Elite RF LLC**

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 Email: [sales@eliterf.com](mailto:sales@eliterf.com) Web: [www.eliterfllc.com](http://www.eliterfllc.com)

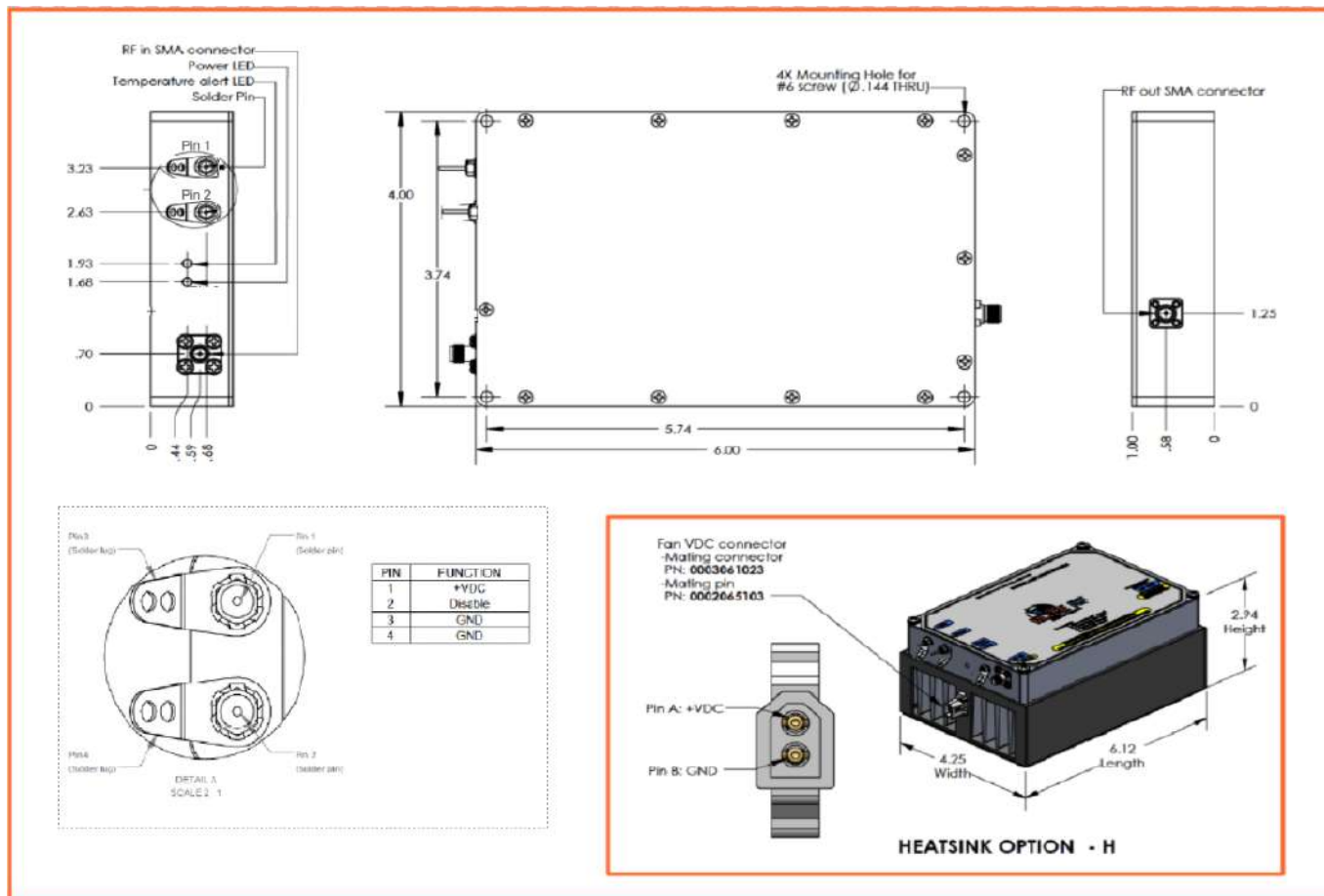
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## Mechanical Drawings



### Model Options

MB.026.0G434850

Standard model

MB.026.0G434850-H

Standard model mounted on heat-sink with fans

MB.026.0G434850-T

Standard model with TTL input pulse port

MB.026.0G434850-W

Standard model with water cooling connections

AB.026.0G4348AC

Standard model mounted in 19" cabinet with heat-sink, fans and power supply

Elite RF welcomes your custom requirement, please contact us so we can put our engineering team to work for you.



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Specifications subject to change, consult  
sales for latest information

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