

# LINEAR PULSED POWER AMPLIFIER

**Model – MP1.21.4G575050**

## General Description:

**Elite RF's MP Series** amplifier is a narrowband power amplifier designed for Pulsed signals fabricated on GaN on SiC process and can operate up to **1.4 GHz**. These amplifiers offer high power density, low thermal resistance, and narrowband performance. They can be widely used for military and commercial applications.

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



## Features Indicator options Protections

Pulsed operation	DC Power	Thermal Overload
High Pk. Output Power	Temp Fault	Over Voltage
High Gain		Reverse Polarity
High Reverse Isolation		
Built-in Protection		
Enable/Disable input (ground to disable)		

## ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	BW	1200		1400	MHz
Output Power Pk	Psat		500		Watt
Duty Cycle	Dc		5	10	%
Small Signal Gain	Gp		50		dB
Gain Flatness	Delta Gp 1		+/- 1		dB
Input VSWR	S11		2:1		Ratio
Pulse width	Pw		50	100	uS
Harmonics	H		-20		dBc
Spurious Signals	Spur		-60		dBc
Operating Voltage	VDC	49	50	51	VDC
Average Current at 500 watts @ 10% DC	Current		2		Amps
Class of Operation	C		AB		Class
Noise Figure	NF		7		dB
Large Signal Gain	Lsg		48		dB
Max Load VSWR @ 500 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

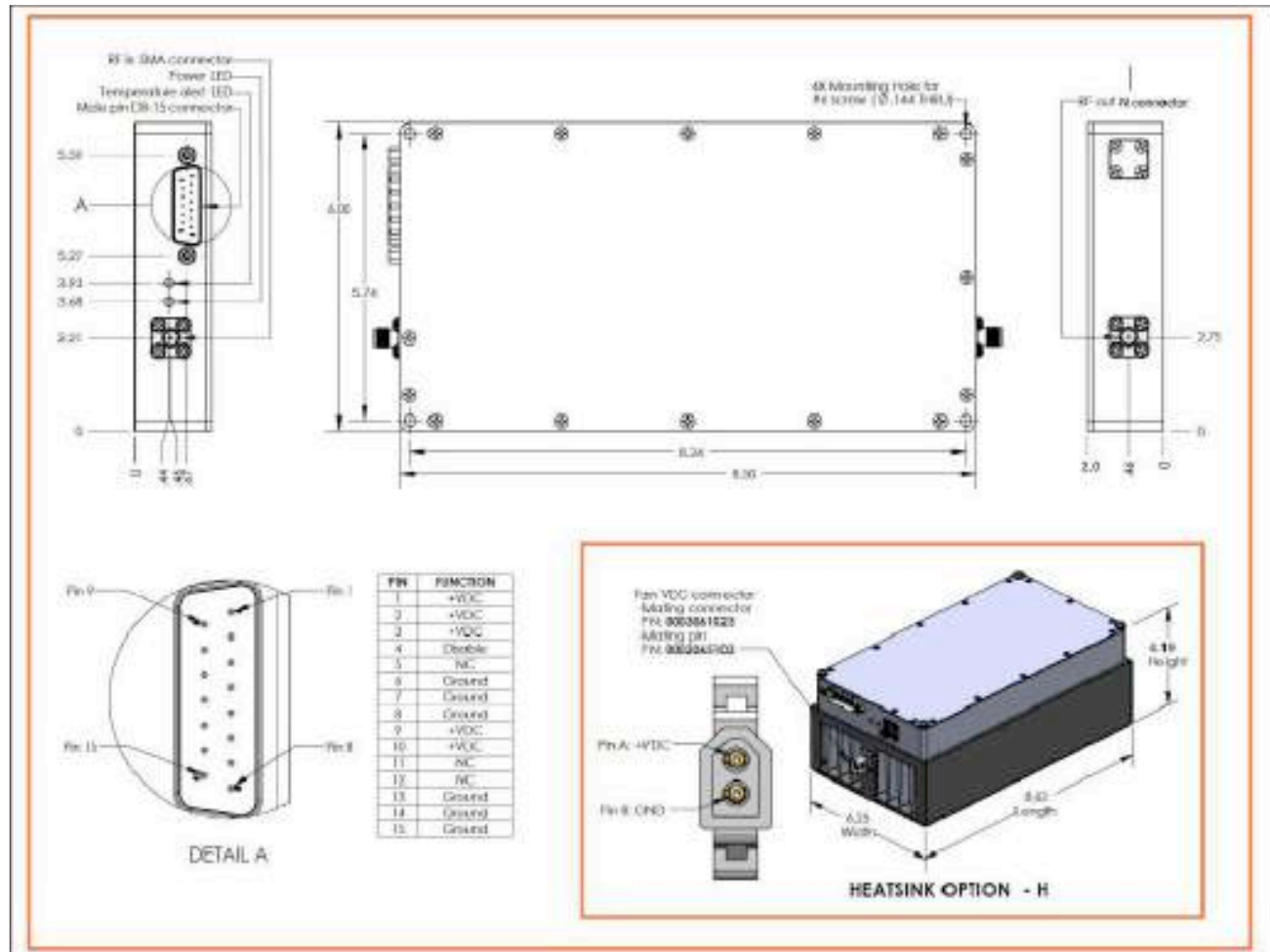
## MECHANICAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit
Dimensions	Dim		8.5 x 6.0 x 2.0		Inches
Weight	Wt.		2		lbs.
Connectors In/Out	RF Conn		SMA/N		-
Cooling	Th		Heat sink required		-

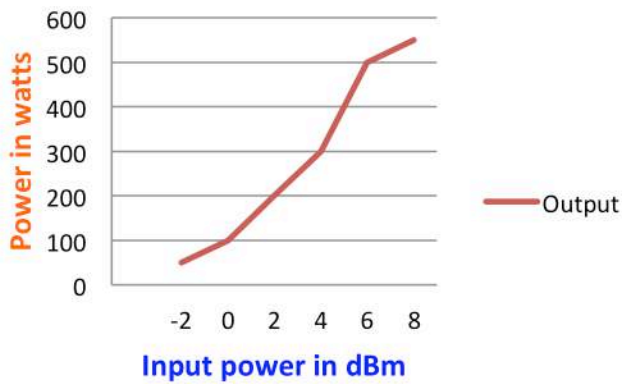
## OPTIONS

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

## Mechanical Drawings



### Output Power Pk. vs. Input Power



### Gain vs. Frequency

