

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 **5-year 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

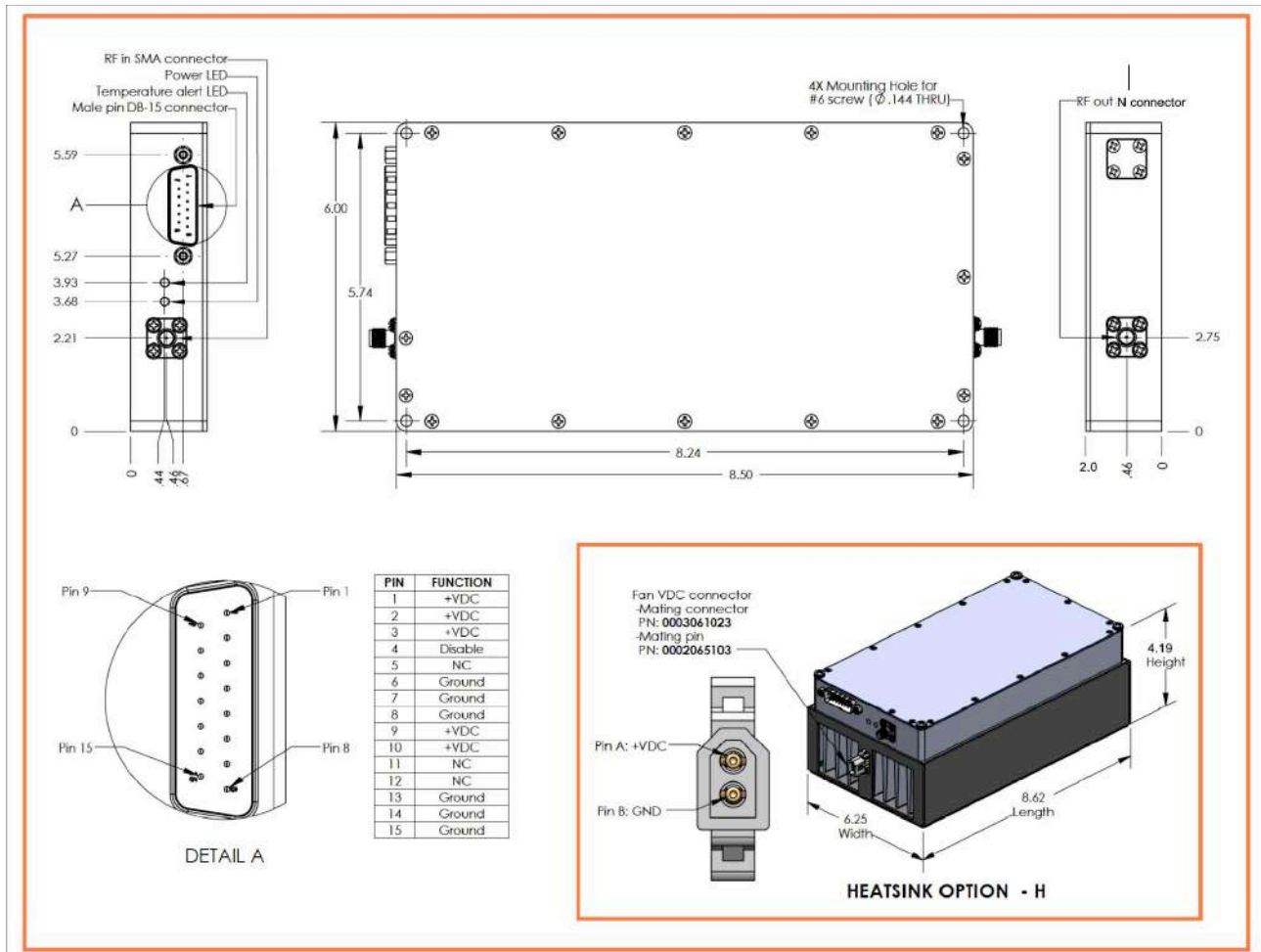
MECHANICAL CHARACTERISTICS

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		-

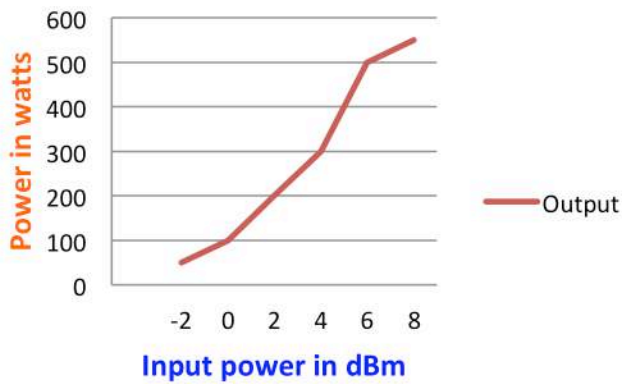
OPTIONS

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

