

LINEAR WIDEBAND POWER AMPLIFIER

Model – MB1.02.0G534850

General Description

Elite RF's MB Series amplifier is a wideband power amplifier designed for CW signals fabricated on GaN process and can operate up to **2.5 GHz**. These amplifiers offer high power density, low thermal resistance, and wideband 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

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 CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	BW	1000		2000	MHz
Output Power CW	Psat		200		Watt
Output Power at 1 dB Compression	P1dB		100		Watt
Gain small signal	Ssg		55		dB
Gain Flatness large signal	Delta Gp 1		+/- 1.5		dB
Input VSWR	S11		2:1		Ratio
IP3 @ 1.0 GHz @ 10 watt/tone @ 10 MHz spacing	IP3		58		dBm
Harmonics	H		-20		dBc
Spurious Signals	Spur		-60		dBc
Operating Voltage	VDC	48	50	51	VDC
Efficiency	Eff		35		%
Class of Operation	C		AB		Class
Idle current	Id		2.0		Amps
Gain large signal	Lsg		48		dB
Max Load VSWR @ 200 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		10.0 x 6.0 x 1.25		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	N/A

Mechanical Drawings

