

LINEAR WIDEBAND POWER AMPLIFIER

MB2.06.0G404028



10 watts 2000 to 6000 MHz 28VDC

General Description:

Elite RF's MB Series amplifier is a wideband power amplifier designed for CW signals fabricated on GaN on SiC process and can operate up to **6.0 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	Protections	Indicator Options
2-6GHz Frequency 10 watts Class AB 28 VDC On/Off Enable - Ground to disable amplifier	Thermal Overload Over Voltage Reverse Polarity	DC Power Temp Fault

ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	BW	2000		6000	MHz
Output Power CW	Psat		10		Watt
Output Power at 1 dB Compression	P1dB		4		Watt
Small Signal Gain	Gp		42		dB
Gain Flatness	Delta Gp 1		+/- 2		dB
Input VSWR	S11		2:1		Ratio
IMD @ 4 GHz @ 1 watt/tone / 1 MHz spacing	IP3		44		dBm
Harmonics	H		-20		dBc
Spurious Signals	Spur		-60		dBc
Operating Voltage	Opv	27	28	29	VDC
Current at 10 watts	Current		2		Amps
Class of Operation	C		AB		Class
Noise Figure	NF		7		dB
Large Signal Gain	Lsg		40		dB
Max Load VSWR @ 10 Watts	ML		6:1		Ratio

ENVIRONMENTAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit
Operating Case Temperature	Tc	0		+50	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		

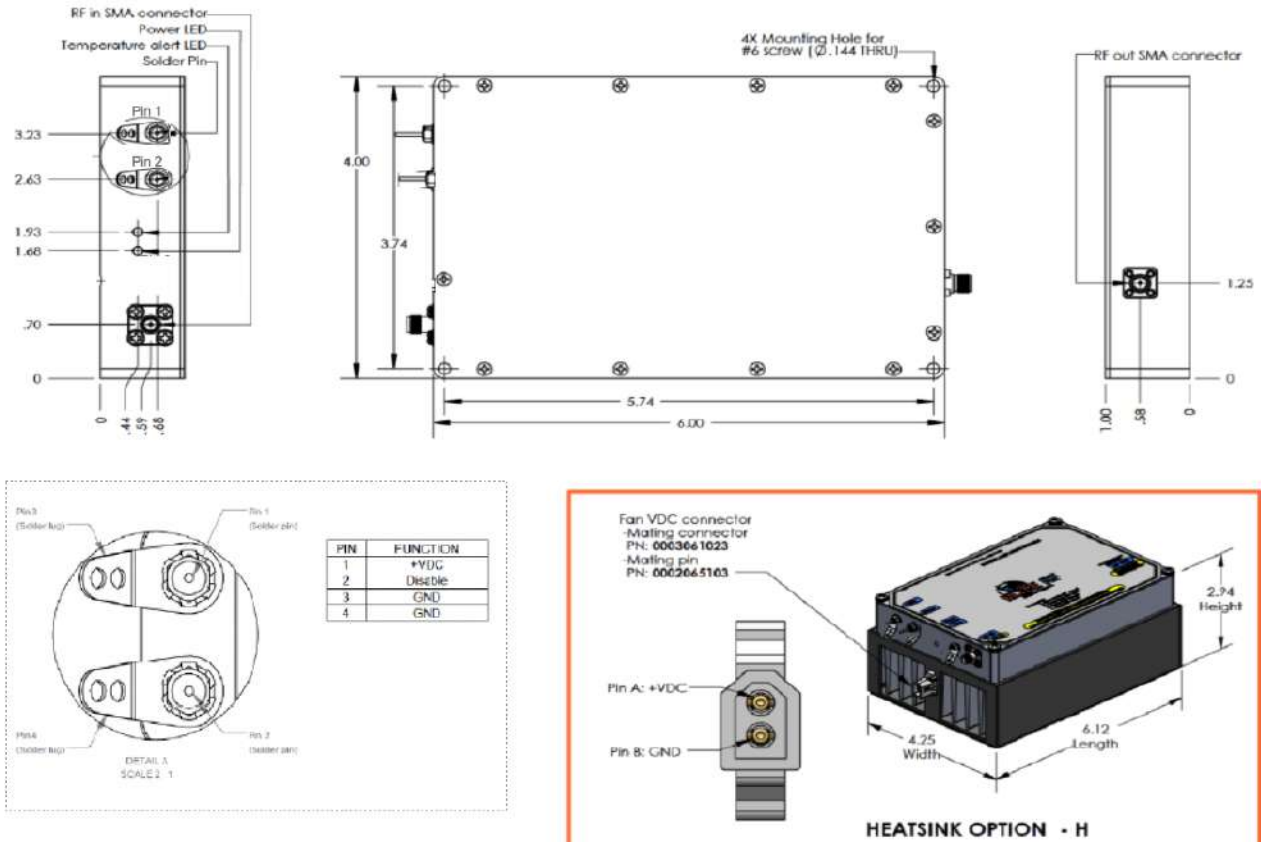
MECHANICAL CHARACTERISTICS

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		Forced air cooling		-

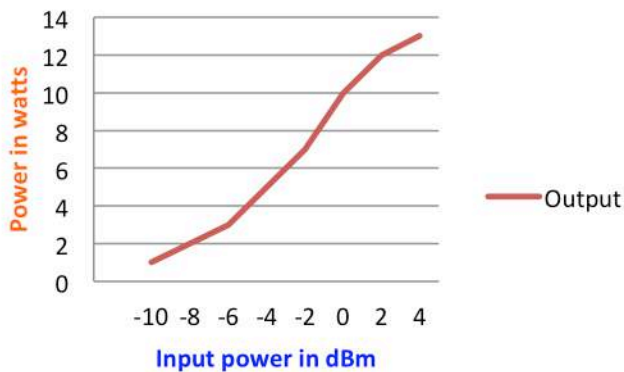
OPTIONS

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 vs. Input Power



Gain vs. Frequency

