

LINEAR WIDEBAND POWER AMPLIFIER

Model – AB428438M5454AC

General Description:

Elite RF's **AB Series** amplifier is a wideband power amplifier designed for CW/Pulse signals fabricated on GaN on SiC process and can operate up to **438 MHz**. 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

Protections

- Thermal Overload
- Over Voltage
- High VSWR

ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	BW	428		438	MHz
Output Power CW	Psat		300		Watt
Output Power at 1 dB Compression	P1dB		100		Watt
Small Signal Gain	Gp		56		dB
Gain Flatness @ Psat	Delta Gp 1		+/- 2.5		dB
Input VSWR	S11		2:1		Ratio
IMD @ 433 MHz @ 10 watt/ tone / 1 MHz spacing	IP3		57		dBm
Harmonics	H		-20		dBc
Spurious Signals	Spur		-60		dBc
Operating Voltage	Opv	100	120	240	VAC
AC Power at 300 watts	Pd		1000		Watt
Class of Operation	C		AB		Class
Noise Figure	NF		7		dB
Large Signal Gain	Lsg		54		dB
Max Load VSWR @ 300 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		19 x 15 x 3.5		Inches
Weight	Wt.		25		lbs.
Connectors In/Out	RF Conn		N-Type		-
Cooling	Th		Forced air cooling		-

OPTIONS

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

Mechanical Drawings

