

LINEAR WIDEBAND POWER AMPLIFIER

Model – AB1.01.8G4748AC



General Description:

Elite RF's AB Series amplifier is a wideband power amplifier designed for CW signals fabricated on GaN on SiC process and can operate up to **1.8 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
- Ethernet based Enable and Gain control

Protections

- Thermal Overload
- Over Voltage

ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	BW	1000		1800	MHz
Output Power CW	Psat		50		Watt
Output Power at 1 dB Compression	P1dB		25		Watt
Small Signal Gain	Gp		48		dB
Gain Flatness	Delta Gp 1		+/- 2		dB
Input VSWR	S11		2:1		Ratio
IMD @ 1.5 GHz @ 1 watt/tone / 1 MHz spacing	IP3		55		dBm
Harmonics	H		-20		dBc
Spurious Signals	Spur		-60		dBc
Operating Voltage	Opv	100	120	240	VAC
AC Power at 50 watts	Pd		200		Watt
Class of Operation	C		AB		Class
Noise Figure	NF		7		dB
Large Signal Gain	Lsg		46		dB
Max Load VSWR @ 50 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

