

LINEAR WIDEBAND POWER AMPLIFIER

Model – AB2.42.5G5550AC



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 **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
Air cooled

Protections

Thermal Overload
Over Voltage

ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	BW	2400		2500	MHz
Output Power CW	Psat		300		Watt
Output Power avg	Pavg		100		Watt
Small Signal Gain	Gp		53		dB
Gain Flatness	Delta Gp 1		+/- 1		dB
Input VSWR	S11		2:1		Ratio
Duty cycle	DC			100	%
Harmonics @ 300 watts	H		-20		dBc
Spurious Signals	Spur		-60		dBc
Operating Voltage	Opv	100	120	240	VAC
AC Power at 300 watts	Pd		800		Watt
Class of Operation	C		AB		Class
Noise Figure	NF		7		dB
Large Signal Gain	Lsg		50		dB
Max Load VSWR @ 300 Watts avg	ML		20:1		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 24 x 3.5		Inches
Weight	Wt.		35		lbs.
Connectors In/Out	RF Conn		N-Type / N- Type		-
Cooling	Th		Water cooling		-

OPTIONS

Parameter	Add suffix to part number
Water cooled	- W
Isolator with forward and reverse voltage outputs	N/A
TTL Input Trigger	- T

Mechanical Drawings

