



General Description:

This system is a broadband power amplifier designed for CW/Digital/Pulse signals and general-purpose amplification. Using advanced high power density LDMOS and GaN semiconductor devices, these high-performance amplifiers achieve high efficiency, high gain, and wide dynamic range. Like all Elite RF amplifiers, the product comes with an industry leading warranty.

Features

30 – 100 MHz

50 watts

50 dB gain

Class AB

24 VDC

Gain Control (vgs): 0- 8 vdc, 8 volts full gain

ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	BW	30		100	MHz
Output Power CW	Psat		50		Watt
Output Power at 1 dB Compression	P1dB		40		Watt
Small Signal Gain	Gp		50		dB
Gain Flatness @ Psat	Delta Gp 1		+/- 2		dB
Input VSWR	S11		2:1		-
IMD	IP3		N/A		dBm
Harmonics at 50 Watts	H		-20		dBc
Spurious Signals	Spur		-60		dBc
Operating Voltage	VDC	23	24	25	VDC
Current at 50 watts	Current		4		Amps
Class of Operation	C		AB		Class
Noise Figure	NF		N/A		dB
Max Load VSWR @ 50 watts	Lm			6:1	Ratio
Large signal gain	Lgs		47		dB

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		5.6 x 3.4 x 0.7		Inches
Weight	Wt.		1		lbs.
Connectors In/Out	RF Conn		SMA/SMA		-
Cooling	Th		Heatsink required		-