

LINEAR WIDEBAND POWER AMPLIFIER

Model – DB200400M5656AC

General Description:

Elite RF's DB Series amplifier is a wideband power amplifier designed for CW/Pulse signals fabricated on LDMOS process and can operate up to **400 MHz**. These amplifiers offer high power density, decade bandwidth performance, 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 interface
- Local Monitoring /Control
- Remote Monitoring/Control

Indicators

- DC Power
- Temp Fault
- Forward Power
- Reverse Power
- VSWR
- Gain

Protections

- Thermal Overload
- Over Voltage
- High VSWR
- High Power

ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	BW	200		400	MHz
Output Power CW	Psat		400		Watt
Output Power at 1 dB Compression	P1dB		250		Watt
Small Signal Gain	Gp		56		dB
Gain Flatness	Delta Gp 1		+/- 2		dB
Input VSWR	S11		2:1		Ratio
IMD	IP3		N/A		dBm
Harmonics	H		-20		dBc
Spurious Signals	Spur		-60		dBc
Operating Voltage	VAC	100	120	240	VAC
AC Power @ 250 watts	Pd		750		Watt
Class of Operation	C		AB		Class
Gain adjustment range	Ga		25		dB
Large Signal Gain @ 250 watts	Lsg		53		dB
Max Load before shutdown @ 250 W	ML		10:1		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 5.25		Inches
Weight	Wt.		40		lbs.
Connectors In/Out	RF Conn		N/N		-
Cooling	Th		Forced Air		-

OPTIONS

Parameter	Add suffix to part number
Water Cooling	- W
Enable/Disable function	- D
TTL Input Trigger	- T

Touch Screen Control Panel



User has complete control of the DB series amplifier through the front panel touch screen display.

User can remotely control all the amplifier functions through an Ethernet connection and GUI software provided.

Amplifier is set internally to shut off if VSWR has exceeded limit.

Power readings in watts and dBm

Display Inputs

Frequency
Attenuation Value/Gain
Amp Enable/Disable
Menu Functions

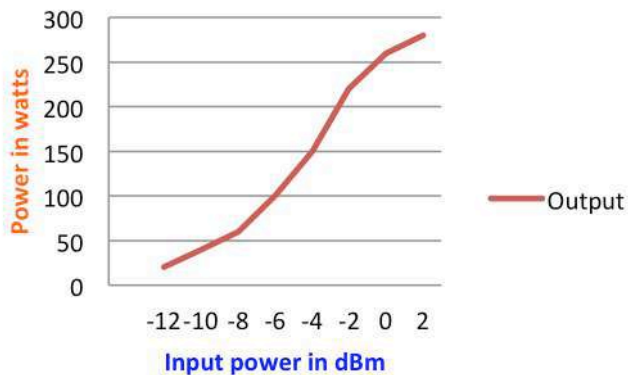
Monitoring

Forward Power
Reverse Power
VSWR
Temp

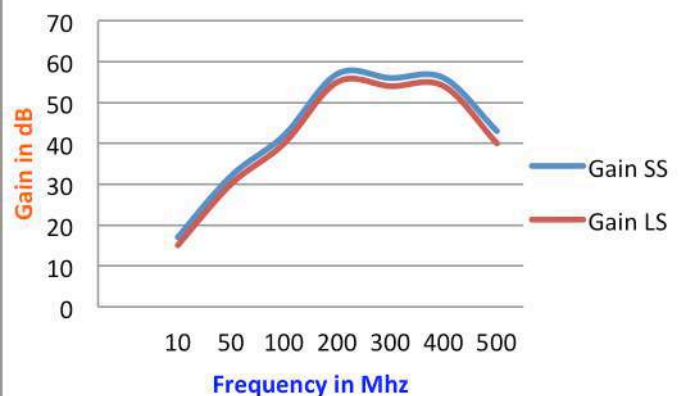
Faults

VSWR Fault
Thermal Fault
High Power Fault

Output Power vs. Input Power



Gain vs. Frequency



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Rev 3 03/17/2023: Specifications subject to change, consult sales for latest information