LINEAR WIDEBAND POWER AMPLIFIER

Model – MB075140M521848

150 watts 75 to 140 MHz 48 VDC

General Description:

Elite RF's MB Series amplifier is a wideband power amplifier designed for CW signals fabricated on LDMOS process and can operate up to **140 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 **3 -year warranty.**

Features	Indicator options	Protections
Wide Freq. Range	DC Power	Thermal Overload
High Output Power	Temp Fault	Over Voltage
High Gain		Reverse Polarity
High Reverse Isolation		
Built-in Protection		
Fwd/Rev DC outputs		
RF sample port		

ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	BW	75		140	MHz
Output Power CW	Psat		150		Watt
Output Power at 1 dB Compression	P1dB		75		Watt
Small Signal Gain	Gp		18		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	VDC	47	48	49	VDC
Current at 150 watts	Current		6		Amps
Class of Operation	C		AB		Class
Noise Figure	NF		N/A		dB
Large Signal Gain	Lsg		17		dB
Max Load VSWR @ 150 Watts	ML		6:1		Ratio

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		

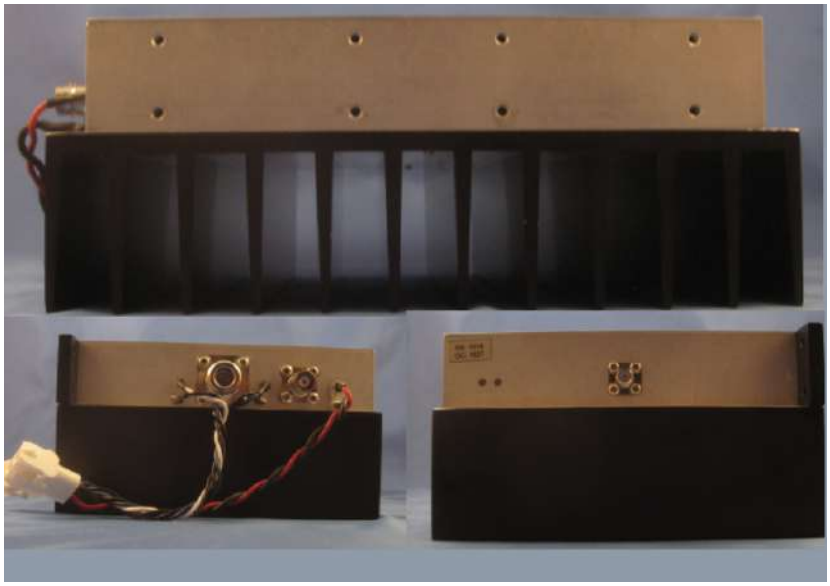
MECHANICAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit
Dimensions	Dim		8.5 x 6.0 x 3.2		Inches
Weight	Wt.		3		lbs.
Connectors In/Out	RF Conn		SMA/N		-
Cooling	Th		Heat sink		-

OPTIONS

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

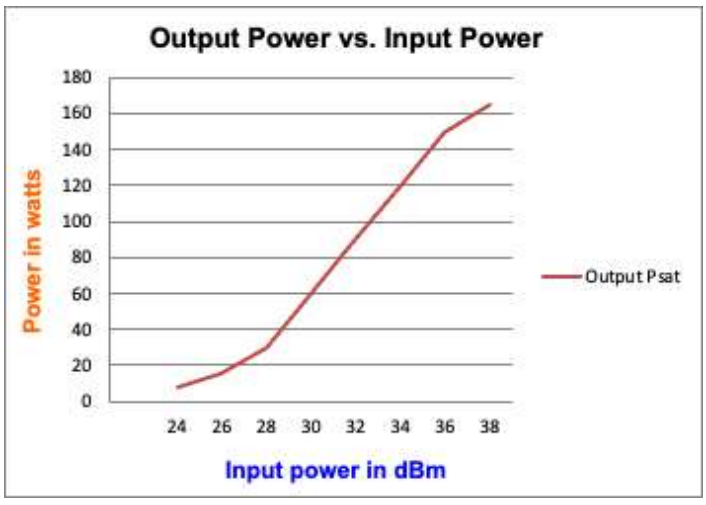
Connector information

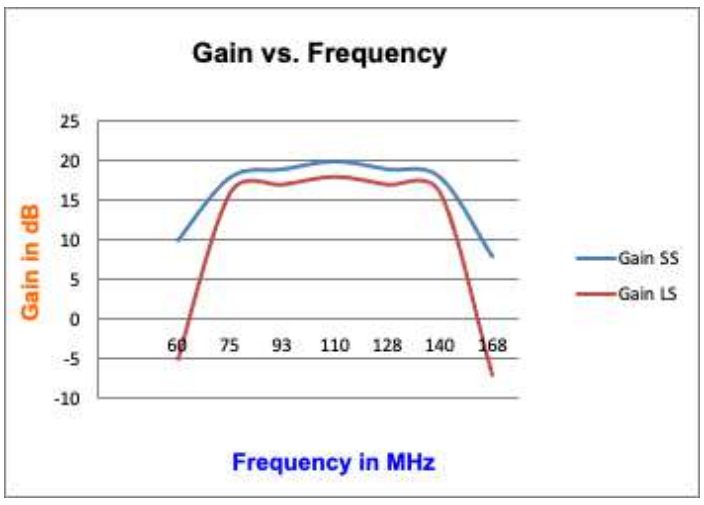


J3 is our RF forward power sample via BNC connector. -37dBc

J4 has the forward and reverse voltages and Is TE Connectivity / Amp PN 172160-1 w male pins PN 170366-1
Pin 1 = (white) FWRD POWER
Pin 2 = (black) GND
Pin 3 = (white) REFLECTED POWER
Pin 4 = (black) GND

J5 has the amp power and is TE Connectivity/Amp PN 350778-1 with male pins PN 350550-1
Pin 1 = (red) +46VDC
Pin 2 =(black) return





Elite RF LLC
1700 Tower Drive, Hanover Park, IL. 60133
Call us for customer service/technical support at: 847-592-6350 Order or email us on-line at www.eliterf.com

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Specifications subject to change, consult sales for latest information
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