

## 2000-4000MHz/100Watt/Module

Model Number: KB2040M50A

The model KB2040M50A is a multi-octave high power amplifier operating between 2000 MHz and 4000 MHz and offering a wide dynamic range with 100 Watts typical saturated power. The employment of advanced high power devices in manufacturing ensures this module exceptional power performance, long term reliability and high efficiency. It is ideal for multi-octave broadband high power RF applications.

### FEATURES:

- Broadband & High power
- High Efficiency
- Small Size & Light Weight
- Low Distortion

### ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Min	Typ	Max	Units
Operating Frequency	BW	2000		4000	MHz
RF Output Power	Pout		100		Watt
Power Gain	Gp		50		dB
Power Gain Flatness	$\Delta Gp$		$\pm 2.5$		dB
Input Return Loss	S11			-10	dB
Harmonics @70W	H		-15		dBc
Spurious Signals	Spur		-55		dBc
Switch On/Off@10-90% Time	TON/OFF		2	5	$\mu s$
In/Output Impedance	Impedance		50		$\Omega$
Operating Voltage	VDC	28	32	36	Volt
DC Current @100W	IDD		15		Amp

### MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	200x150x25 [7.87x5.9x0.98]	mm [inch]	Maximum
Weight	3 [6.6]	kg [lbs]	Maximum
RF Connector Input	SMA, Female		
RF Connector Output	N, Female		
DC Interface Connector	Hybrid, D-Sub 7-Pin, Male		
Cooling	External Heatsink Required (Not Supplied)		

### ENVIRONMENTAL CHARACTERISTICS (Design to Meet)

Parameter	Minimum	Typical	Maximum	Units	Notes
Operating Temperature	-20		60	$^{\circ}C$	
Non-operating Temperature	-25		65	$^{\circ}C$	Storage
Relative Humidity (non-condensing)			95	%	

### ABSOLUTE MAXIMUM RATING

Input RF drive level without damage	+10 dBm (Max)
Load VSWR @ POUT =70W	$\infty$ @ all load phase & amplitude for duration of 1 minute; 3:1 @ all load phase & amplitude continuous
Over Temperature	85 $^{\circ}C$ @ heatsink [restored @ 60 $^{\circ}C$ ]

*Focus on Your Application*

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Specifications subject to change without notice

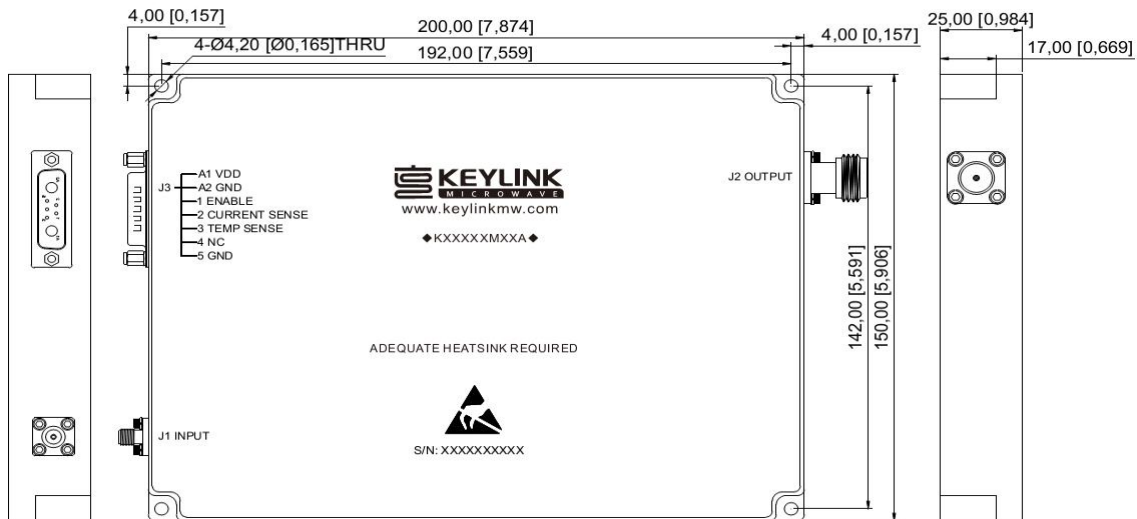
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DC INTERFACE CONNECTOR

Pin #	Description	Specifications
A1	VDD	32VDC
A2	GND	Ground
1	ENABLE	Amplifier Enable: TTL Logic High (3.3V) (Internally Pulled-Low)
2	CURRENT SENSE	Analog voltage relative to IDD @ 100mV per Ampere
3	TEMP SENSE	Analog voltage relative to Module's Temperature @ 10 mV/°C
4	NC	No electrical connection
5	GND	Ground

OUTLINE DRAWING (All dimensions in mm [inch])



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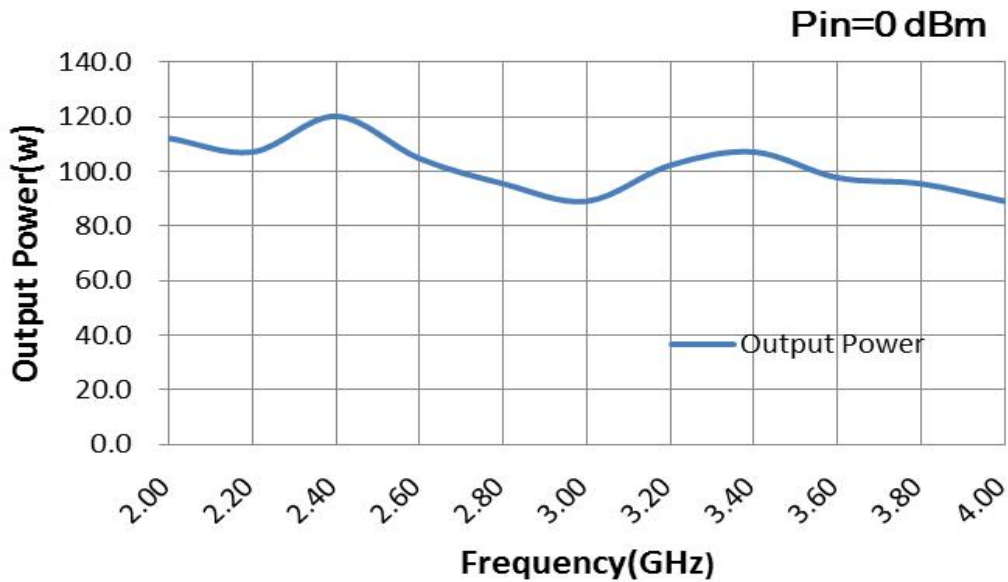
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TYPICAL PERFORMANCE PLOTS(For reference only)



Note:

1. Adequate heatsink required.
2. This product will be developed upon contract/order. All the above specs are for reference only. Actual product may be different. Please check with KeyLink sales team if you have any questions.

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