

## 225-400MHz/100Watt/Module

Model Number: KB0204M50A

The model KB0204M50A is a high power amplifier operating between 225 MHz and 400 MHz and offering a wide dynamic Range with 200 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 broadband high power RF, VHF applications.

**FEATURES:**

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

**ELECTRICAL SPECIFICATIONS @ +28.0VDC, 25°C, 50Ω System**

Parameter	Symbol	Min	Typ	Max	Units
Operating Frequency	BW	225		400	MHz
RF Output Power	P <sub>out</sub>		100		Watt
Power Gain	G <sub>p</sub>		50		dB
Power Gain Gain Flatness	Δ G <sub>p</sub>		±2		dB
Input Return Loss	S <sub>11</sub>			-10	dB
Harmonics @50W	H		-15		dBc
Spurious Signals	Spur		-55		dBc
Switch On/Off@10-90% Time	T <sub>ON/OFF</sub>		2	5	μS
In/Output Impedance	Impedance		50		Ω
Operating Voltage	VDC		28		Volt
DC Current @100W	IDD		8.5		Amp

**MECHANICAL SPECIFICATIONS**

Parameter	Value	Units	Notes
Dimensions	180x90x27 [7x3.55x1.1]	mm [inch]	Maximum
Weight	2 [4.4]	kg [lbs]	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	SMA, 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	°C	
Non-operating Temperature	-25		65	°C	Storage
Relative Humidity (non-condensing)			95	%	

**Absolute Maximum Rating**

Input RF drive level without damage	+10 dBm (Max)
Load VSWR @ P <sub>OUT</sub> =50W	∞ @ all load phase & amplitude for duration of 1 minutes; 3:1 @ all load phase & amplitude continuous
Over Temperature	85°C @ heatsink [restored @ 60°C]

### Focus on Your Application

**\*Chengdu KeyLink Microwave Technology Co., Ltd.\***

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Specifications subject to change without notice

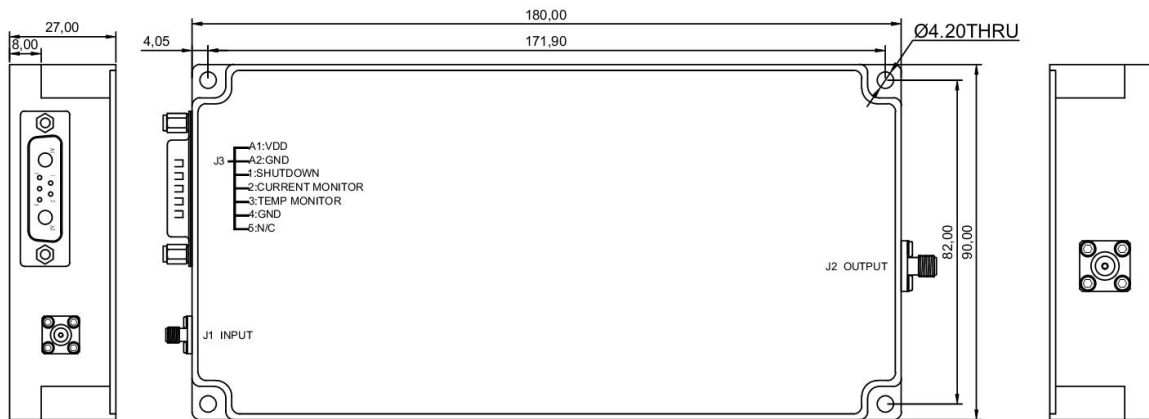
225-400MHz/100Watt/Module

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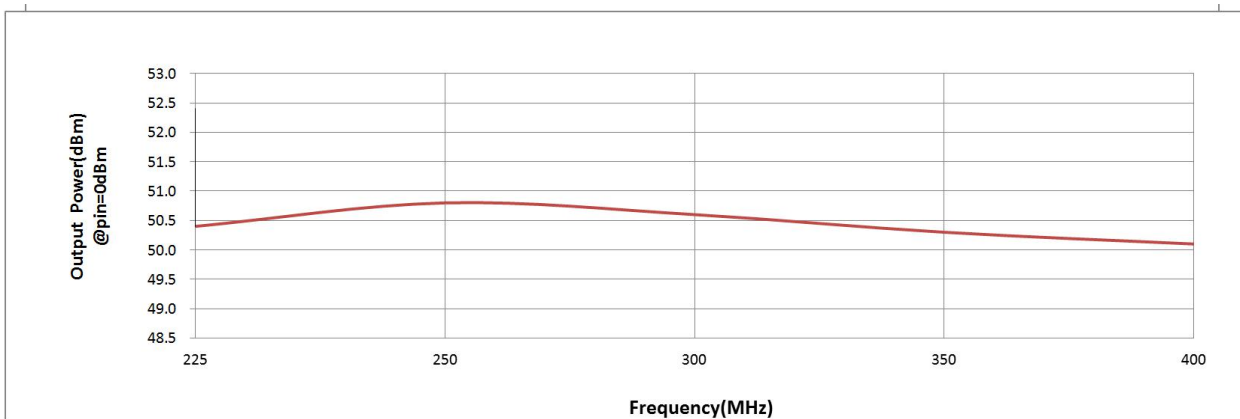
DC INTERFACE CONNECTOR

Pin #	Description	Specifications
A1	VDD	28V <sub>DC</sub>
A2	GND	Ground
1	SHUTDOWN	Amplifier Disable: TTL Logic High (3.3V) (Internally Pulled-Low)
2	CURRENT MONITOR	Analog voltage relative to I <sub>DD</sub> @ 100mV per Ampere
3	TEMP MONITOR	Analog voltage relative to Module's Temperature @ 10 mV/°C
4	GND	Ground
5	NC	No electrical connection

OUTLINE DRAWING (All dimensions in mm)



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 question.

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