

**1000-2000MHz/50Watt/Module**

The model KB1020M47A is a broadband high power amplifier operating between 1000 MHz and 2000 MHz and offering a wide dynamic Range with 50 Watts minimum 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 applications.

**Model Number: KB1020M47A**
**FEATURES:**

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

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

Parameter	Symbol	Min	Typ	Max	Units
Operating Frequency	BW	1000		2000	MHz
RF Output Power	Pout		50		Watt
Power Gain	Gp		47		dB
Power Gain Flatness	Δ Gp		±1.5		dB
Input Return Loss	S11			-10	dB
Harmonics @25W	H		-10		dBc
Spurious Signals	Spur		-60		dBc
In/Output Impedance	Impedance		50		Ω
Operating Voltage	VDC	26	28	30	Volt
DC Current @40W	IDD		6		Amp
Switch On/Off @10-90% Time	Ton/off		2	5	uS

**MECHANICAL SPECIFICATIONS**

Parameter	Value	Units	Notes
Dimensions	150x 90 x 25 [5.91x3.54x0.98]	mm [inch]	Maximum
Weight	1.5 [3.3]	kg [lbs]	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	SMA, Female		
DC Interface Connector	D-Sub 9-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 @ POUT =40W	∞ @ 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*

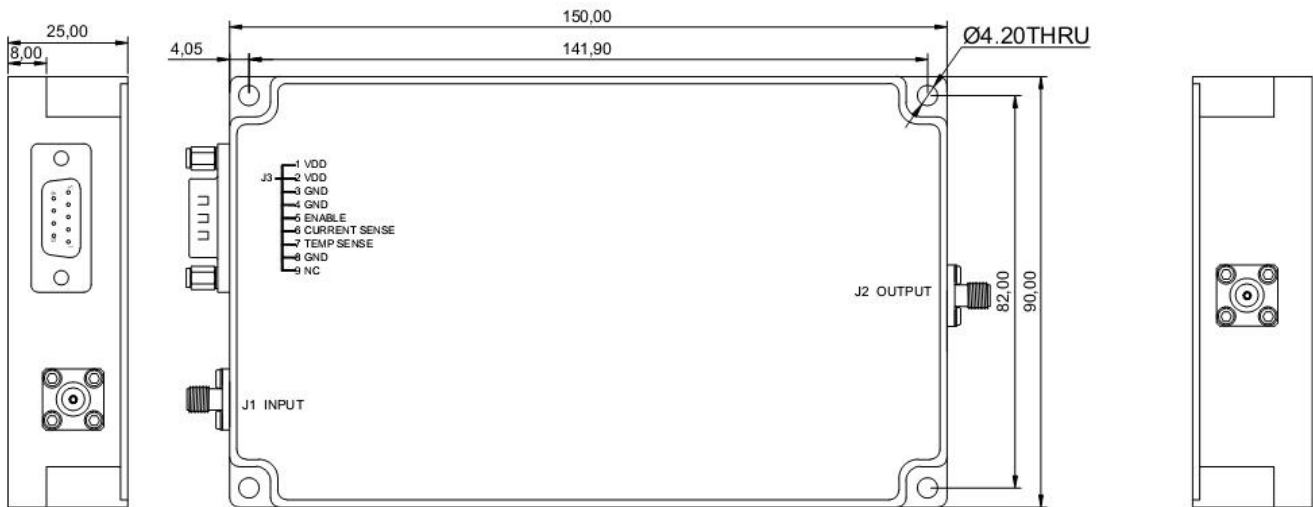
1000-2000MHz/50Watt/Module

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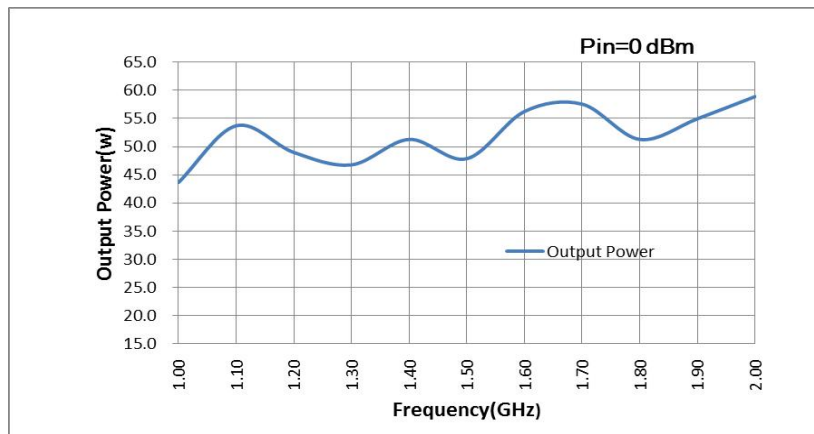
**DC INTERFACE CONNECTOR**

Pin #	Description	Specifications
1,2	VDD	28±2VDC
3,4,8	GND	Ground
7	TEMP SENSE	Analog voltage relative to Module's temperature @10mV/°C
9	N/C	No electrical connection
5	ENABLE	Amplifier Enable: TTL Logic High (3.3V) (Internally Pulled-Low)
6	CURRENT SENSE	Analog voltage relative to IDD@100mV/A

**OUTLINE DRAWING (All dimensions in mm )**



**TYPICAL PERFORMANCE PLOT (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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