

800-2500MHz/20Watt/Module
Model Number: KB0825M43A

The model KB0825M43A is a multi-octave high power amplifier operating between 800 MHz and 2500 MHz and offering a wide dynamic Range with 20 Watts typical saturated power. The employment of gallium nitride (GaN) and chip-and-wire technology in manufacturing ensures this module state-of-the-art power performance with excellent power-to-volume ratio. It is ideal for multi octave broadband high power RF linear applications.

FEATURES:

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

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

Parameter	Symbol	Min	Typ	Max	Units
Operating Frequency	BW	800		2500	MHz
RF Output Power	Pout		20		Watt
Power Gain	Gp		43		dB
Power Gain Flatness	Δ Gp		±2.5		dB
Input Return Loss	S11			-10	dB
Harmonics @10W	H		-15		dBc
Spurious Signals	Spur		-55		dBc
Switching Speed	TON/OFF		2		μS
In/Output Impedance	Impedance		50		Ω
Operating Voltage	VDC	24	28	32	Volt
Current Consumption @ POUT =20W	IDD		4		Amp
Current Consumption @ Shutdown	ISD		0.2		Amp

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	150x90x25 [5.9x3.54x0.98]	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)

Focus on Your Application

Chengdu KeyLink Microwave Technology Co., Ltd.

>> 5-2, Huidu Headquarters Park, High-Tech(West) Zone, Chengdu, 611731, P. R. China

>> Phone: +86(28)87870761*8708 >> Fax: +86(28)87883266

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Specifications subject to change without notice

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Parameter	Minimum	Typical	Maximum	Units	Notes
Operating Temperature	-20		60	°C	
Non-operating Temperature	-45		80	°C	Storage
Relative Humidity (non-condensing)			95	%	

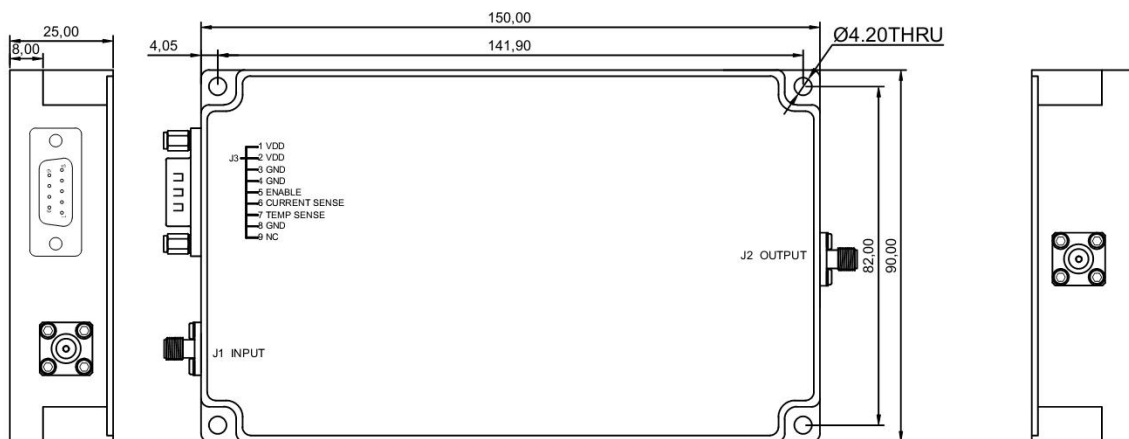
Absolute Maximum Rating

Input RF drive level without damage	+10 dBm (Max)
Load VSWR @ POUT =10W	∞ @ all load phase & amplitude for duration of 1 minutes; 3:1 @ all load phase & amplitude continuous

DC INTERFACE CONNECTOR

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

OUTLINE DRAWING (All dimensions in mm)



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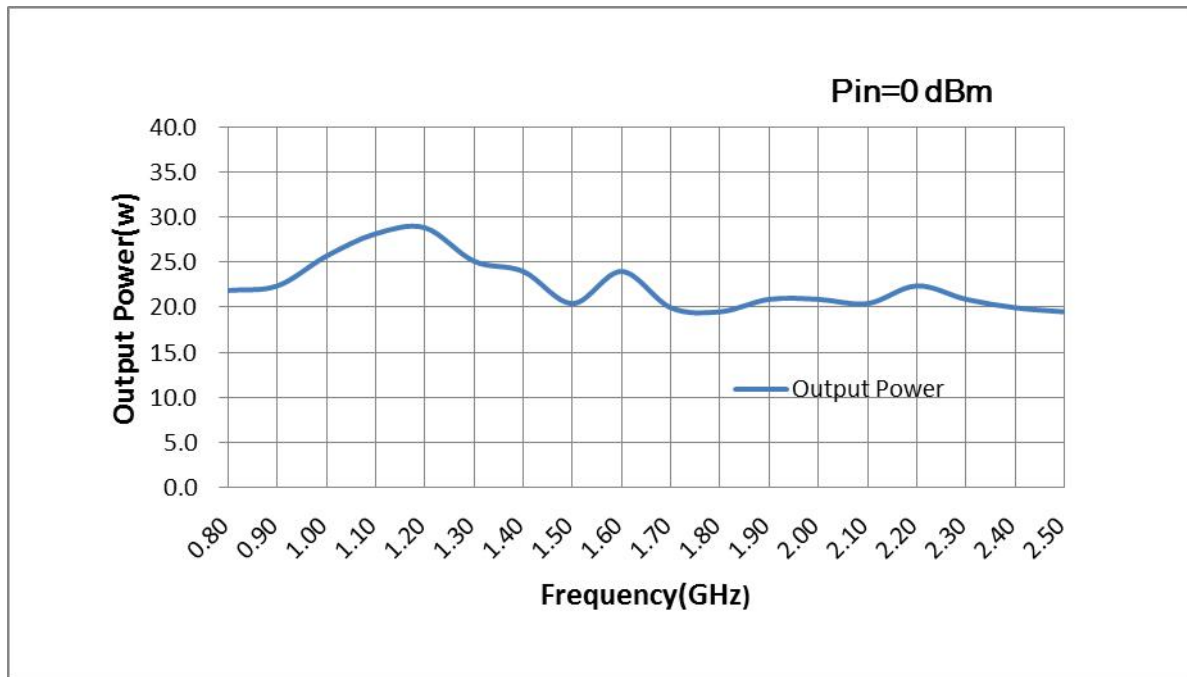
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TYPICAL PERFORMANCE PLOTS(For reference only)



Note:

1. Need external heatsink.
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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