

43-46GHz/40Watt/Module

Model Number: KB430460M46A

The model KB430460M46A is a multi-octave high power amplifier operating between 43 GHz and 46 GHz and offering a wide dynamic Range with 40 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 jamming, EMC, test and measurement applications.

FEATURES:

- Small Size and light weight
- Instantaneous ultra-broadband
- Suitable for CW mode(100% duty cycle)
- 50Ohms input matched
- Built-in control and protection circuits

ELECTRICAL SPECIFICATIONS @ +22.0VDC, 25°C, 50Ω

Parameter	Symbol	Minimum	Typical	Maximum	Units
Operating Frequency	BW	43000		46000	MHz
RF Output Power @Pin=0dBm	PSAT		40		Watt
Power Gain @PSAT	Gp		46		dB
Power Gain Flatness	Δ Gp		±2		dB
Input Return Loss	S11		-10		dB
Harmonics 2 nd @15W	H		-30		dBc
Spurious Signals	Spur		-55		dBc
Operating Voltage	V _{DC}	20	22	23	Volt
DC Current @40W	I _{DD}		20	23	Amp
Switch On/Off@10-90% Time	T _{ON/OFF}		0.3	0.5	μs

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Limits
Dimensions	150x100x45[5.91x3.94x1.77]	mm [inch]	
Weight	2.5 [5.51]	kg [lbs]	Maximum
RF Connectors Input	2.4mm, Female		
RF Connectors Output	WR22		
DC Interface Connector	J29A-37ZKP		
Cooling	External Heatsink (Not Supplied)		

ENVIRONMENTAL CHARACTERISTICS (Design to Meet)

Parameter	Minimum	Typical	Maximum	Units	Notes
Operating Temperature	-40		60	°C	
Non-operating Temperature	-45		85	°C	Storage
Relative Humidity (non-condensing)	5		95	%	

Absolute Maximum Rating

Input RF drive level without	+5dBm	Maximum
Load VSWR @ POUT =30W	2.5:1 @ all load phase & amplitude continuous More than 3:1 may cause PA damage	

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

>> Email: sales@keylinkmw.com >> www.keylinkmw.com

Specifications subject to change without notice

43-46GHz/40Watt/Module

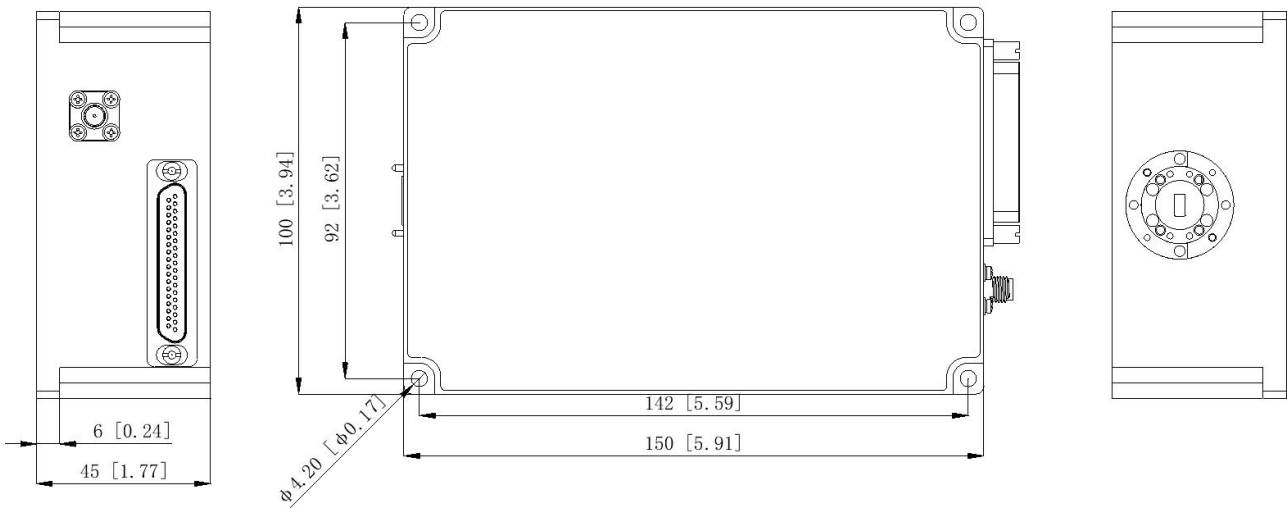
Model Number: KB430460M46A

Over Temperature	80°C @ heatsink
------------------	-----------------

DC INTERFACE CONNECTOR

Pin#	Description	Specifications
1-16	VDD	22 V
17-32	GND	Ground
33	ENABLE	Amplifier Enable: TTL Logic High (3.3V)
34	GND	Ground
35	CURRENT SENSE	Analog voltage relative to I _{DD}
36	TEMP SENSE	Analog voltage relative to Module's Temperature
37	GND	Ground

OUTLINE DRAWING [All dimensions in mm]



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

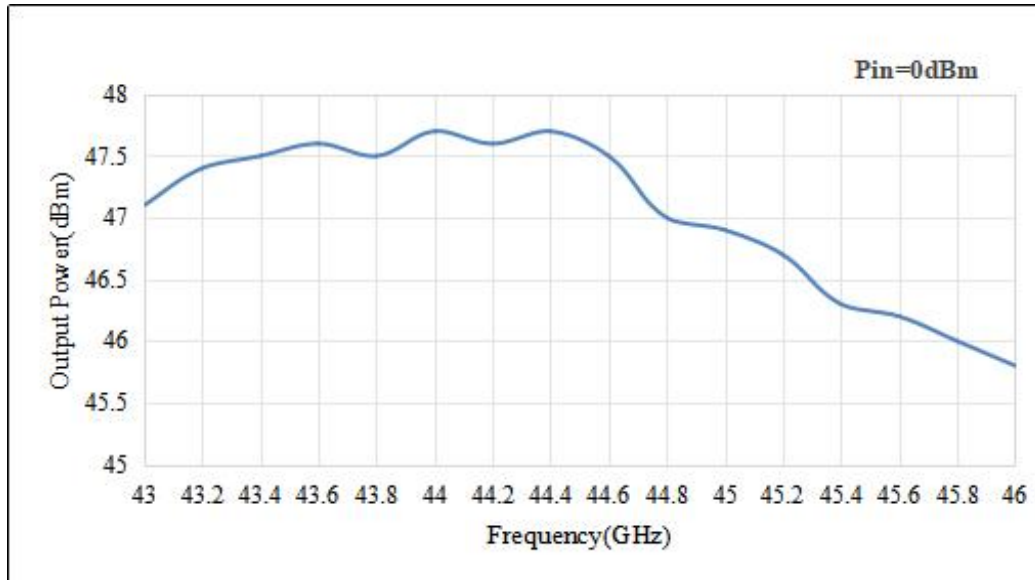
>> Email: sales@keylinkmw.com >> www.keylinkmw.com

Specifications subject to change without notice

43-46GHz/40Watt/Module

Model Number: KB430460M46A

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.

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

>> Email: sales@keylinkmw.com >> www.keylinkmw.com

Specifications subject to change without notice