

6-18GHz/20Watt/Module

Model Number: KB60180M43B

The model KB60180M43B is a multi-octave high power amplifier operating between 6 GHz and 18 GHz 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 jamming, EMC, test and measurement applications.

FEATURES:

- Small Size and light weight
- Instantaneous ultra-broadband
- 50 Ohms input and Output matched
- Built-in control and protection circuits

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

Parameter	Symbol	Minimum	Typical	Maximum	Units
Operating Frequency	BW	6000		18000	MHz
RF Output Power @PSAT	PSAT		20		Watt
Power Gain @PSAT	Gp		43		dB
Power Gain Flatness	Δ Gp		±2.5		dB
Input Return Loss	S ₁₁			-10	dB
@10W	H		-20	-10	dBc
Spurious Signals	Spur		-60	-55	dBc
In/Output Impedance			50		Ω
Operating Voltage	V _{DC}	26	28	30	Volt
DC Current @20W	I _{DD}		7		Amp
Switching Time @1kHz TTL	T _{on/off}		2	3	uSec

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Limits
Dimensions	150x90x25 [5.9x3.54x0.98]	mm [inch]	Maximum
Weight	1.2 [2.64]	kg [lbs]	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	SMA, Female		
DC Interface Connector	D-Sub 9-Pin, Male		
Cooling	External Heat sink (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	+10 dBm	Maximum
Load VSWR @ P _{OUT} =8W	∞ @ all load phase & amplitude for duration of 1 minute; 3:1 @ all load phase & amplitude continuous	
Over Temperature	85°C @ heat sink [restored @ 60°C]	

Focus on Your Application

Chengdu KeyLink Wireless Technology Co., Ltd.

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Specifications subject to change without notice

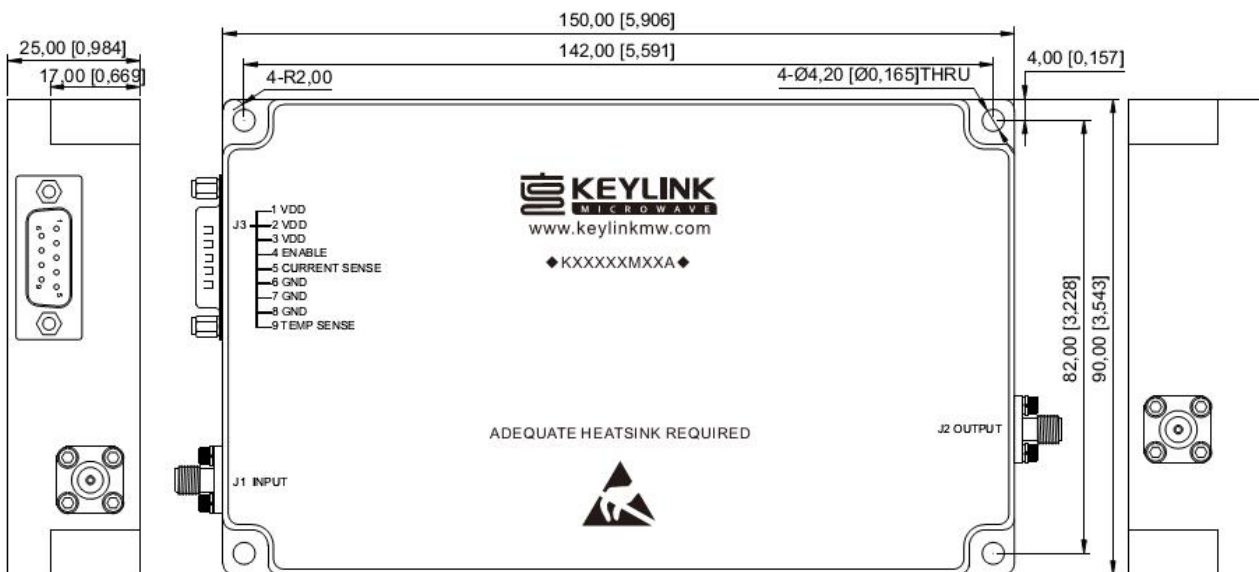
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DC INTERFACE CONNECTOR

Pin #	Description	Specifications
1	VDD	28V _{DC}
2	VDD	28V _{DC}
3	VDD	28V _{DC}
4	ENABLE	Amplifier Enable: TTL Logic High (3.3V) (Internally Pulled-Low)
5	CURRENT SENSE	Analog voltage relative to I _{DD} @ 100mV per Ampere
6	GND	Ground
7	GND	Ground
8	GND	Ground
9	TEMP SENSE	Analog voltage relative to Module's Temperature @ 10 mV/°C

OUTLINE DRAWING [All dimensions in mm (inch)]



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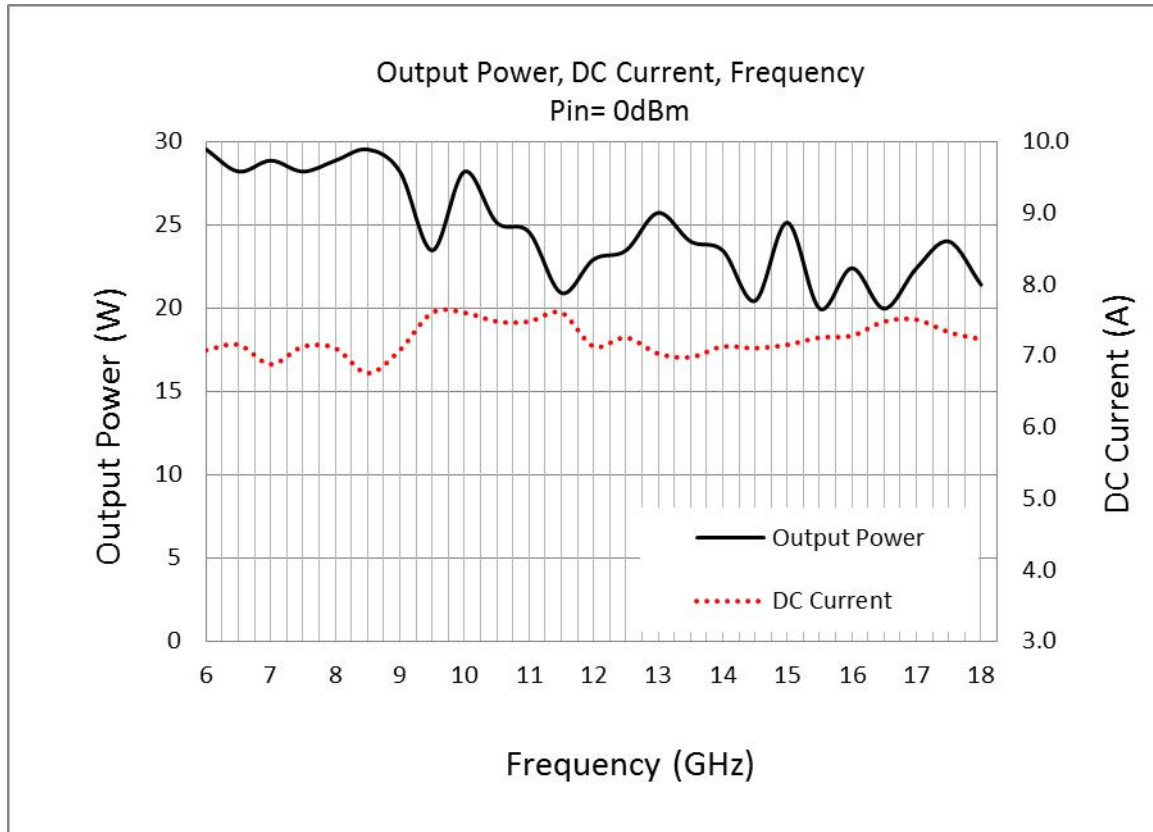
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TYPICAL PERFORMANCE PLOTS (for reference only)



Note: Adequate heat sink required.

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