

6-18GHz/120Watt/Module**Model Number: KB60180M51B**

The model KB60180M51B is a high power amplifier operating between 6GHz and 18GHz and offering a wide dynamic range with 120W typical saturated power. The employment of GaN 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 applications.

FEATURES:

- Small Size and Light Weight
- 50 Ohms Input and Output Matched
- Built-In Control and Protection Circuits, Including Over-Temperature Protection, Over-Current Protection, Over-Voltage Protection and Over-VSWR Protection.

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

Parameter	Symbol	Min	Typ	Max	Units
Operating Frequency	BW	6		18	GHz
RF Output Power @P _{in} =0dBm	P _{sat}		120		Watt
Power Gain @P _{in} =0dBm	G _p		51		dB
Power Gain Flatness @P _{in} =0dBm	Δ G _p		±2		dB
Input Return Loss	S ₁₁		-10		dB
Harmonics @100W	H		-15		dBc
Spurious Signals	Spur		-55		dBc
In/Output Impedance	Impedance		50		Ω
Operating Voltage	V _{DC}	26	28	30	Volt
DC Current @120W	I _{DD}		42	48	Amp

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	320x230x120[12.60x9.06x4.72]	mm [inch]	Maximum
Weight	10 [22.05]	kg [lbs]	Maximum
RF Connector Input	SMA, Female		
RF Connector Output	N, Female		
DC Interface Connector	J29A-37ZK		
Cooling	With heatsink, forced air cooling		

ENVIRONMENTAL CHARACTERISTICS (Design to Meet)

Parameter	Min	Typ	Max	Units	Notes
Ambient Temperature	-40		60	°C	Operating case temperature up to +85°C
Non-operating Temperature	-45		85	°C	Storage
Relative Humidity (non-condensing)			95	%	

ABSOLUTE MAXIMUM RATING

Input RF drive level without damage	+5dBm (Max)
Load VSWR @ P _{OUT} =80W	∞ @ all load phase & amplitude for duration of 1 minute 3:1 @ all load phase & amplitude continuous
Over Temperature	95°C @ heatsink [restored @ 60°C]

Focus on Your Application***Chengdu KeyLink Wireless Technology Co., Ltd.***

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

>> Phone: +86(28)87870761

>> Fax: +86(28)87883266

>> Email: sales@keylinkmw.com

>> www.keylinkmw.com

Specifications subject to change without notice

6-18GHz/120Watt/Module

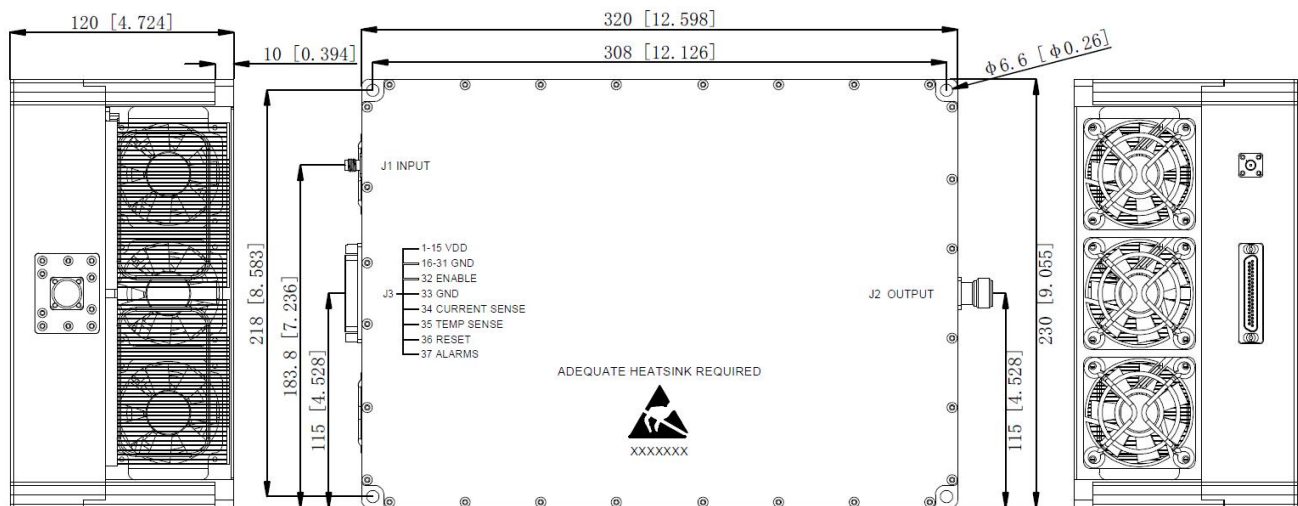
Model Number: KB60180M51B

DC INTERFACE CONNECTOR

Pin #	Description	Specifications
1-15	VDD	+28.0 V _{DC}
16-31	GND	Ground
32	ENABLE	Amplifier Enable: TTL Logic High (3.3V~5V) (Internally Pulled-Low)
33	GND	Ground
34	CURRENT SENSE	Analog voltage relative to I _{DD} @ 50mV per Ampere
35	TEMP SENSE	Analog voltage relative to Module's Temperature @ 0.5V+10 mV/°C
36	RESET	It is usually connected to a high-impedance state, and to a low level (0V) when it is necessary to cancel standing wave protection
37	ALARMS	Amplifier Alarm indicator: Normally TTL Low

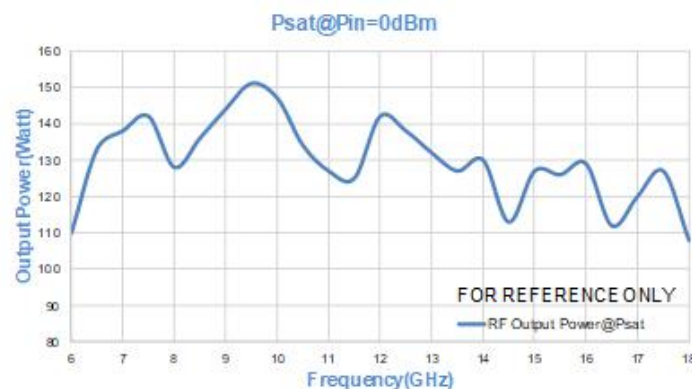
***If you need RS422 or RS485, please contact the sales for customization.**

OUTLINE DRAWING (All dimensions in mm [inch],dimensional tolerance:±0.2mm(0.008 inch))



TYPICAL PERFORMANCE PLOTS (FOR REFERENCE ONLY) (Please contact the sales for special requirements)

Output Power (Normal temp. +25±3°C)



Note: Don't cover air duct.

Focus on Your Application

Chengdu KeyLink Wireless Technology Co., Ltd.

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

>> Phone: +86(28)87870761

>> Fax: +86(28)87883266

>> Email: sales@keylinkmw.com

>> www.keylinkmw.com

Specifications subject to change without notice