

6-18GHz/50Watt/Module

Model Number: KB60180M47EC1

The model KB60180M47EC1 is a multi-octave high power amplifier operating between 6 GHz and 18 GHz and offering a wide dynamic Range with 50 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 @Pin=0dBm	PSAT		50		Watt
Power Gain @PSAT	Gp		48		dB
Power Gain Flatness	Δ Gp		±2		dB
Input Return Loss	S11		-10		dB
Harmonics 2 nd @PSAT	H		-15	-12	dBc
Spurious Signals	Spur			-60	dBc
In/Output Impedance	Impedance		50		Ω
Operating Voltage	VDC	26	28	30	Volt
DC Current @50W	IDD		18	21	Amp
Switching On/Off@10-90% Time	TON/OFF		0.2	0.3	μS

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Limits
Dimensions	180x120x25[7.09x4.72x0.98]	mm [inch]	Maximum
Weight	1.3 [2.87]	kg [lbs]	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	N, Female		
DC Interface Connector	J29A-25ZKP		
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		80	°C	Storage
Relative Humidity (non-condensing)	5		95	%	

Focus on Your Application

Chengdu KeyLink Wireless Technology Co., Ltd.*

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Specifications subject to change without notice

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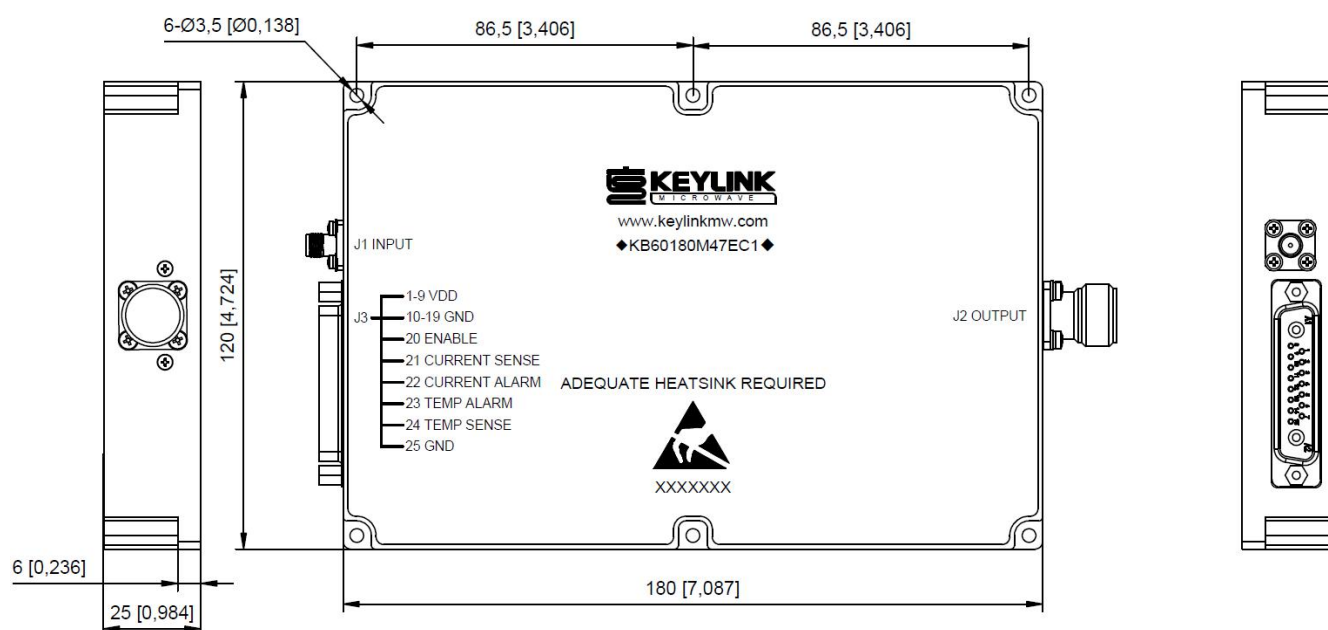
Absolute Maximum Rating

Input RF drive level without	+5dBm	Maximum
Load VSWR @ POUT =30W	3:1 @ all load phase & amplitude continuous More than 4:1 may cause PA damage	
Over Temperature	85°C @ heatsink [restored @ 60°C]	

DC INTERFACE CONNECTOR

Pin #	Description	Specifications
1-9	VDD	28 V
10-19	GND	Ground
20	ENABLE	Amplifier Enable: TTL Logic High (3.3V)
21	CURRENT SENSE	Analog voltage relative to IDD @ 100mV per Ampere
22	CURRENT ALARM	Amplifier Alarm indicator: Normally TTL Low
23	TEMP ALARM	Amplifier Alarm indicator: Normally TTL Low
24	TEMP SENSE	Analog voltage relative to Module's Temperature @ 10 mV/°C
25	GND	Ground

OUTLINE DRAWING [All dimensions in mm]



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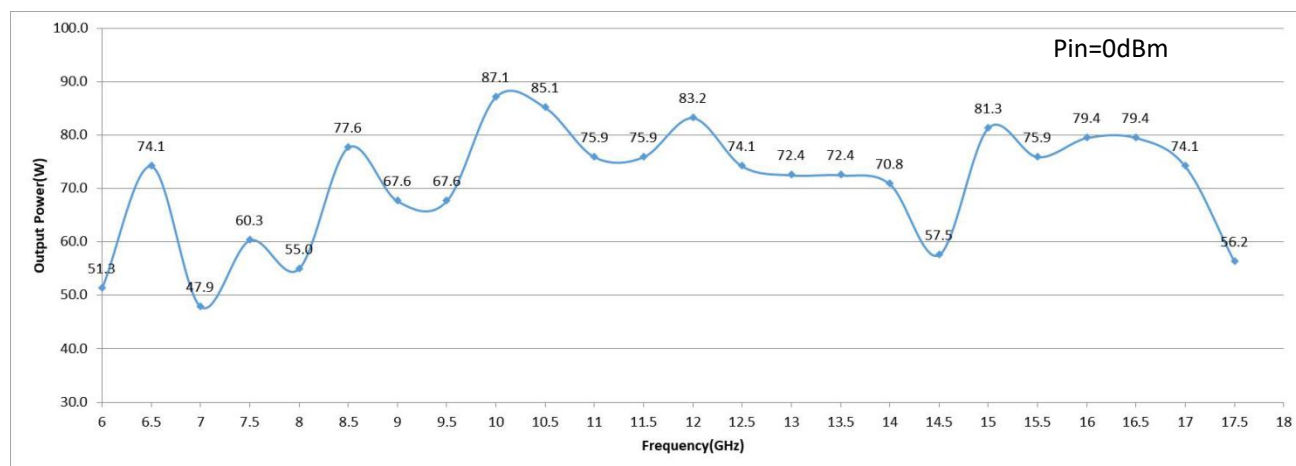
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TYPICAL PERFORMANCE PLOTS (For reference only)



Note: Adequate heatsink required.

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