

500-1000MHz/200Watt/Module

Model Number: KB0510M53A

The KB0510M53A is suitable for multi octave broadband high power RF, UHF linear applications. This compact module utilizes advanced high power devices that provide excellent power density, high efficiency, wide dynamic range and low distortions. Exceptional performance, long term reliability and high efficiency are achieved by employing advanced broadband RF matching networks and combining techniques, EMI/RFI filters, machined housings and qualified components. Keylink's ISO9001 Quality Assurance Program assures consistent performance and the highest reliability.

FEATURES:

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

ELECTRICAL SPECIFICATIONS @ +50.0VDC, 25°C, 50Ω

Parameter	Symbol	Minimum	Typical	Maximum	Units
Operating Frequency	BW	500		1000	MHz
RF Output Power	P _{out}		200		Wat
Power Gain	G		53		dB
Power Gain Flatness	Δ G		±2.5		dB
Input Return Loss	S ₁₁			-10	dB
Harmonics @100W	H		-10		dBc
Spurious Signals	Spur		-55		dBc
In/Output Impedance			50		Ω
Operating Voltage	V _{DC}	48	50	52	Volt
DC Current @200W	I _{DD}		14		Amp

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Limits
Dimensions	200x150x30 [7.87x5.9x1.18]	mm [inch]	Maximum
Weight	3 [6.6]	kg [lbs]	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	Type-N, Female		
DC Interface Connector	Hybrid,D-Sub 7-Pin,Male		
Cooling	External Heatsink (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	+5 dBm	Maximum
Load VSWR @ P _{OUT} =100W	∞ @ all load phase & amplitude for duration of 1minute; 3:1 @ all load phase & amplitude continuous	
Thermal Overload	85°C °C shutdown	Maximum

Focus on Your Application

Chengdu KeyLink Microwave Technology Co., Ltd.

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Specifications subject to change without notice

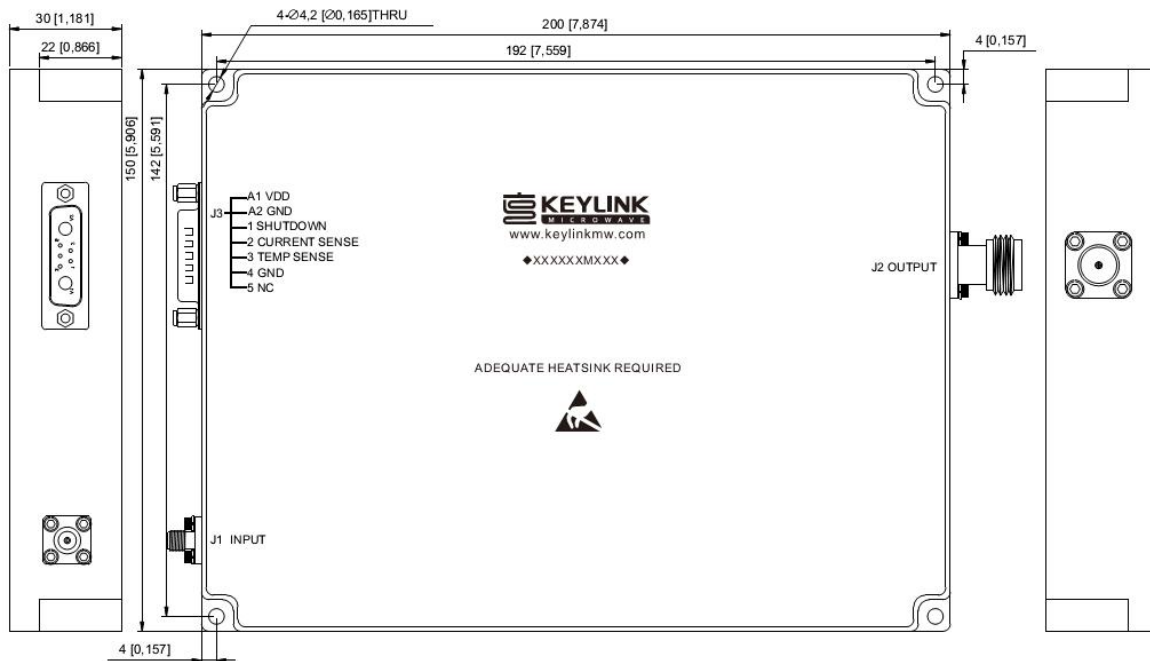
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DC INTERFACE CONNECTOR

Pin #	Description	Specifications
A1	VDD	50V _{DC}
A2	GND	Ground
1	SHUTDOWN	Amplifier Disable: TTL Logic High (3.3V) (Internally Pulled-Low)
2	CURRENT SENSE	Analog voltage relative to Module's Temperature @ 10 mV/°C
3	TEMP SENSE	Analog voltage relative to I _{DD} @ 100mV per Ampere
4	GND	Ground
5	NC	No electrical connection

OUTLINE DRAWING (All dimensions in mm [inch])



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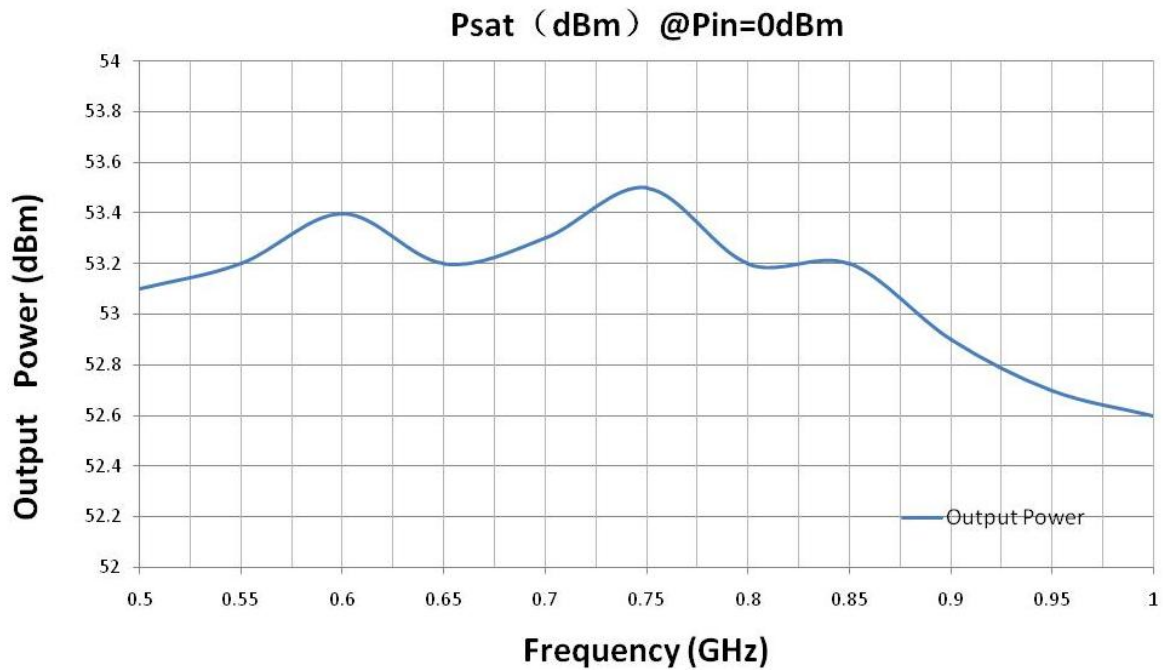
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TYPICAL PERFORMANCE PLOTS (for reference)



Note: Adequate heatsink required.

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