

## 1.5-30MHz/200Watt/Module

The model KB0001003M53B is a high power amplifier operating between 1.5MHz and 30MHz and offering a wide dynamic Range with 200 Watts typical saturated power. The employment of LD MOS 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.

Model Number: KB0001003M53B

### 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	1.5		30	MHz
RF Output Power@P <sub>IN</sub> =0dBm	P <sub>SAT</sub>		200		Watt
Power Gain	G <sub>p</sub>		53		dB
Input Return Loss	S <sub>11</sub>			-10	dB
Harmonics @100W	H		-10		dBc
Spurious Signals	Spur		-60		dBc
In/Output Impedance	Impedance		50		Ω
Operating Voltage	VDC	24	28	32	Volt
DC Current @200W	IDD		15		Amp

### MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Limits
Dimensions	200x150x30 [7.87x5.91x1.18]	mm [inch]	Maximum
Weight	2.0 [4.4]	kg [lbs]	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	N-Typ, 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	-40		60	°C	
Non-operating Temperature	-45		85	°C	Storage
Relative Humidity (non-condensing)			95	%	

### Absolute Maximum Rating

Input RF drive level without damage	+10dBm	Maximum
Load VSWR @ P <sub>OUT</sub> =100W	∞ @ all load phase & amplitude for duration of 1 minute; 3:1 @ all load phase & amplitude continuous	
Thermal Overload	85°C shutdown	Maximum

## Focus on Your Application

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Specifications subject to change without notice

# Broadband High Power Amplifier Module (SSPA)

Version.1.0\_2025.01.24

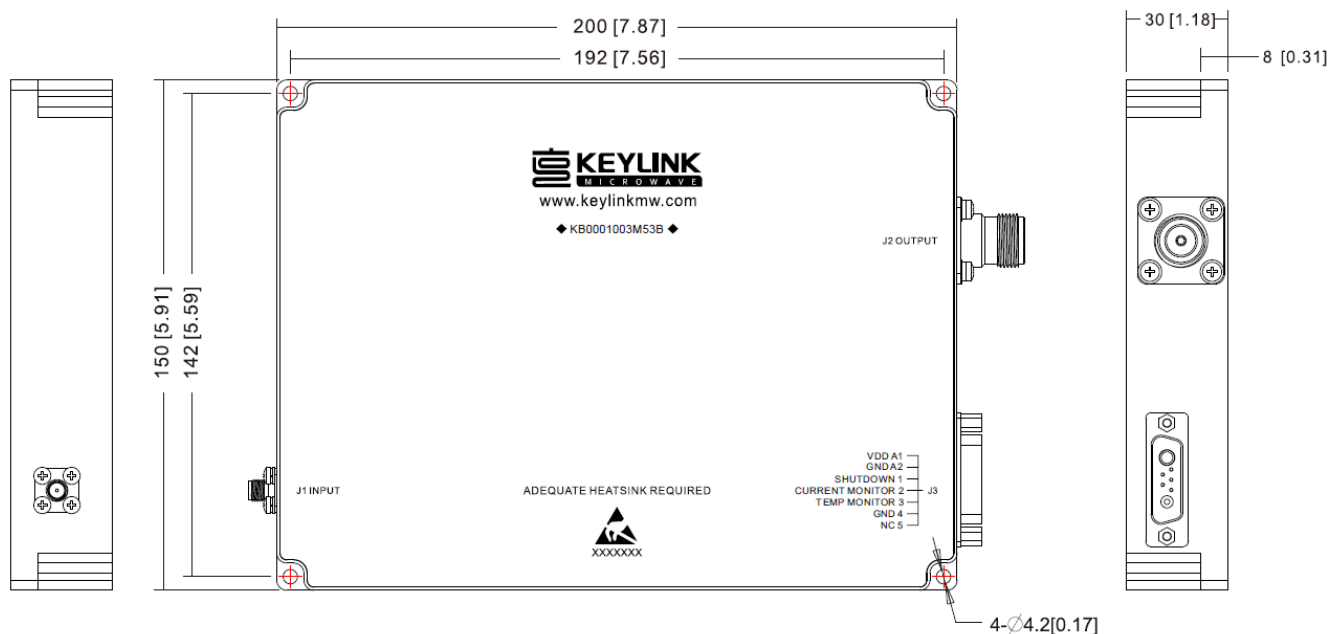
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### DC INTERFACE CONNECTOR

Pin #	Description	Specifications
A1	VDD	28VCC
A2	GND	Ground
1	SHUTDOWN	Amplifier Disable: TTL Logic High (3.3V) (Internally Pulled-Low)
2	CURRENT SENSE	Analog voltage relative to I <sub>DD</sub> @ 100mV per Ampere
3	TEMP SENSE	Analog voltage relative to Module's Temperature @ 10 mV/°C
4	GND	Ground
5	NC	No electrical connection

### OUTLINE DRAWING(All dimensions in mm[inch])



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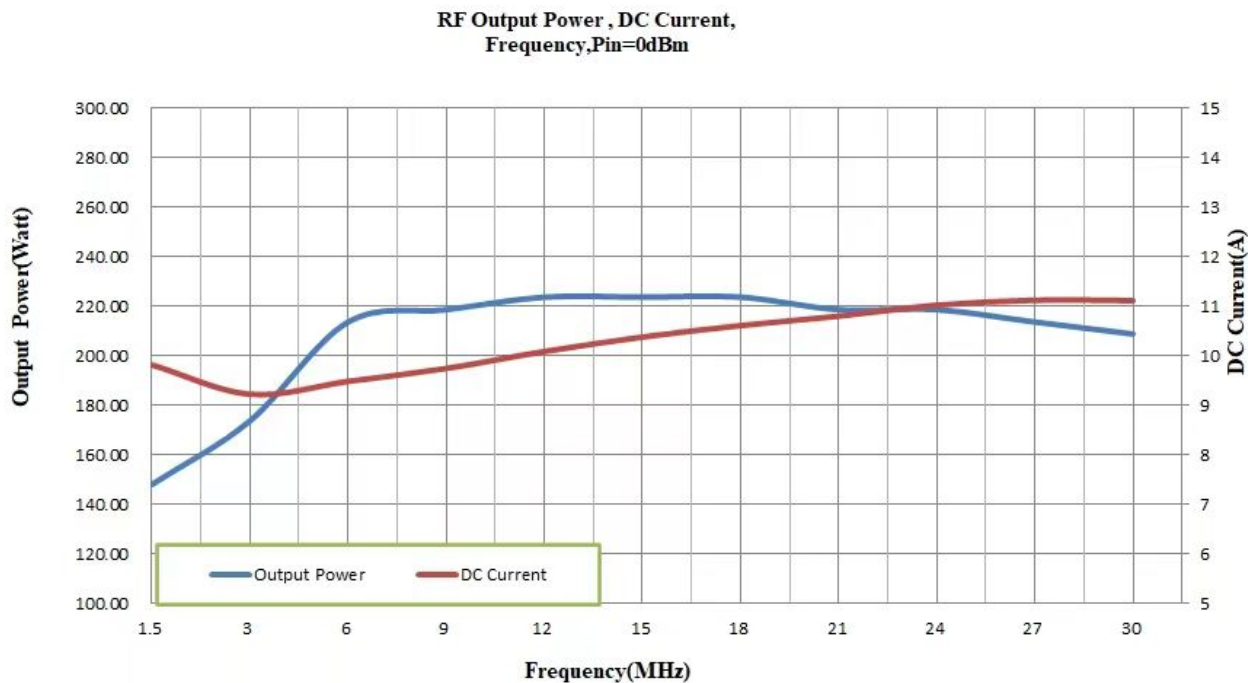
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TYPICAL PERFORMANCE PLOTS (for reference only)



**Note:** Adequate heatsink required.

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