

5000-6000MHz/50Watt/Module**Model Number: KN5500M47B**

The model KN5500M47B is a narrow-band high power amplifier operating between 5GHz and 6GHz with 50 Watts typical saturated power. The employment of 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
- Narrowband & High power
- 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	5000		6000	MHz
RF Output Power	P _{SAT}		50		Watt
Power Gain	GP		47		dB
Small Signal Gain Flatness	ΔG _{SS}		±2.5		dB
Input Return Loss	S ₁₁			-10	dB
Harmonics @20W	H		-15		dBc
Spurious Signals	Spur		-60		dBc
In/Output Impedance	Impedance		50		Ω
Operating Voltage	VDC	24	28	32	Volt
DC Current @50W	IDD		9		Amp
Switch On/Off@10-90% Time ,1kHz	Ton/Toff		2	5	Us

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Limits
Dimensions	160x100x25 [6.29x3.94x0.98]	mm[inch]	Maximum
Weight	1.5[3.3]	Kg[lbs]	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	SMA, Female		
DC Interface Connector	D-Sub 9-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	+5 dBm	Maximum
Load VSWR @ POUT =20W	∞ @ all load phase & amplitude for duration of 1 minute; 3:1 @ all load phase & amplitude continuous	
Over Temperature	85°C @ heatsink [restored @ 60°C]	Maximum

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

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Specifications subject to change without notice

Narrowband High Power Amplifier Module (SSPA)

Version.1.0_2025.08.19

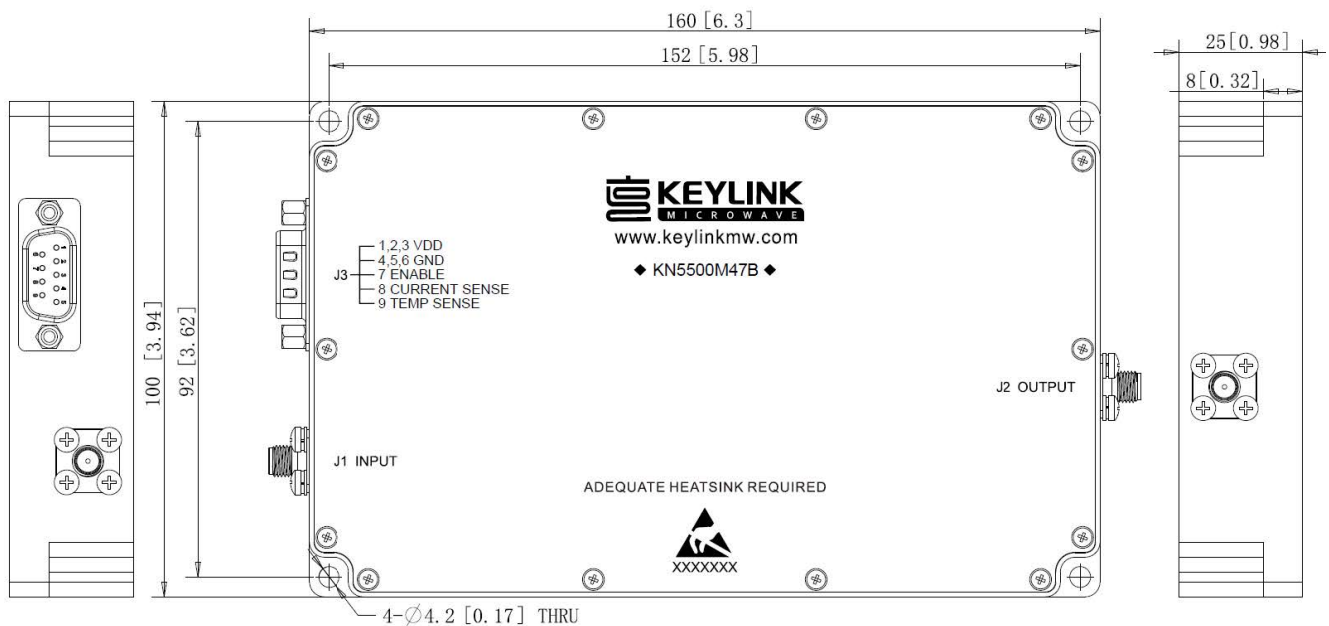
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DC INTERFACE CONNECTOR

Pin #	Description	Specifications
1, 2, 3	VDD	28VDC
4, 5, 6	GND	Ground
7	ENABLE	Amplifier Enable: TTL Logic High (3.3V~5V) (Internally Pulled-Low)
8	CURRENT SENSE	Analog voltage relative to IDD @100mV per Ampere
9	TEMP SENSE	Analog voltage relative to Module's Temperature @ 0.5V +10 mV/°C

OUTLINE DRAWING (All dimensions in mm [inch])



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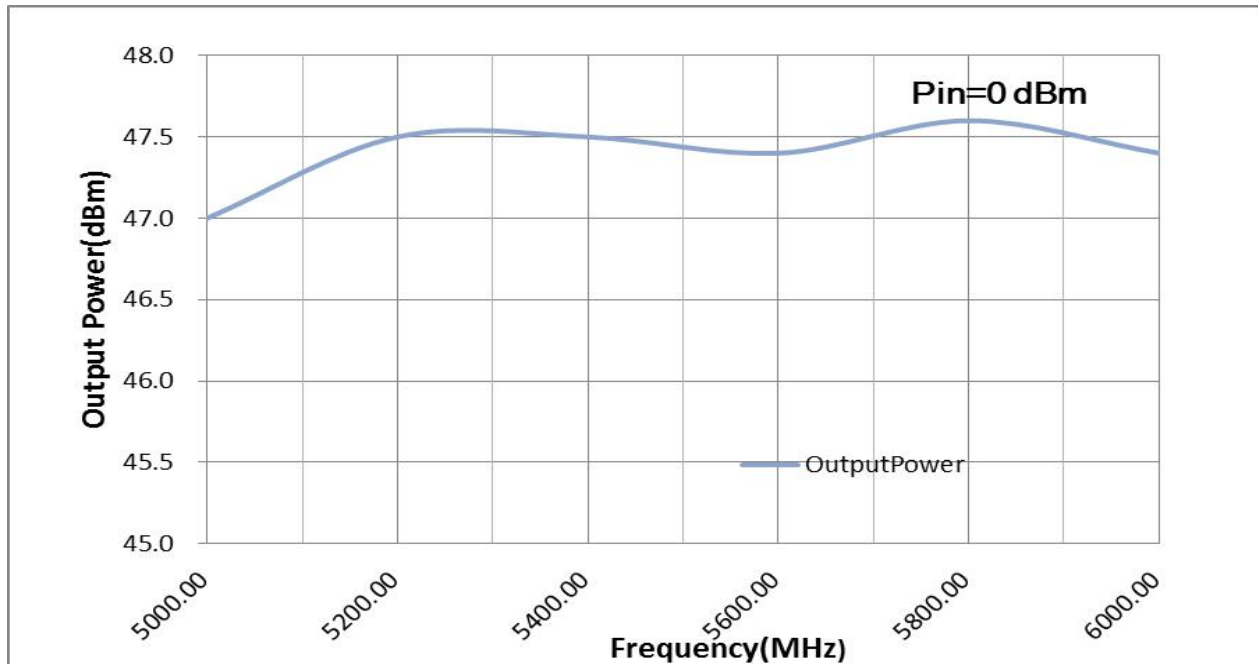
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TYPICAL PERFORMANCE PLOTS(for reference only)



Note: Adequate heatsink required.

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