

2300-2700MHz/50Watt/Module

Model Number: KNTR2500M47A

The model KNTR2500M47A is a narrowband high power amplifier operating between 2300MHz and 2700MHz with 50Watts typical saturated power. The employment of advanced high power devices in manufacturing ensures this module exceptional power performance, long term reliability and high efficiency. It is ideal for narrowband high power RF, S-band linear applications.

FEATURES:

- Narrowband & High power
- High Efficiency
- Great Linearity
- Small Size & Light Weight
- Built-In Control and Protection Circuits

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

Parameter		Symbol	Min	Typ	Max	Units
	Operating Frequency	BW	2300		2700	MHz
TX	RF Output Power@P1dB	P1dB		50		Watt
	Small Signal Gain	G		49		dB
	Small Signal Gain Flatness	Δ Gss		± 2.5		dB
	Input Return Loss	S11			-10	dB
	Harmonics @40W	H		-10		dBc
RX	RF Output Power@P1dB	P1dB		12		dBm
	Small Signal Gain	G		10		dB
	Small Signal Gain Flatness	Δ Gss		± 2		dB
	Noise Figure	N		3		dB
	Spurious Signals	Spur		-55		dBc
	Switch On/Off@10-90% Time	T _{ON/OFF}		2		μs
	In/Output Impedance	Impedance		50		Ω
	Operating Voltage	VDC		28		Volt
	DC Current @50W	IDD		8.5		Amp

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	160x120x22 [6.3x4.72x0.87]	mm [inch]	Maximum
Weight	2.5 [5.5]	kg [lbs]	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	SMA, Female		
DC Interface Connector	D-Sub 9-Pin, Male		
Cooling	External Heatsink Required (Not Supplied)		

ENVIRONMENTAL CHARACTERISTICS (Design to Meet)

Parameter	Minimum	Typical	Maximum	Units	Notes
Operating Temperature	-20		60	°C	
Non-operating Temperature	-45		85	°C	Storage
Relative Humidity (non-condensing)			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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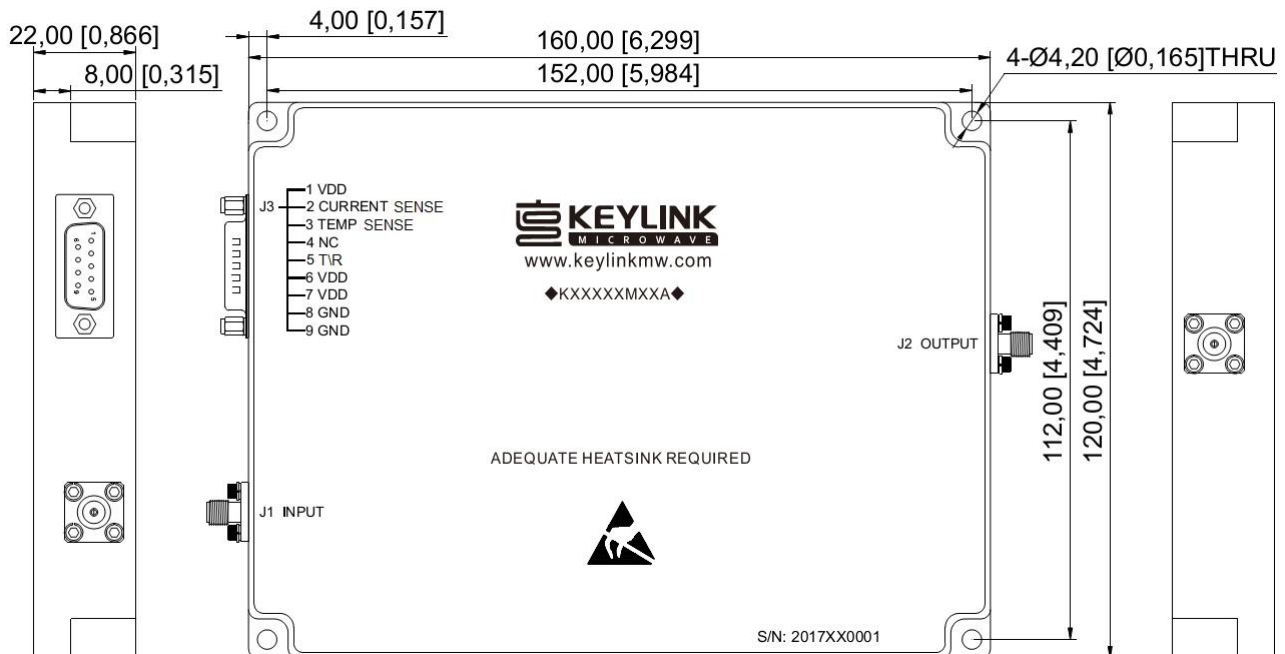
Absolute Maximum Rating

Input RF drive level without damage	+10 dBm (Max)
Load VSWR @ POUT =30W	∞ @ all load phase & amplitude for duration of 1 minutes; 3:1 @ all load phase & amplitude continuous
Over Temperature	85°C @ heatsink [restored @ 60°C]

DC INTERFACE CONNECTOR

Pin #	Description	Specifications
1,6,7	VDD	28V _{DC}
8,9	GND	Ground
5	T\R	Amplifier Disable: TTL Logic High Tx(3.3V) (Internally Pulled-Low)
2	CURRENT SENSE	Analog voltage relative to I _{DD} @ 100mV per Ampere
3	TEMP SENSE	Analog voltage relative to Module's Temperature @ 10 mV/°C
4	NC	No electrical connection

OUTLINE DRAWING (All dimensions in mm [inch])



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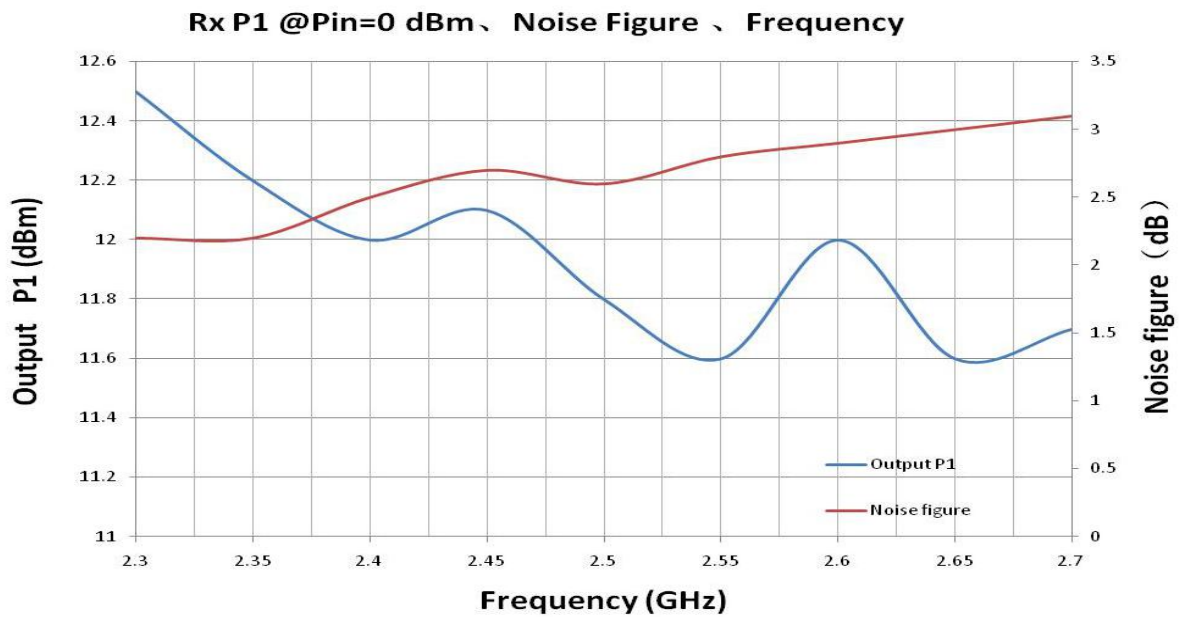
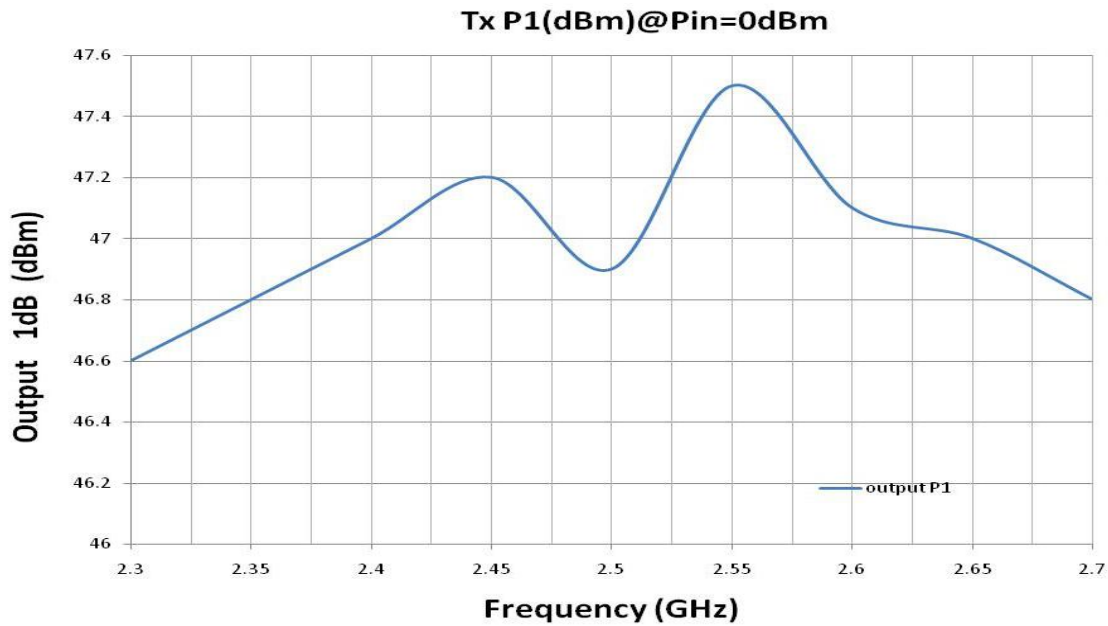
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TYPICAL PERFORMANCE PLOTS



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