

5300-5900MHz/16Watt/Module

Model Number: KN5600M42A

The model KN5600M42A is a multi-octave high power amplifier operating between 5.3 GHz and 5.9GHz and offering a wide dynamic Range with 10 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;
- Instantaneous ultra-broadband;
- 50 Ohms input and Output matched;
- Built-in control and protection circuits.
- Class AB.

ELECTRICAL SPECIFICATIONS @ +12.0VDC, 25°C, 50Ω

Parameter	Symbol	Minimum	Typical	Maximum	Units
Operating Frequency	BW	5300		5900	MHz
RF Output Power@P1dB	P1dB	16			Watt
Power Gain	G	38	42		dB
Noise Figure	NF		6	8	dB
Small Gain Flatness	Δ G		±1		dB
Input Return Loss	S ₁₁			-10	dB
Harmonics @8W	H		-30		dBc
Spurious Signals	Spur		-60		dBc
In/Output Impedance			50		Ω
Operating Voltage	V _{DC}		12		Volt
DC Current @10W	I _{DD}		7		Amp
Switching Time@10kHz TTL	Ton/Toff		2	5	Us

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Limits
Dimensions	160x 80 x 25	mm	Maximum
Weight	1.0	kg	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	SMA, Female		
DC Interface Connector	DB-9M, 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	+8 dBm	Maximum
Load VSWR @ POUT =10W	∞ @ 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

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DC INTERFACE CONNECTOR

Pin #	Description	Specifications
1,2,3,4	VDD	12V
5,6,7,8,9	GND	Ground

OUTLINE DRAWING (All dimensions in mm [inch])



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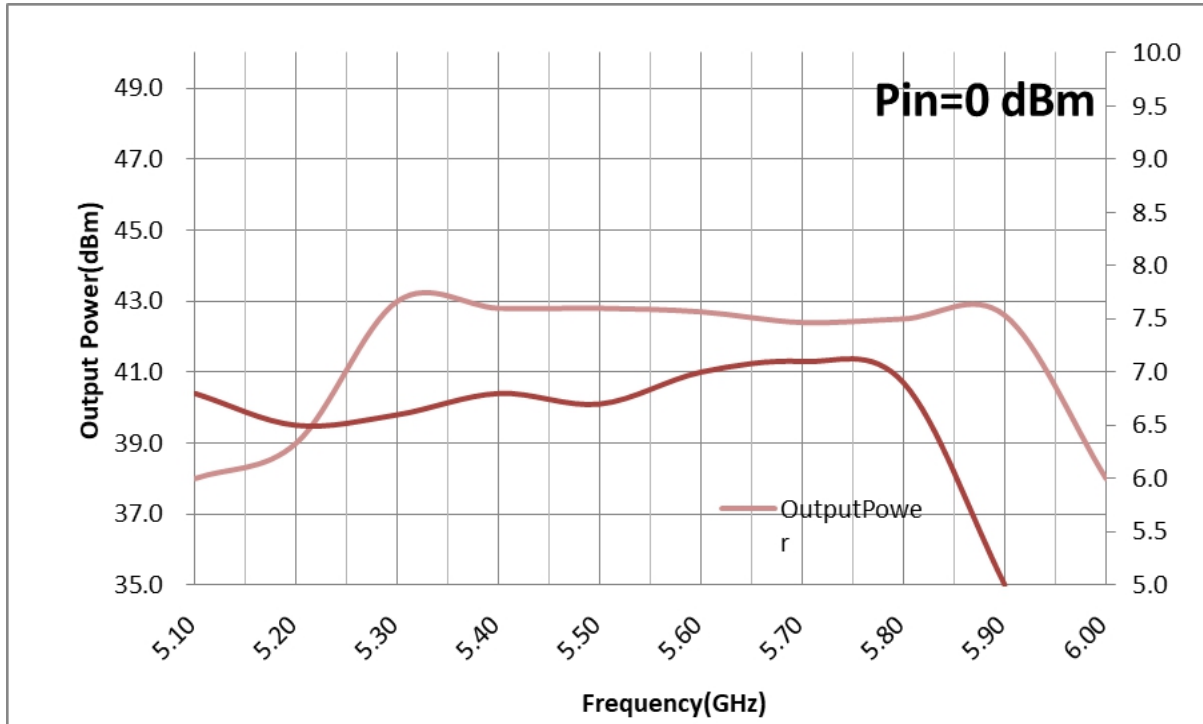
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TYPICAL PERFORMANCE PLOTS

Graph1: Output Power (Low temp. +25±3°C)



Note:

- 1. Adequate heatsink required.

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