

## 0.5-2.7GHz/100Watt/Module

Model Number: OC-PA05-2.7K100W

The model OC-PA05-2.7K100W is a multi-octave high power amplifier operating between 0.5 GHz and 2.7GHz and offering a wide dynamic Range with 100 Watts typical saturated power. The employment of gallium nitride (GaN) and 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 @ +28.0VDC, 25°C, 50Ω**

Parameter	Symbol	Minimum	Typical	Maximum	Units
Operating Frequency	BW	500		2700	MHz
RF Output Power @PSAT	PSAT		100		Watt
Power Gain	Gp		50		dB
Power Gain Flatness	Δ Gp		±2		dB
Input Return Loss	S <sub>11</sub>			-10	dB
Harmonics @70W	H		-10		dBc
Spurious Signals	Spur		-55		dBc
In/Output Impedance			50		Ω
Operating Voltage	V <sub>DC</sub>	24	28	32	Volt
DC Current @80W	I <sub>DD</sub>		13		Amp
Switching Time @1kHz TTL	T <sub>on/off</sub>		2		uS

**MECHANICAL SPECIFICATIONS**

Parameter	Value	Units	Limits
Dimensions	180x90x25 [7.08x3.54x0.098]	mm [inch]	Maximu
Weight	2 [4.4]	kg [lbs]	Maximu
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	-25		65	°C	Storage
Relative Humidity (non-condensing)			95	%	

**Absolute Maximum Rating**

Input RF drive level without damage	+5 dBm (Max)
Load VSWR @ POUT =70W	∞ @ all load phase & amplitude for duration of 1 minute; 3:1 @ all load phase & amplitude continuous
Over Temperature	85°C @ heatsink [restored @ 60°C]

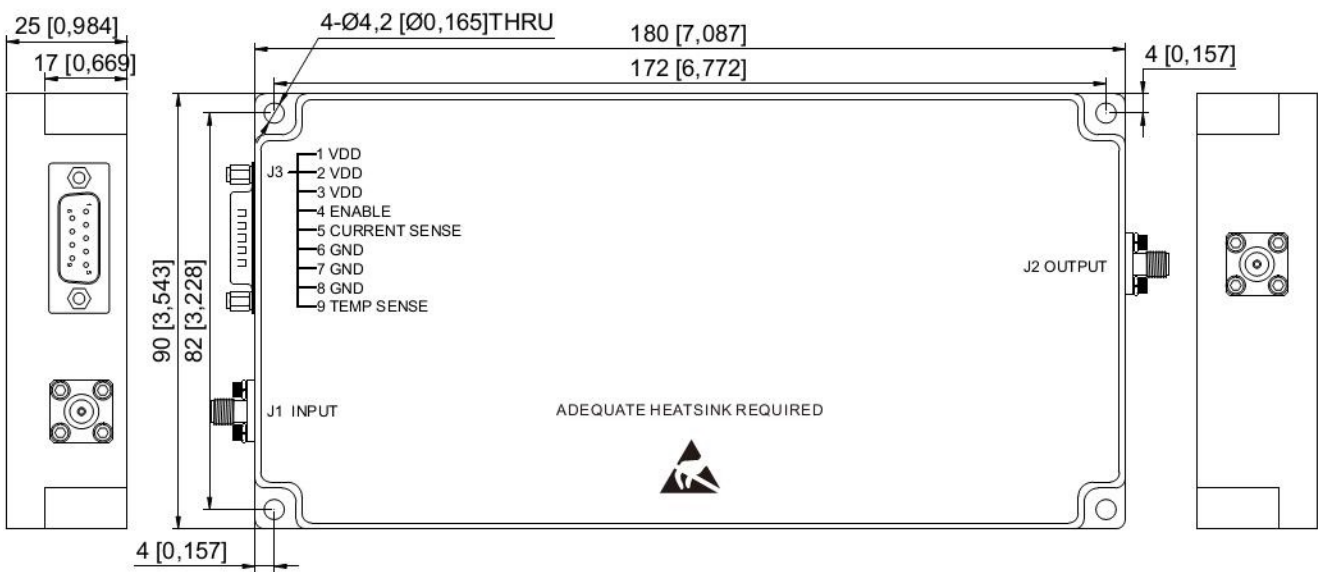
0.5-2.7GHz/100Watt/Module

Model Number: OC-PA05-2.7K100W

**DC INTERFACE CONNECTOR**

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

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





0.5-2.7GHz/100Watt/Module

Model Number: OC-PA05-2.7K100W

TYPICAL PERFORMANCE PLOTS (FOR REFERENCE)

