800-3000MHz/30Watt/Module

Model Number: OC-PA08-3K30W

The model OC-PA08-3K30W is a multi-octave high power amplifier operating between 800 MHz and 3000 MHz and offering a wide dynamic Range with 30 Watts 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 multi octave broadband high power RF, P&L&S applications.

FEATURES:

- Broadband & High power
- High Efficiency
- Great Linearity
- Small Size & Light Weight
- Low Distortion

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

Parameter	Symbol	Min	Typ	Max	Units
Operating Frequency	BW	800		3000	MHz
RF Output Power	P_{out}		30		Watt
Power Gain	Gp		45		dB
Power Gain Flatness	ΔGp		±2		dB
Input Return Loss	S_{11}			-10	dB
Harmonics @20W	H		-15		dBc
Spurious Signals	Spur		-60		dBc
Switch On/Off@10-90% Time	TON/OFF		2	5	μS
In/Output Impedance	Impedance		50		Ω
Operating Voltage	VDC	24	28	32	Volt
DC Current @30W	IDD		6		Amp

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	150x90x25 [5.9x3.55x0.98]	mm [inch]	Maximum
Weight	1.2 [2.6]	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	-25		65	°C	Storage
Relative Humidity（non-condensing）			95	%	

ABSOLUTE MAXIMUM RATING

Input RF drive level without damage	+10 dBm (Max)
Load VSWR @ POUT =20W	∞ @ all load phase & amplitude for duration of 1 minutes; 3:1 @ all load phase & amplitude continuous
Over Temperature	85°C @ heatsink [restored @ 60°C]

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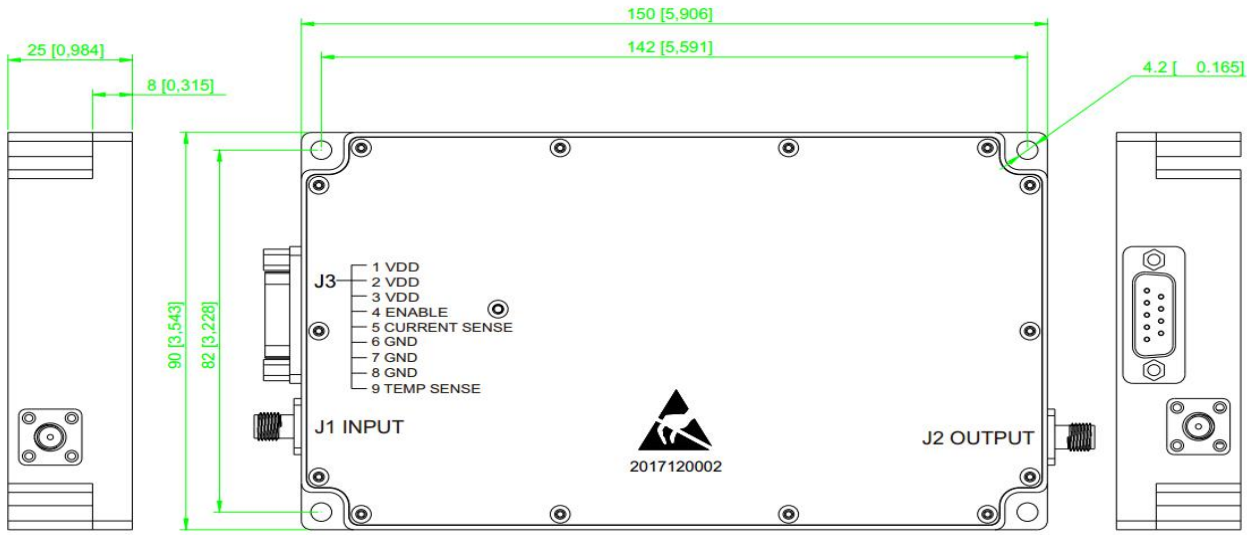
DC INTERFACE CONNECTOR

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

OUTLINE DRAWING (All dimensions in mm [inch])



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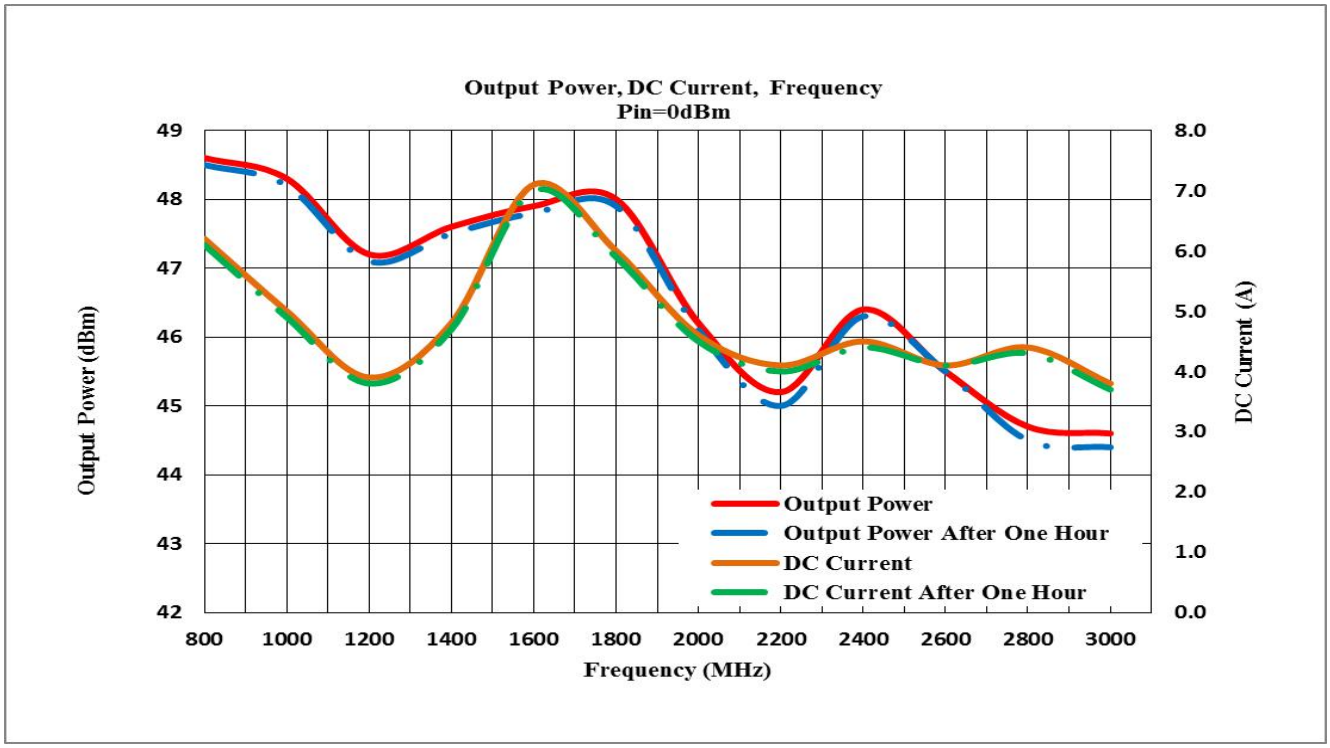
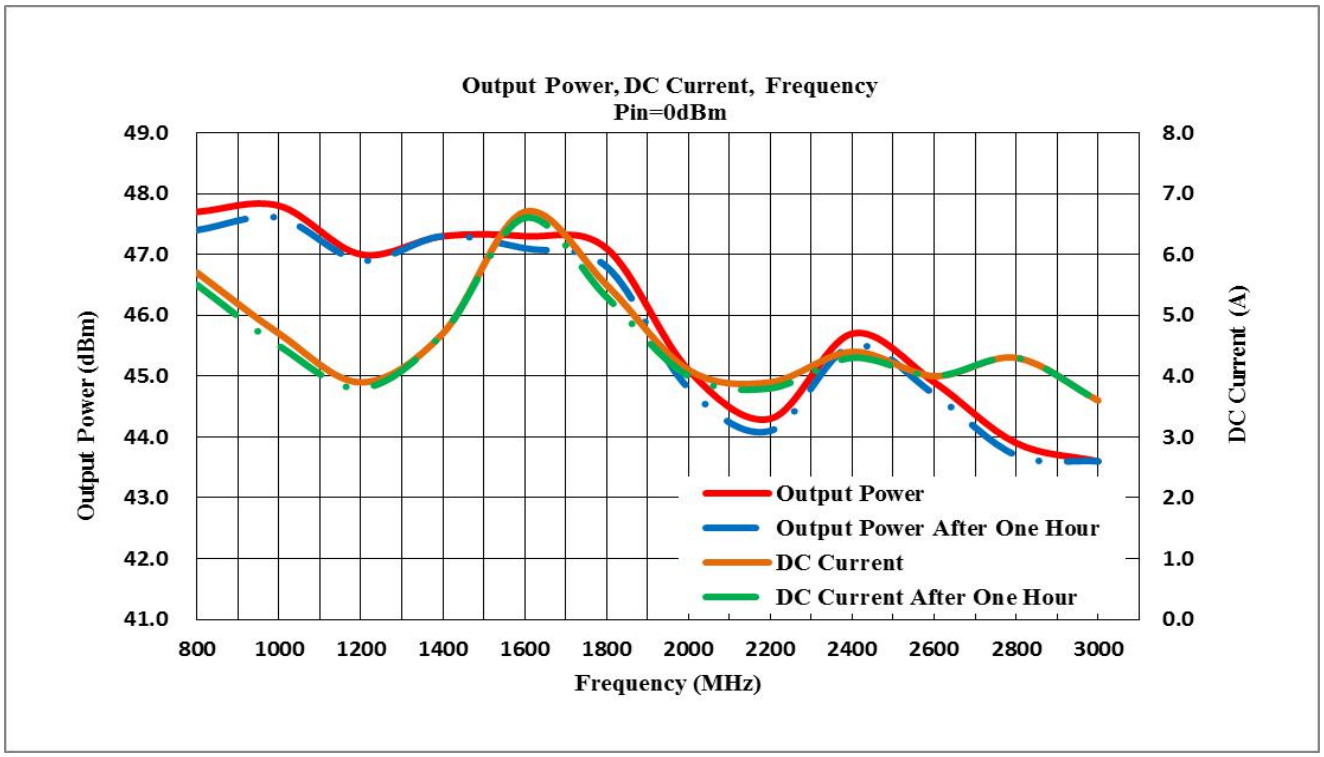
TYPICAL PERFORMANCE PLOTS(For reference only)

Graph1: Output Power (Low temp. -20±3℃)



Graph2: Output Power (High temp. +60±3℃)



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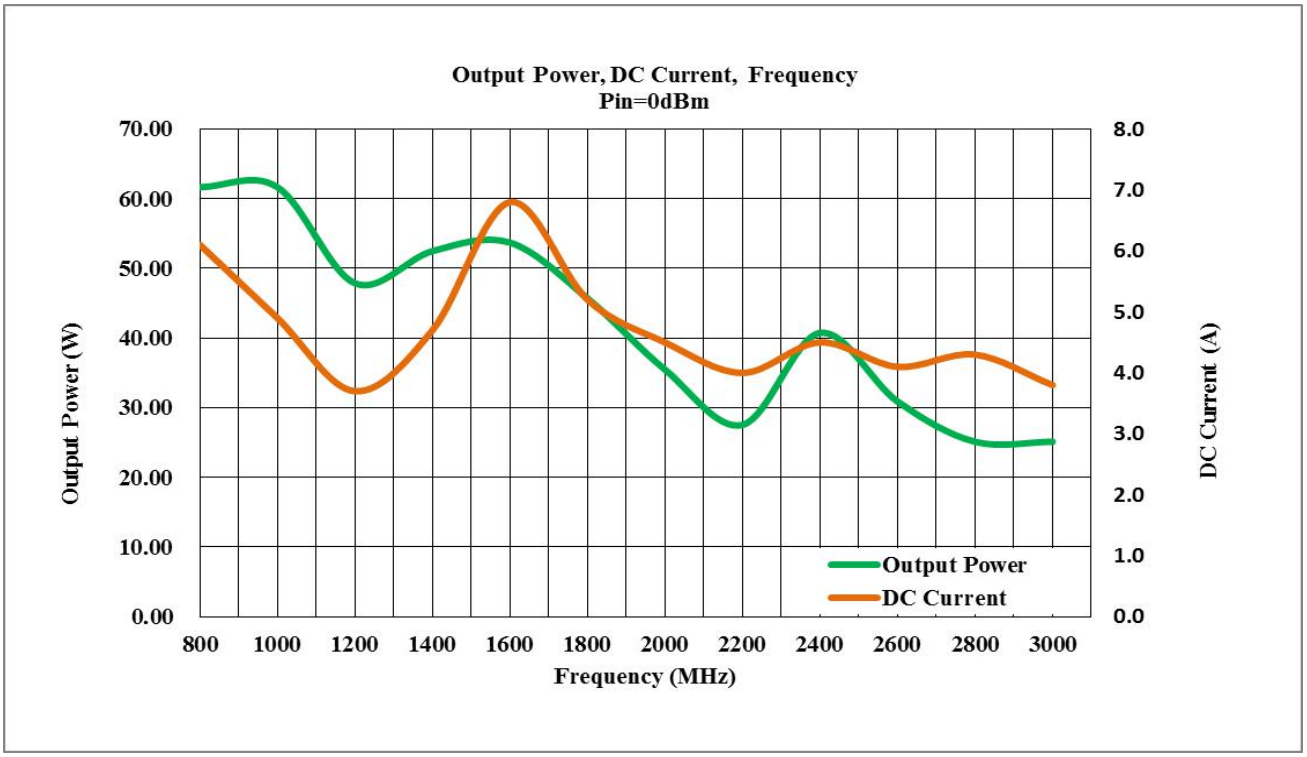
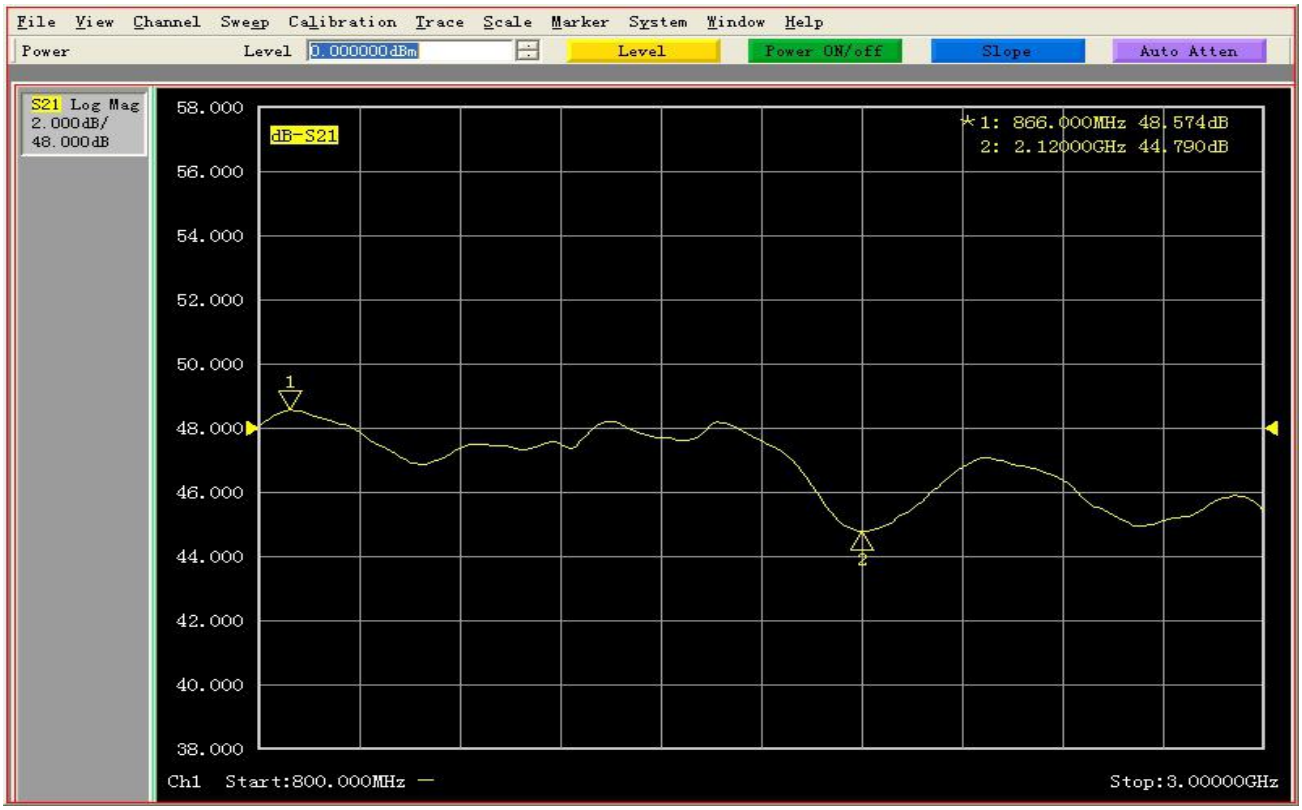
Graph3: Output Power (Normal temp. +25±3℃)



Power Gain:



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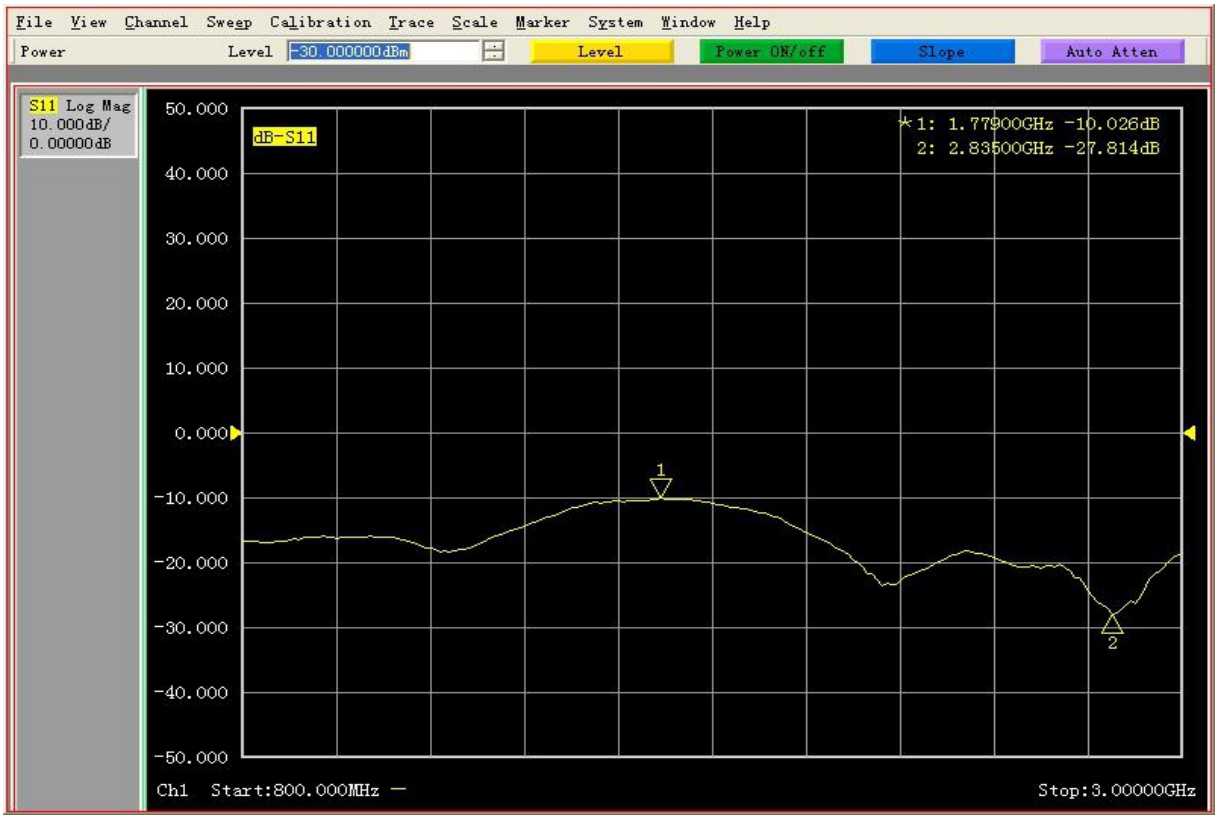
Input Return Loss：



Note: Adequate heatsink required.