



2.11-2.17GHz/100Watt/Module

Model Number: OC-NPA2.11-2.17K100W

The model OC-NPA2.11-2.17K100W is a multi-octave high power amplifier operating between 2.11GHz and 2.17GHz and offering a wide dynamic Range with 100Watts 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 narrowband high power RF, L linear applications.

FEATURES:

- Narrowband & 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	2.11		2.17	GHz
RF Output Power P1	P1	100			Watt
Power Gain	Gp		50		dB
Power Gain Flatness	Δ Gp		±2		dB
Input Return Loss	S ₁₁			-10	dB
Harmonics @80W	H		-10		dBc
Spurious Signals	Spur		-55		dBc
Switch On/Off@10-90% Time	TON/OFF		2	5	μS
In/Output Impedance	Impedance		50		Ω
Operating Voltage	VDC	26	28	30	Volt
DC Current @100W	IDD		13		Amp

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	170x130x30 [6.69x5.12x1.18]	mm [inch]	Maximum
Weight	2 [4.4]	kg [lbs]	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	Type-N, Female		
DC Interface Connector	Hybrid,D-sub 7 Pin, 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	-40		65	°C	Storage
Relative Humidity (non-condensing)			95	%	

Absolute Maximum Rating

Input RF drive level without damage	+5 dBm (Max)
Load VSWR @ Pout =50W	5:1@ all load phase & amplitude for duration of 1 minutes; 3:1 @ all load phase & amplitude continuous
Over Temperature	85°C @ heatsink [restored @ 60°C]



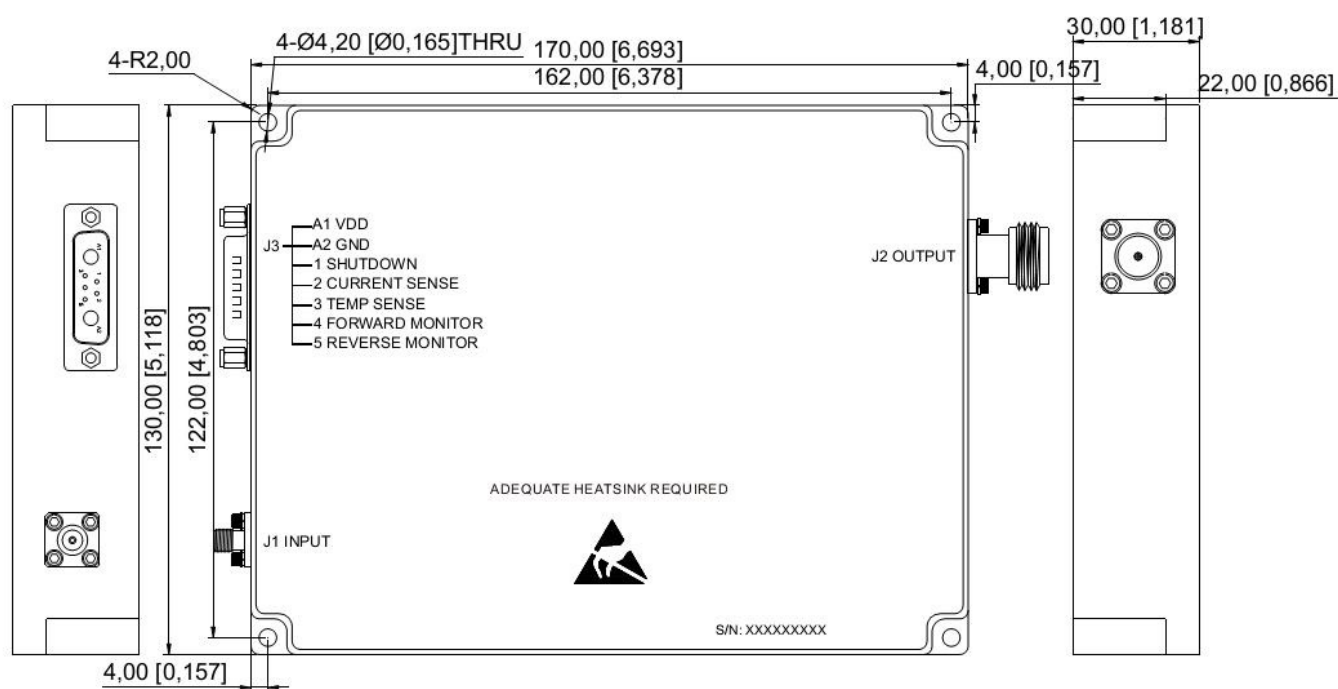
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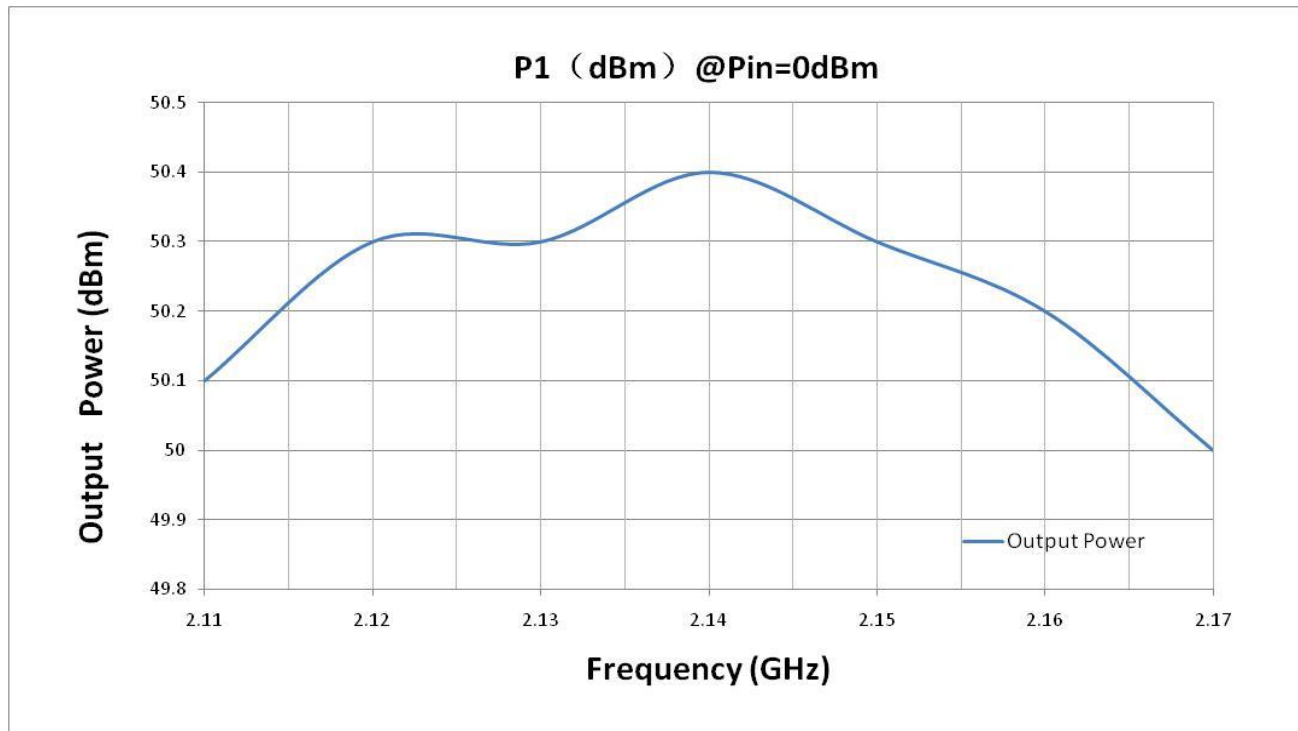
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DC INTERFACE CONNECTOR

Pin #	Description	Specifications
A1	VDD	28V _{DC}
A2	GND	Ground
1	SHUTDOWN	Amplifier Disable: TTL Logic High (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	FORWARD MONITOR	Analog voltage relative to forward power level
5	REVERSE MONITOR	Analog voltage relative to reflected power level

OUTLINE DRAWING (All dimensions in mm [inch])



**2.11-2.17GHz/100Watt/Module****Model Number: OC-NPA2.11-2.17K100W****TYPICAL PERFORMANCE PLOTS** (For reference only)**Note:**

1. Adequate heatsink required.