

AMP5062P SOLID STATE HIGH POWER AMPLIFIER



FEATURES

- Class AB linear GaN design
- Suitable for narrow S-Band high power pulse applications
- Built-in monitoring and protection circuits
- High reliability and ruggedness
- Gating function to quiet the SSPA between pulses
- Built-in isolator

ELECTRICAL SPECIFICATIONS@ 50Ω, 25°C

Parameter	Specification			Notes	
Operating Frequency Range	3.6 GHz				
Peak Output Power	1300 Watt Typ				
Pulse Characteristics	Width	Duty / PRF	Droop	Rise / Fall ¹	
	5 μS	1 %	<0.5dB Typ	75 nS Typ	
Power Gain	62 dB Nom				
Input / Output Return Loss	-10 dB Max			Relative to 50 Ohm	
Harmonics	-40 dBc Typ			At rated Pout	
Spurious	-60 dBc Max			Non-harmonics	
Operating Voltage	50 VDC Nom			Requires 10Kuf Ext. Cap	
Current Consumption	<2 Amp Avg Typ			@ 5 μS, 1%	
Input Power Protection	+5 dBm Max			<10 Sec without damage	
Load VSWR Protection	∞ : 1			<1 minute @ rated Pout	

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +75°C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	95 % Max	Non-condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	14.37 x 9.84 x 1.69in (365 x 250 x 43mm)	Requires 10Kuf Ext. Cap
Weight	14.3 lb. (6.5Kg.)	Outline drawing
RF Connectors In/Out	SMA female / Type-N female	
DC Power / Interface Connector	7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

Notes:

1. Measured between 10% and 90% at nominal output

PIN ASSIGNMENT

Pin	Function	Test Results
1	N/C	N/C
2	N/C	N/C
3	CURRENT MONITOR	$I_b @ 80mV/100mA$
4	TEMP. MONITOR	$10mV/^{\circ}C + 500mV$
5	PULSE GATING	Enable = TTL "High" or Open; Disable = TTL "Low" or Short @ $2\mu S$ delay
A1	VDD	+50VDC
A2	GND	Ground

OUTLINE DRAWING

