

# AMP5061P SOLID STATE HIGH POWER AMPLIFIER



## FEATURES

- Class AB linear GaN design
- Suitable for S-Band narrow band high power pulse applications
- Built-in monitoring and protection circuits
- High reliability and ruggedness
- Built-in isolator

## ELECTRICAL SPECIFICATIONS@ 50Ω, 25°C

Parameter	Specification			Notes	
Operating Frequency Range	3.9 GHz				
Peak Output Power	900 Watt Min / 1000 Watt Typ				
Pulse Characteristics	<b>Width</b>	<b>Duty / PRF</b>	<b>Droop</b>	<b>Rise / Fall <sup>1</sup></b>	
	2 mS Max	2% / 10 Hz	<1.0 dB Typ	75 nS Typ	
Pulse to pulse Phase & Amplitude Stability					
Phase Stability vs. Temperature					
Power Gain	60 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	-				
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		
Weight		
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



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### PIN ASSIGNMENT

Pin	Function	Test Results
1	N/C	N/C
2	N/C	N/C
3	CURRENT MONITOR: $I_D$ @ 80mV/100mA	i.e. 72mV @ $I_{dq} = 0.921A$
4	TEMP. MONITOR: 10mV/°C + 500mV	i.e. 0.802V @ Room temp = 30.2°C
5	SHUTDOWN	Enable = Open or TTL "High" (<3.2V) - Disable = TTL "Low" (0V)
A1	VDD	+50VDC
A2	GND	Ground

### OUTLINE DRAWING