



# AMP5052P SOLID STATE HIGH POWER AMPLIFIER

## FEATURES

- Class AB linear GaN design
- Instantaneous bandwidth
- Suitable for mid power pulse applications
- Small form factor, light weight
- Built-in protection circuits
- High reliability and ruggedness



## ELECTRICAL SPECIFICATIONS

Parameter	Specification			Notes	
Operating Frequency Range	2.7 - 2.9 GHz				
Power Output Pulse	65 Watt Min				
Pulse Characteristics (Max Values)	<b>Width</b>	<b>Duty</b>	<b>Rise/Fall</b>	<b>Drop</b>	
	150 $\mu$ S	10 %	100/50 nS	1 dB	
Power Gain	48 dB Min				
Power Gain Flatness	2.0 dB p-p Max			Constant input power	
Input Return Loss	10 dB Min			Relative to 50 Ohm	
2-Tone Intermodulation (IMD)	-30 dBc Typ			37dBm/Tone, $\Delta = 1$ MHz	
Harmonics	<-20 dBc Typ			At rated Pout	
Spurious	-60 dBc Max			Non-harmonics	
Operating Voltage	28 - 30 VDC				
Current Consumption	2 Amp Avg. Max			At rated Pout	
Input Power Protection	+8 dBm Max			<10 Sec without damage	
Load VSWR Protection	$\infty : 1$			<1 minute at rated Pout	
Turn On / Off Speed	5 $\mu$ Sec Max				

## ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensing

## MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	198 x 92 x 27 mm	Excluding connectors
Weight	850 gr.	
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

### D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	N/C
2	VVA	Analog
3	CURRENT SENSOR	20mV/100mA Typ
4	TEMP SENSOR	10mV/°C + 500mV Typ
5	SHUTDOWN	Enable = TTL "Hi" or Open / Disable = TTL "Lo" or short
6, 7	VDD	28VDC
8, 9	GND	Ground

### OUTLINE DRAWING

