



# AMP5044P SOLID STATE HIGH POWER PULSE AMPLIFIER

## FEATURES

- Class AB linear GaN design
- High dynamic range
- Suitable for airborne and satellite C-Band pulse applications
- Built in protections
- High reliability and ruggedness



## ELECTRICAL SPECIFICATIONS

Parameter	Specification			Notes	
Operating Frequency Range	5.41 GHz			BW = 800 MHz Min	
Peak Pulse Output @ Psat	200 Watt Min				
Power Gain at Peak Power	30 dB Min				
Pulse Characteristics (Max values)	<b>Width</b>	<b>Duty</b>	<b>PRF</b>	<b>Rise/Fall</b>	<b>Drop</b>
	250 $\mu$ S	10%	-	60 nS Typ	0.8 dB
Max Input Power	+27 dBm			No damage	
Input VSWR / Output VSWR	1.5 : 1 / 2.0 : 1 Max			Relative to 50 Ohm	
Harmonics	-35 dBc Max @ Psat				
Spurious	-60 dBc Max				
Switching Delay Time (Td)	300 nS Typical				
Noise Figure	10 dB Max				
Operating Voltage	28 VDC Nom				
Current Consumption	20 Amp Peak / 3 Amp Avg.			At 10% Duty-Cycle	
Quiescent Current	TBD				
Load VSWR Protection	20 : 1			Output isolator	

## ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Note
Operating Case Temperature	-40 to +65 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non Condensation

## MECHANICAL SPECIFICATIONS

Parameter	Specifications	Note
Dimensions	100 x 80 x 50 mm (target)	Excluding Connectors
Weight	TBD	
Cooling	External Heatsink	Forced air required
Input / Output Connectors	SMA-F	Type-N optional



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## I/O INTERFACE

Pin	Function	Test Results
1	N/C	N/C
2	N/C	N/C
3	CURRENT MONITOR: $I_b @ 25\text{mV}/100\text{mA}$	Nom
4	TEMP. MONITOR: $10\text{mV}/^\circ\text{C} + 500\text{mV}$	Nom
5	GATING SIGNAL	TTL "Hi" = Disable Function @ 1uS Nom switching speed
6, 7	VDD	+28VDC
8, 9	GND	Ground

## OUTLINE DRAWING (mm)