



AMP3096AP SOLID STATE HIGH POWER AMPLIFIER

FEATURES

- Class AB linear GaN design
- Instantaneous bandwidth
- Suitable C-Band high peak power pulse applications
- Small form factor & light weight
- Built-in protection circuits
- High reliability and ruggedness

ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

Parameter	Specification			Notes	
Operating Frequency Range	5.4 - 5.9 GHz				
Power Output Peak Pulse	1100 Watt Min / 1200 Watt Typ				
Power Gain	40 dB Min / 42 dB Typ			Pin = 19 dBm Nom	
Power Gain Flatness	1.0 dB p-p Max			Constant input power	
Input / Output Return Loss	-10 dB Max				
Input Pulse Characteristics	Width	Duty	Droop	Rise/Fall	
	100 μs	10 %	<1 dB	<100 nS	
Harmonics	-40 dBc Max			At rated Pout	
Spurious	-60 dBc Max			Non-harmonics	
Operating Voltage	50 VDC Nom				
Efficiency	25 % Min / 35 % Typ			At rated Pout	
Input Power Protection	+23 dBm Max			Without damage	
Load VSWR Protection	∞ : 1			Output isolator	
Turn On / Off Speed	1 μSec Max			Fast switching option	
Phase Deviation Module to Module	±20 Deg.				

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +85 °C	
Storage Temperature	-40 to +125 °C	
Relative Humidity	5 to 95 %	Non-condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions L x W x H	330 x 242 x 42 mm	Excluding connectors
Weight	-	
RF Connectors In/Out	SMA / Type-N female	
DC Power / Interface Connector	7-Pin Hybrid D-Sub	7W2
Cooling	External Heatsink	Forced air required

AMP3096AP SOLID STATE HIGH POWER AMPLIFIER

D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	Peak Pwr Monitor
2	TEMP SENSOR	$V_T @ 10\text{mV}/^\circ\text{C} + 500\text{mV Typ}$
3	SHUTDOWN	Enable: TTL Hi or Open / Disable: TTL Lo or Short
4	N/C	
5	CURRENT SENSOR	$I_D @ 20\text{mV}/100\text{mA Typ}$
A1	VDD	50VDC
A2	GND	Ground

OUTLINE DRAWING

