



AMP3112P-2 SOLID STATE HIGH POWER AMPLIFIER

FEATURES

- Class AB linear GaN design
- Instantaneous bandwidth
- Suitable for X-Band high power pulse applications
- Built-in protection circuits
- High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification			Notes	
Operating Frequency Range	7.5 - 10.0 GHz				
Pulse Power Output	500 Watt Min			Peak pulse	
Power Gain	57 dB Min				
Power Gain Flatness	3.0 dB p-p Max				
Input Pulse Characteristics	Width	Duty	PRF	Drop	
	0.2 - 100 μ S	1 %	10 KHz	0.7 dB	
Input / Output Return Loss	10 dB Min			Relative to 50 Ohm	
Harmonics	-30 dBc Typ			At rated Pout	
Spurious	-60 dBc Max			Non-harmonics	
Operating Voltage	32 VDC Nom				
Efficiency	20 % Typ			At rated Pout	
Max Input Power	+3 dBm Max			Without damage	
Load VSWR Protection	3 : 1				

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +65 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non Condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	TBD	Including WG
Weight	TBD	
RF Connectors In/Out	SMA / WG (WR112)	
DC Power / Interface Connector	7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	N/C	
2	N/C	
3	CURRENT SENSOR	$I_D @ 50mV/100mA$ Typ
4	TEMP SENSOR	$V_T @ 10mV/^{\circ}C + 500mV$ Typ
5	SHUTDOWN	TTL "Hi" = Disable Function @ <50mS
A1	VDD	32VDC
A2	GND	Ground



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OUTLINE DRAWING