



# AMP3112AP SOLID STATE HIGH POWER AMPLIFIER

## FEATURES

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



## ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

Parameter	Specification			Notes	
Operating Frequency Range	7.5 - 10.0 GHz				
Pulse Power Output	300 Watt Typ			Peak pulse	
Power Gain	55 dB Nom				
Power Gain Flatness	3.0 dB p-p Max				
Input Pulse Characteristics	<b>Width</b>	<b>Duty</b>	<b>PRF</b>	<b>Drop</b>	
	0.2 - 100 μS	1 %	10 KHz	<0.5 dB	
Input / Output Return Loss	-10 dB Max			Relative to 50 Ohm	
Harmonics	-30 dBc Typ			At rated Pout	
Spurious	-60 dBc Max			Non-harmonics	
Operating Voltage	40 VDC Nom				
Efficiency	20 % Typ			At rated Pout	
Input Power Protection	+3 dBm Max			<10 Sec without damage	
Load VSWR Protection	3 : 1 Max			<1 minute @ rated Pout	

## ENVIRONMENTAL CHARACTERISTICS

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

## MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	220 x 235 x 27 mm	
Weight	3 Kg.	
RF Connectors In/Out	Hi-Freq. SMA female	Optional 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 <sub>D</sub> @50mV/100mA Typ
4	TEMP SENSOR	V <sub>T</sub> @10mV/°C + 500mV Typ
5	SHUTDOWN	TTL "Hi" = Disable Function @ <50mS
A1	VDD	40VDC
A2	GND	Ground

## OUTLINE DRAWING

