



# AMP3113P SOLID STATE HIGH POWER AMPLIFIER

## FEATURES

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

## ELECTRICAL SPECIFICATIONS

Parameter	Specification			Notes
Operating Frequency Range	5.2 - 5.5 GHz			
Power Output	100 Watt Min			Peak pulse
Pulse Characteristics	Width	Duty	PRF	
	15mS		30Hz	
Power Gain	65 dB Min			
Power Gain Flatness	0.2 dB p-p Max			Over any 2MHz
Input / Output Return Loss	12 dB Min			Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-30 dBc Typ			40dBm/Tone, $\Delta = 1$ MHz
Harmonics	-20 dBc Typ			At rated Pout
Spurious	-60 dBc Max			Non-harmonics
Operating Voltage	30 - 32 VDC			
Current Consumption	10 Amp Max			Peak current
Max Input Power	-10 dBm			Without damage
Load VSWR Protection	$\infty : 1$			

## 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	230 x 150 x 32 mm	Excluding Connectors
Weight	-	
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required



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## D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	N/A
2	VVA	N/A
3	CURRENT SENSOR	$I_D @ 20\text{mV}/100\text{mA Typ}$
4	TEMP SENSOR	$V_T @ 10\text{mV}/^\circ\text{C} + 500\text{mV Typ}$
5	SHUTDOWN	TTL
6, 7	VDD	32VDC
8, 9	GND	Ground

## OUTLINE DRAWING