



AMP3008 SOLID STATE HIGH POWER AMPLIFIER

PRELIMINARY

FEATURES

Class AB linear GaN design
 Instantaneous wide bandwidth
 Suitable for all modulations standards
 Built-in protection circuits
 High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	9.1 - 10.1 GHz	
Output Power	20 Watt Min	CW
Power Gain	43 dB Min	
Power Gain Flatness	3.0dB p-p Max	
Input Return Loss	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	>30 dBc Typ	35dBm/Tone, $\Delta = 1\text{MHz}$
Harmonics	>30 dBc Typ	At rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	27.5 - 28.5 VDC	
Current Consumption	6.5 Amp Max	At rated output
Load VSWR Protection	$\infty : 1$	Output Isolator

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non Condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	200 X 125 X 27 mm	Nominal Dimensions
Weight	TBD	
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	N/C
2	REV	N/C
3	CURRENT SENSOR	$I_D @ 50\text{mV}/100\text{mA Typ}$
4	TEMP SENSOR	$V_T @ 10\text{mV}/^\circ\text{C} + 500\text{mV Typ}$
5	SHUTDOWN	TTL
6, 7	VDD	28VDC
8, 9	GND	Ground

OUTLINE DRAWING

