



AMP3009 SOLID STATE HIGH POWER AMPLIFIER

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	9.0 - 10 GHz	
Power Output	100 Watt Min	CW
Power Gain	56 dB Min	
Power Gain Flatness	2.0dB p-p Max	
Input / Output Return Loss	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	>30 dBc Typ	41dBm/Tone, $\Delta = 1\text{MHz}$
Harmonics	>30 dBc	At rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	28 VDC $\pm 0.5\text{ V}$	
Current Consumption	10 Amp Max	At rated Pout
Max Input Power	+8 dBm Max	Without damage
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	260 X 160 X 41 mm	Including WG
Weight	TBD	
RF Connectors In/Out	SMA/WG	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	GND	Ground
2	VDD	28VDC
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	28VDC
8, 9	GND	Ground

OUTLINE DRAWING

