AMP1009
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	1.0 - 3.0 GHz	
Power Output	120 Watt Min	CW
Power Gain	14 dB Min	Over Temp range
Power Gain Flatness	3.0dB p-p Max	Constant input power
Input / Output VSWR	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	>30 dBc Typ	40dBm/Tone, Δ = 1MHz
Harmonics	>20 dBc Typ	At rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	32 VDC Nom	
Current Consumption	13 Amp Max	At rated Pout
Max Input Power	42 dBm Max	Without damage
Load VSWR Protection	5 : 1	
Turn On / Off Speed	2 µSec Max	
Gain Match	±1.5 dB	Unit to Unit
Phase Match	±10 Deg	Unit to Unit

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	MIL-STD 810F - 5 to 95 %	Non Condensation
Shock and Vibration	MIL-STD-810F	

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	152.4 x 114.3 x 18.5 mm	Excluding Connectors
Weight	700 gr Typ	Max Weight
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	Feed Thru	
Cooling	External Heatsink	Forced air required

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D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	N/C
2	REV	N/C
3	CURRENT SENSOR	I_D@25mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
6, 7	VDD	32VDC
8, 9	GND	Ground

OUTLINE DRAWING