



AMP1008 SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear 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	500 - 1000 MHz	
Power Output	125 Watt Min	CW
Power Gain	37 dB Min	Over Temp range
Power Gain Flatness	2.0 dB p-p Max	Constant input power
Input / Output VSWR	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	>30 dBc Typ	37dBm/Tone, $\Delta = 1\text{MHz}$
Harmonics	>30 dBc Typ	At rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	28 - 30 VDC	
Current Consumption	12 Amp Max	At rated Pout
Max Input Power	17 dBm Max	Without damage
Load VSWR Protection	$\infty : 1$	
Turn On / Off Speed	2 μSec Max	
Gain Match	$\pm 1.5\text{ dB}$	Unit to Unit
Phase Match	$\pm 10\text{ Deg}$	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	160 x 69 x 32 mm Max	Excluding Connectors
Weight	TBD	
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/C
2	REV	N/C
3	CURRENT SENSOR	$I_D @ 25\text{mV}/100\text{mA Typ}$
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

