



AMP7004 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	800 - 1000 MHz	
Output Power @ P1dB	10 Watt Min	
Power Gain	45 dB Min	
Power Gain Flatness	2.0 dB p-p Max	Constant input power
Input Return Loss	10 dB Min	Relative to 50 Ohm
Noise Figure	5 dB Max	
2-Tone Intermodulation (IMD)	>30 dBc	32dBm/Tone, $\Delta = 1\text{MHz}$
Harmonics 2 nd / 3rd	>20 dBc	At Rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	28 VDC Nom	
Current Consumption	4.0 Amp Max	At rated Pout
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 Condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	147 X 69 X 27 mm	Excluding Connectors
Weight	490 gr.	Max Weight
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	$I_D @ 100\text{mV}/100\text{mA Typ}$
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

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OUTLINE DRAWING

