AMP1090
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB GaN Chip & Wire technology
Instantaneous wide Bandwidth
Suitable for all single channel modulation standards
Built-in protection circuits
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	2.0 - 8.0 GHz	
Power Output Past	10 Watt Min / 12 Watt Typ	CW
Small Signal Gain	40 dB Min	
Power Gain Flatness	3.0 dB p-p Max	
Input Return Loss	-10 dB Max	50 Ohm reference
2-Tone Intermodulation (IMD)	-30 dBc Typ	30dBm/Tone, Δ = 1MHz
Harmonics	-20 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Noise Figure	10 dB Max	
Operating Voltage	32 VDC Nom	
Current Consumption	3 Amp Max / 3.5 Amp @ Psat	
Input Power Protection	+5 dBm Max	<10Sec without damage
Load VSWR Protection	5 : 1 Max	<1 minute at rated Pout

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +65 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	140 x 75 x 25 mm	Excluding connectors
Weight	450 gr.	
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		N/A
2		N/A
3	Current Sensor	I_D@20mV/100mA Typ
4	Temp Sensor	V_T@10mV/°C + 500mV Typ
5	Shutdown	TTL
6,7	VDD	32VDC
8,9	GND	Ground

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OUTLINE DRAWING