



# AMP1031 SOLID STATE HIGH POWER AMPLIFIER

## FEATURES

- Class AB GaN 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	1.0 - 2.0 GHz	
Power Output Psat	15 Watt Min	CW
Output Power @ P1dB	6 Watt Min	
Power Gain	42 dB Min	
Gain Flatness	3.0 dB p-p Max	Constant input power
Input Return Loss	10dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	>30 dBc Typ	33dBm/Tone, $\Delta = 1\text{MHz}$
Harmonics	>20dBc Typ	
Non Harmonics Distortions	>60dBc	
Operating Voltage	28 - 30 VDC Nom	
Current Consumption	1.5 Amp Max	At rated Pout
Max Input Power	+8 dBm	Without damage
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	125 X 63 X 27 mm	Without Connectors
Weight	800 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	OPTION 101 - Forward power detect
2	N/C	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

