

# AMP1034 SOLID STATE HIGH POWER AMPLIFIER

## FEATURES

- Class AB linear LDMOS design
- Instantaneous wide bandwidth
- Suitable for all single channel modulation standards
- Built-in monitoring and protection circuits
- High reliability and ruggedness



## ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	1 - 100 MHz	
Power Output Psat	100 Watt Min	CW
Power Gain	50 dB Min	
Power Gain Flatness	3.0 dB p-p Max	
Input Return Loss	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-30 dBc Typ	40dBm/Tone, $\Delta = 1\text{MHz}$
Harmonics	-20 dBc Typ	At rated Pout
Non Harmonics Spurious	-60 dBc Max	
Operating Voltage	28 VDC $\pm 0.5\text{ V}$	
Current Consumption	10 Amp Max	At rated Pout
Max Input Power Protection	+8 dBm	Without damage
Load VSWR Protection	$\infty : 1$ Min	
Turn On / Off Speed	5 $\mu\text{Sec}$	<10 Sec

## 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	162 x 96 x 27 mm	Excluding Connectors
Weight	600 gr.	Typical 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	VVA	N/C
3	CURRENT SENSOR	$I_b @ 20\text{mV}/100\text{mA Typ}$
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

