



# AMP1005A SOLID STATE HIGH POWER AMPLIFIER

## FEATURES

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



## ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	700 - 2700 MHz	
Power Output @ Sat	50 Watt Min	CW
Power Output @ P1dB	20 Watt Min	CW
Power Gain	47 dB Min	
Power Gain Flatness	3.0 dB p-p Max	Constant input power
Input Return Loss	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	>30 dBc Typ >38 dBc Typ	37dBm/Tone, $\Delta = 1\text{MHz}$ 33dBm/Tone, $\Delta = 100\text{KHz}$
Harmonics	>20 dBc Typ	At rated Pout
Non Harmonics Spurious	>60 dBc Min	
Operating Voltage	28 - 30 VDC	
Current Consumption	7 Amp Max / 6 Amp Typ	At rated Pout
Quiescent Current	1.8 Amp Typ	
Max Input Power	+8 dBm	Without damage
Load VSWR Protection	$\infty : 1$	
Turn On / Off Speed	5 $\mu\text{Sec}$ Max	

## ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non Condensing

## MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	188 X 91.5 X 27 mm	Excluding Connectors
Weight	825 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	FWD	N/C
2	VVA	N/C
3	CURRENT SENSOR	20mV/100mA Typ
4	TEMP SENSOR	10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
6, 7	VDD	28VDC
8, 9	GND	Ground

### OUTLINE DRAWING

