



# AMP5001 SOLID STATE HIGH POWER AMPLIFIER

**PRELIMINARY**

## FEATURES

- Class AB LDMOS linear design
- Single frequency, Laser and Plasma exciters applications
- Small form factor
- Built-in protection circuits
- High reliability and ruggedness



## ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	13.56 MHz	
Power Output Psat	300 Watt Min	CW
Power Gain	30 dB Min	
Gain Variation Over Temperature	±2.0 dB	Rated case temperature
Input Return Loss	10dB Min	Relative to 50 Ohm
Harmonics	>30dBc	
Non Harmonics Distortions	>60dBc	
Operating Voltage	28 VDC Nom	
Current Consumption	22 Amp Nom	At rated Pout
Max Input Power	37 dBm	Without damage
Load VSWR Protection	∞ : 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	3 x 2x 1 inch	Without Connectors
Weight	300 gr.	Typical Weight
RF Connectors In/Out	SMA / N-Type female	
DC Power / Interface Connector	Feed Thru	
Cooling	External Heatsink	Forced air required

## D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	Option-101 - Analog Forward Power Indicator
2	VVA	N/C
3	CURRENT SENSOR	I <sub>b</sub> @10mV/100mA Typ
4	TEMP SENSOR	V <sub>T</sub> @10mV/°C + 500mV Typ
5	SHUTDOWN	TTL via Input GaAsFET switch for fast pulse rise & fall time
6, 7	VDD	28VDC
8, 9	GND	Ground



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OUTLINE DRAWING