



# AMP1135P SOLID STATE HIGH POWER AMPLIFIER

## FEATURES

- Class AB linear LDMOS design
- Instantaneous wide bandwidth
- Suitable HF & VHF high power pulse applications
- Built-in protection circuits
- High reliability and ruggedness
- Small form factor, high power density

## ELECTRICAL SPECIFICATIONS: 50Ω, 25°

Parameter	Specification	Notes
Operating Frequency Range	1 - 200 MHz	
Power Output @ Peak Power	1000 Watt Min	Peak pulse
Pulse Characteristics	<b>Width</b>	<b>Rise/Fall</b>
	5 - 200μS	<200nS
Power Gain	60 dB Min	
Power Gain Flatness	3.0 dB p-p Max	Constant input power
Input / Output Return Loss	-10 dB Max	Relative to 50 Ohm
Harmonics 2 <sup>nd</sup> / 3 <sup>rd</sup>	<-20 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	50 VDC Nom	
Current Consumption	43 Amp Peak Max / 6 Amp Avg	At rated Pout
Input Power Protection	+5 dBm Max	<10 Sec without damage
Load VSWR Protection	5 : 1	<1 minute at rated Pout

## 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	220 x 150 x 41 mm	Excluding connectors
Weight	TBD	
RF Connectors In/Out	SMA female / Type-N Female	
DC Power / Interface Connector	7 Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

## D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	N/C	Reserved
2	MODULATOR	Pulse Modulator @ 35nS Typ - TTL Hi=On, TTL Lo=Off
3	CURRENT SENSOR	I <sub>b</sub> @10mV/100mA Typ
4	TEMP SENSOR	V <sub>T</sub> @10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
A1	VDD	50VDC
A2	GND	Ground



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**OUTLINE DRAWING**