



# AMP1156P SOLID STATE HIGH POWER AMPLIFIER

## FEATURES

- Class AB linear balanced Push-Pull LDMOS design
- Instantaneous wide bandwidth
- High peak pulse power covering the VHF & UHF frequency range
- Built-in protection circuits
- High reliability and ruggedness



## ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	150 - 500 MHz	
Power Output Peak Pulse	4000 Watt Min	See pulse parameters
Pulse Characteristics	<b>Width</b>	<b>PRF</b>
	1 - 5 $\mu$ S	1 KHz
Power Gain	60 dB Min	Pin = +4dBm Nom
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	
Current Consumption	6 Amp Avg Max	At rated Pout
Input Power Protection	+6 dBm Max	<10 Sec without damage
Load VSWR Protection	$\infty$ : 1	<1 minute at rated Pout
Turn On / Off Speed	5 $\mu$ 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	350 x 250 x 32 mm	Excluding connectors
Weight	6.6 Kg.	
RF Connectors In/Out	SMA female / Type-N Female	
DC Power / Interface Connector	9 Pin Hybrid D-Sub	9W4
Cooling	External Heatsink	Forced air required

## D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	N/C	
2	N/C	
3	CURRENT SENSOR	$I_b$ @10mV/100mA Typ
4	TEMP SENSOR	$V_T$ @10mV/°C + 500mV Typ
5	SHUTDOWN	Enable = TTL Hi or Open, Disable = TTL Low or Short
A1, A2	VDD	50VDC
A3, A4	GND	Ground

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## OUTLINE DRAWING

