



AMP1109P 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 - 20 MHz	
Power Output Peak Pulse	400 Watt Min	Pulse
Power Gain	40 dB Min	
Pulse Width	100 μ S Max	
Pulse Duty Cycle	20 % Max	
Power Gain Flatness	2.0 dB p-p Max	
Temperature Stability	1.0 dB Max	Over 0 - 50°C
Input Return Loss	-10 dB Max	Relative to 50 Ohm
Harmonics	<-20dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Noise Figure	6 dB Max	
Operating Voltage	24 VDC Nom	
Current Consumption	60 Amp Max Peak	
Input Power Protection	+23 dBm Max	<1 Sec without damage
Load VSWR Protection	∞ : 1	<1 minute at rated Pout
Turn On / Off Speed	5 μ 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	250 X 200 X 41 mm	Excluding connectors
Weight	-	
RF Connectors In/Out	SMA 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	FWD	N/C
2	VVA	N/C
3	CURRENT SENSOR	I_D @20mV/100mA Typ
4	TEMP SENSOR	V_T @10mV/°C + 500mV Typ
5	SHUTDOWN	TTL "Hi" = Disable Function @ 50mS (Option: 5 μ S Trigger/Pulse Modulator)
A1	VDD	24VDC
A2	GND	Ground

OUTLINE DRAWING

