



AMP3120 SOLID STATE HIGH POWER AMPLIFIER



FEATURES

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

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	950 - 1250 MHz	
Power Output Psat	30 Watt Min	CW
Power Gain	45 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	34dBm/Tone, $\Delta = 1$ MHz
Harmonics	<-20 dBc Typ	At rated output
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	28 VDC Nom	
Current Consumption	5 Amp Max	At rated Pout
Input Power Protection	+8 dBm Max	<10 Sec without damage
Load VSWR Protection	$\infty : 1$	<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-condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	120 x 60 x 27 mm	Excluding Connectors
Weight	500 gr.	Max Weight
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	Option-101 - Analog Forward Power Indicator
2	REV	Option-103 - Analog Gain Control
3	CURRENT SENSOR	$I_b @ 100mV/100mA$ Typ
4	TEMP SENSOR	$V_T @ 10mV/^\circ C + 500mV$ Typ
5	SHUTDOWN	TTL
6, 7	VDD	28VDC
8, 9	GND	Ground

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OUTLINE DRAWING

