

AMP3124

SOLID STATE HIGH POWER AMPLIFIER



FEATURES

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

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	17.0 - 21.0 GHz	
Power Output Psat	2.5 Watt Typ	
Power Output @ P1dB	2.0 Watt Min	P1dB Variation - 1.3dBm Max
Power Gain	33 dB Min	
Power Gain Flatness	1.5 dB p-p Max	Constant input power
Input / Output Return Loss	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	>30 dBc Min (IP3 = 42 dBm)	27dBm/Tone, $\Delta = 1$ MHz
Noise Figure	12 dB Max	
Harmonics	>20 dBc	At rated Pout
Non Harmonics Spurious	>60 dBc Min	
Operating Voltage	9 VDC Nom	
Current Consumption	4 Amp Max	At rated Pout
Max Input Power Protection	+3 dBm	Without damage
Load VSWR Protection	5 : 1	

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +65 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non Condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	80 x 80 x 20 mm	Excluding Connectors
Weight	TBD	
RF Connectors In/Out	SMA K Type female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	N/C	Reserved
2	N/C	Reserved
3	CURRENT SENSOR	$I_D @ 20mV/100mA$ Typ
4	TEMP SENSOR	$V_T @ 10mV/^{\circ}C + 500mV$ Typ
5	SHUTDOWN	TTL
6,7	VDD	9VDC
8,9	GND	Ground



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OUTLINE DRAWING