

AMP3097 SOLID STATE HIGH POWER AMPLIFIER



FEATURES

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

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	400 - 500 MHz	
Power Output Psat	10 Watt Typ	CW
Power Gain	40 dB Min	
Power Gain Flatness	1.0 dB p-p Max	Constant input power
Input Return Loss	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	>30 dBc	30dBm/Tone, $\Delta = 1\text{MHz}$
Harmonics 2 nd / 3rd	>30 dBc	At Rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	12 VDC Nom	
Current Consumption	4 Amp Max	At rated output
Max Input Power	+8 dBm	Without damage
Load VSWR Protection	$\infty : 1$	At rated output

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	160 X 80 X 25 mm	Excluding Connectors
Weight	150 gr.	
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	N/C
2	REV	N/C
3	CURRENT SENSOR	$I_D @ 20\text{mV}/100\text{mA Typ}$
4	TEMP SENSOR	$V_T @ 10\text{mV}/^\circ\text{C} + 500\text{mV Typ}$
5	SHUTDOWN	TTL
6, 7	VDD	12VDC
8, 9	GND	Ground

OUTLINE DRAWING

