



AMP3093 SOLID STATE HIGH POWER AMPLIFIER

FEATURES

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



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	1.2 - 1.4 GHz	
Power Output Psat	500 Watt Min / 600 Watt Typ	CW
Power Gain	57 dB Min	
Power Gain Flatness	2.0 dB p-p Max	Constant input power
Input / Output Return Loss	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	>30 dBc Typ	47dBm/Tone, $\Delta = 1\text{MHz}$
Harmonics	>30 dBc Typ	At rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	32 VDC	
Current Consumption	43 Amp Max	At rated Pout
Max Input Power	+8 dBm	Without damage
Load VSWR Protection	$\infty : 1$	
Turn On / Off Speed	5 μSec 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	TBD	Max Weight
RF Connectors In/Out	SMA female / Type N female	
DC Power / Interface Connector	9W4 - 9-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	OPTION 101 - Forward power detect
2	VVA	OPTION 103 - Variable Voltage Attenuator
3	CURRENT SENSOR	$I_D @ 10\text{mV}/100\text{mA}$ Typ
4	TEMP SENSOR	$V_T @ 10\text{mV}/^\circ\text{C} + 500\text{mV}$ Typ
5	SHUTDOWN	TTL
A1, A2	VDD	28VDC
A3, A4	GND	Ground

AMP3093 SOLID STATE HIGH POWER AMPLIFIER

OUTLINE DRAWING

