

AMP1014C 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: 50Ω, 25°C

Parameter	Specification	Notes
Operating Frequency Range	20 - 520 MHz	
Power Output @ Psat	170 Watt Min	CW
Power Output @ P1dB CW	100 Watt Typ	
Power Gain	52 dB Min	
Power Gain Flatness	3.0 dB p-p Max	Pin = 0dBm
Input Return Loss	-10 dB Max	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-30 dBc Typ	42dBm/Tone, Δ = 1MHz
Harmonics	2nd <-25dBc Typ 3rd <-12dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	30 VDC Nom	
Current Consumption	13 Amp Typ / 10 Amp Typ	At rated Pout
Input Power Protection	+8 dBm Max	<10 Sec without damage
Load VSWR Protection	5 : 1 Min	<1 minute at rated Pout
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	200 x 100 x 27 mm	Excluding connectors
Weight	950 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	TTL level "Hi" @ Pout=5Watt
2	CURRENT SENSOR	I _b @20mV/100mA Typ
3	TEMP SENSOR	TTL "Hi" @ >77°C
4		
5	SHUTDOWN	TTL
6, 7	VDD	28VDC
8, 9	GND	Ground

OUTLINE DRAWING

