

AMP1053-1 SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear LDMOS design
 Instantaneous HF frequency wide bandwidth
 Suitable for all single channel modulation standards
 Built-in monitoring and protection circuits
 High reliability and ruggedness



ELECTRICAL SPECIFICATIONS: 50Ω, 25°

Parameter	Specification	Notes
Operating Frequency Range	1 - 32 MHz Min	
Power Output @ Psat	200 Watt Min	CW
Power Gain	53 dB Min	
Power Gain Flatness	2.0 dB p-p Max	
Input Return Loss	-10 dB Max	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	<-30 dBc Typ	43dBm/Tone, Δ = 1MHz
Harmonics	2 nd	<-35 dBc Typ
	3 rd	<-13 dBc Typ
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	35 VDC Nom	
Current Consumption	13 Amp Max	At rated Pout
Input Power Protection	+8 dBm Max	<10 Sec without damage
Load VSWR Protection	∞ : 1	<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	162 x 106 x 28 mm	Excluding connectors
Weight	700 gr.	
RF Connectors In/Out	SMA-F / Type-N	
DC Power / Interface Connector	7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	FWD	N/A
2	VVA	N/A
3	CURRENT SENSOR	I _b @20mV/100mA Typ
4	TEMP SENSOR	V _T @10mV/°C + 500mV Typ
5	SHUTDOWN	TTL "Hi" = OFF, TTL "Lo" or Open = ON
6, 7	VDD	35VDC
8, 9	GND	Ground

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OUTLINE DRAWING

