



AMP3081 SOLID STATE HIGH POWER AMPLIFIER

FEATURES

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



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	950 - 1300 MHz	
Power Output Psat	500 Watt Min	CW
Power Gain	54 dB Min	
Power Gain Flatness	3.0 dB p-p Max	Constant input power
Input / Output Return Loss	-10 dB Max	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-30dBc Typ	47dBm/Tone, $\Delta = 1$ MHz
Harmonics	-20 dBc Max	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	32 VDC Nom	
Current Consumption	40 Amp Max	At rated Pout
Input Power Protection	+8 dBm Max	<10 Sec without damage
Load VSWR Protection	10 : 1 Max	<1 minute at rated Pout
Turn On / Off Speed	5 μ Sec 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 300 x 27 mm	Excluding Connectors
Weight	-	
RF Connectors In/Out	SMA female / Type N female	
DC Power / Interface Connector	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 _b @20mV/100mA Typ
4	TEMP SENSOR	V _T @10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
A1	VDD	32VDC
A2	GND	Ground

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OUTLINE DRAWING

