



AMP3039 SOLID STATE HIGH POWER AMPLIFIER

FEATURES

High Power Class AB GaN design
 Instantaneous wide Bandwidth
 Built-in protection circuits
 High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	7.6 - 9.6 GHz	
Power Output @ P1dB GCP	40 Watt Min	CW
Small Signal Gain	46 dB Min	
Power Gain Flatness	3.0 dB p-p Max	
Input Return Loss	10 dB Min	
Harmonics	>20 dBc	At rated Pout
Non Harmonics Spurious	>60 dBc	
Noise Figure	10.0 dB Max	
Operating Voltage	40 VDC \pm 0.5 V	
Current Consumption	10 Amp Max	At rated Pout
Max Input Power	+8 dBm Max	Without damage
Load VSWR Protection	5 : 1	

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	170 X 180 X 27 mm	Excluding Connectors
Weight	TBD	
RF Connectors In/Out	SMA female	Cover Flange
DC Power / Interface Connector	7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1		N/A
2		N/A
3	Current Sensor	$I_p @ 20mV/100mA$ Typ
4	Temp Sensor	$V_T @ 10mV/^{\circ}C + 500mV$ Typ
5	Shutdown	TTL
A1	VDD	40VDC
A2	GND	Ground

OUTLINE DRAWING

