



AMP3042 SOLID STATE HIGH POWER AMPLIFIER

FEATURES

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

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	16.2 - 16.5 GHz	
Power Output	30 Watt Min	CW
Power Gain	45 dB Min	
Power Gain Flatness	1.0 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	35 dBm/Tone, $\Delta = 1$ MHz
Harmonics	>30 dBc Typ	At rated Pout
Non Harmonics Spurious	>60 dBc Min	
Noise Figure	10 dB Max	
Operating Voltage	42 \pm 0.5 VDC Nom	
Current Consumption	8.0 Amp Max	At rated Pout
Max Input Power	+8 dBm	Without damage
Load VSWR Protection	$\infty : 1$	

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	150 X 110 X 27 mm	Excluding Connectors
Weight	TBD	
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	Reserved
2	VVA	Reserved
3	CURRENT SENSOR	$I_D @ 50mV/100mA$ Typ
4	TEMP SENSOR	$V_T @ 10mV/^{\circ}C + 500mV$ Typ
5	SHUTDOWN	TTL
6, 7	VDD	42VDC
8, 9	GND	Ground

OUTLINE DRAWING

