



AMP3041ALW SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear GaN design
Instantaneous wide bandwidth
Suitable for all single channel modulation standards
Small form factor & light weight
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	4.2 - 5.2 GHz	
Power Output	50 Watt Min	CW
Power Output @ P1dB	40 Watt Min.	CW
Power Output OFDM	10 Watt Min	7dB Peak to Average
Power Gain	47 dB Min	
Power Gain Flatness	1.5 dB p-p Max	Constant input power
Input / Output Return Loss	-10 dB Max	Relative to 50Ohm
2-Tone Intermodulation (IMD)	-30 dBc Typ	40dBm/Tone, $\Delta = 1\text{MHz}$
Harmonics	-30 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	28 -30 VDC	
Current Consumption	10 Amp Max	At rated Pout
Input Power Protection	+8 dBm Max	<1 minute without damage
Load VSWR Protection	$\infty : 1$	<10 Sec 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	285 x 106 x 20 mm	Excluding connectors
Weight	900 gr.	
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin D-Sub	
Cooling	External Heatsink	Forced air required



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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	$I_D @ 20\text{mV}/100\text{mA Typ}$
4	TEMP SENSOR	$V_T @ 10\text{mV}/^\circ\text{C} + 500\text{mV Typ}$
5	SHUTDOWN	TTL
6, 7	VDD	28VDC
8, 9	GND	Ground

OUTLINE DRAWING - OPTION 101

