



AMP3006 SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear GaN design
X-Band applications
Built-in protection circuits
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	8.0 - 9.0 GHz	
Power Output @ Psat	200 W CW Min	Pin = 0 dBm
Power Gain	53 dB Min	
Power Gain Flatness	±1.5 dB Max	
Gain Stability	±0.5 dB Max	@ Psat
Input VSWR	1.5 : 1 Max	Relative to 50 Ohm
Output VSWR	2.0 : 1 Max	Relative to 50 Ohm
Harmonics	30 dBc Max	2 nd / 3 rd
Spurious	60 dBc Max	
Operating Voltage	40 VDC ± 1.0 V	
Power Consumption	1200 W Max	
Quiescent Current	5.0 Amp Typ	
Input Power	+6 dBm Max	
Load VSWR	5 : 1 Max	Output Isolator

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Note
Operating Case Temperature	-30 to +60 °C	
Storage Temperature	-40 to +80 °C	
Relative Humidity	5 to 95 %	Non Condensation

MECHANICAL SPECIFICATIONS

Parameter	Value	
Dimensions	160 x 235 x 43 mm	Excluding Connectors
Weight	4 Kg Max	
Cooling	External Heatsink	Forced air required



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• I/O INTERFACE

Parameters	Specifications			Remarks
RF Input Connector	SMA Female			
RF Output Connector	WR-112 Waveguide Type			Cover Flange
I/O Connector (17W2 Male Type)	A1	+40VDC	I	
	A2	GND		
	P1			
	P2	GND		
	P3	Temp_Monitor	O	0V ~ +1.5V (DC)
	P4	Current_Monitor_25A	O	0V ~ +4.5V (DC)
	P5	Voltage_Monitor_40V	O	0V ~ +4.5V (DC)
	P6			
	P7			
	P8			
	P9			
	P10			
	P11	Gain_Atten_Control	I	0V ~ +3.0V (DC)
	P12			
	P13	GND		
P14	Enable	I	Active Low (TTL Level)	
P15	GND			

• MECHANICAL OUTLINE (Unit: mm)

