



AMP3126P SOLID STATE PULSE POWER AMPLIFIER

FEATURES

- Class AB Pulse GaN design
- Instantaneous bandwidth within Ku Frequency range
- Ku-Band pulse applications
- Built-in protection circuits
- High reliability and ruggedness

ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

Parameter	Specification			Notes	
Operating Frequency Range	12 - 18 GHz			700MHz BW within Ku Band	
Power Output Pulse Peak	100 Watt Min				
Pulse Characteristics	Width	Duty	Droop	PRF	
	0.25 - 50 μS	7 % Nom	<1dB	-	
Turn On / Off delay	<250nS / <50nS				
Tx-Gate Pulse Width	0.5 μS Min / 20 μS Max				
Power Gain	50 dB Min			20dBm for normal operation	
Power Gain Flatness	2.0 dB p-p Max				
Input / Output Return Loss	-10 dB Max			Relative to 50 Ohm	
Harmonics	-30 dBc Max			At rated Pout	
Non Harmonics Spurious	-60 dBc Max				
Operating Voltage	40 VDC Nom				
Current Consumption	2.5 Amp Avg Max			At rated Pout	
Input Power Protection	+3 dBm Max			<10 Sec without damage	
Load VSWR Protection	∞ : 1			Output Isolator	

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-0 to +60 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	143 x 120 x 27 mm	Nominal dimensions
Weight	-	
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	N/C	Reserved
2	N/C	Reserved
3	CURRENT SENSOR	I _b @ 20mV/100mA Typ
4	TEMP SENSOR	V _T @10mV/°C + 500mV Typ
5	SHUTDOWN	Enable = TTL Hi or Open (Pull-Up resistor); Disable = TTL or Short
6, 7	VDD	40VDC
8, 9	GND	Ground



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OUTLINE DRAWING