



# AMP3010AP SOLID STATE PULSE POWER AMPLIFIER

## FEATURES

- Class AB Pulse GaN design
- Small form factor, light weight
- Instantaneous bandwidth
- Designed for high power X-Band pulse applications
- Built-in protection circuits
- High reliability and ruggedness

## ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

Parameter	Specification			Notes
Operating Frequency Range	8.5 - 10.2 GHz			
Power Output Peak Pulse	100 Watt Min			
Pulse Characteristics	<b>Width</b>	<b>Duty</b>	<b>Rise / Fall</b>	
	100 μS Max	20 % Max	<50 nS	
Power Gain	50 dB Min			Pin = 0dBm 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
Spurious	-60 dBc Max			Non-harmonics
Operating Voltage	40 VDC Nom			
Current Consumption	5 Amp Avg. Max			At rated Pout
Input Power Protection	+5 dBm Max			<10 Sec without damage
Load VSWR Protection	∞ : 1			Output Isolator

## 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	180 x 110 x 27 mm	Excluding connectors
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	Reserved	
2	Reserved	
3	CURRENT SENSOR	I <sub>D</sub> @ 20mV/100mA Typ
4	TEMP SENSOR	V <sub>T</sub> @10mV/°C + 500mV Typ
5	SHUTDOWN	Enable = TTL "Hi" or Open; Shutdown = TTL "Lo" or Short
6, 7	VDD	40VDC
8, 9	GND	Ground



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**OUTLINE DRAWING**