



AMP3090BP SOLID STATE HIGH POWER PULSE AMPLIFIER

FEATURES

Ruggedized, compact Class AB high power pulse SSPA
 Suitable for S-Band, high power Radar applications
 Internal capacitive bank provides low output droop over extended pulse widths.

ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

Parameter	Specification			Notes
Operating Frequency	3.1 - 3.4 GHz			
Peak Pulse Output Power	300 Watt Min			Peak Pulse
Peak Power Gain	55 dB Min			
Input Pulse Characteristics	Pulse Width(tp)	Duty Cycle(δ)	PRF	Nominal Values
	900 μs	20 % Max	-	
Pulse Rise / Fall Time	100 nS Max			
Pulse Droop	0.5 dB Max			
Input Return Loss	-12 dB Max			Relative to 50 Ohm
Harmonics	-30 dBc Max			
Spurious	-60 dBc Max			Non-harmonics or Gaussian
Operating Voltage	32 VDC Nom			
Current Consumption	28 Amp Peak Max			
Input Power Protection	+3 dBm Max			<10 Sec without damage
Load VSWR Protection	∞ : 1			<1 minute at rated Pout

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Note
Operating Case Temperature	-20 to +70°C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensing

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	200 x 140 x 35 mm	Excluding heatsink
Weight	TB-	
RF Connectors In/Out	SMA female / Type N female	
DC Power / Interface Connector	7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	Option	Pulse Trigger
2	N/C	
3	CURRENT SENSOR	I _b @50mV/100mA Typ
4	TEMP SENSOR	V _T @10mV/°C + 500mV Typ
5	SHUTDOWN	Enable = TTL Hi or Open / Disable = TTL Lo or Short
A1	VDD	32VDC
A2	GND	Ground



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OUTLINE DRAWING