



AMP3085AP SOLID STATE HIGH PULSE POWER AMPLIFIER

FEATURES

Class AB solid-state linear hybrid advanced technology design
Designed for C & X Bands high power pulse applications
Compact small form factor, light weight, high power density
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

Parameter	Specification			Notes
Operating Frequency Range	6.0 - 12.0 GHz			
Power Output Pulse	100 Watt Min / 120 Watt Typ			33Watt Max Avg. Pout
Pulse Characteristics	Width	Duty	Rise/Fall	
	0.2 - 20 μS	up to 33 %	50 nS Typ	
Power Gain	50 dB Min			
Power Gain Flatness	3.0 dB p-p Max			0dBm or less for rated Pout
Input Return Loss	10 dB Min			
Harmonics	-25 dBc Max			At rated Pout
Spurious	-60 dBc Max			Non-harmonics
Noise Figure	10 dB Max			
Operating Voltage	32 VDC Nom			
Current Consumption	11.5 Amp Max			At rated Pout @ 33%
Max Input Power Protection	+3 dBm Max			<10 Sec without damage
Load VSWR Protection	∞: 1			W/External Output Isolator

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	up to 95 %	Non-condensing
Altitude	3000 meters	
Shock & Vibration	Normal transport ¹	

1 MIL Spec available for quotation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	180 x 200 x 27 mm	Excluding connectors
Weight	4 Kg.	
RF Connectors In/Out	SMA female / Type-N female	
DC Power / Interface Connector	7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

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D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	N/A	N/A
2	GATING	Enable = "High" / Disable = "Low"
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	Enable = TTL "High" or Open; Disable = TTL "Low" or short
A1	VDD	32VDC
A2	GND	Ground

OUTLINE DRAWING

