

AMP3085P SOLID STATE HIGH POWER AMPLIFIER

FEATURES

- Class AB GaN design
- Instantaneous full X-Band wide Pulse applications
- Built-in protection circuits
- High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	8.0 - 12.0 GHz	
Power Output Pulse	100 Watt Min / 120 Watt Typ	33 Watt max Ave Pout
Pulse Characteristics	Width	
	Duty	
	0.2 - 20 μ S	33 %
		10 nS
Power Gain	50 dB Min	
Power Gain Flatness	3.0 dB p-p Max	Pin=0dBm
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	Output Isolator (Max rating 33W Ave.)
Muting Noise Between Pulses	-30 dBm Max	

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +75 $^{\circ}$ C	
Storage Temperature	-40 to +85 $^{\circ}$ C	
Relative Humidity	5 to 95 %	Non-condensation

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

D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1		N/A
2		N/A
3	Current Sensor	I_D @20mV/100mA Typ
4	Temp Sensor	V_T @10mV/ $^{\circ}$ C + 500mV Typ
5	Shutdown	TTL
A1	VDD	32VDC
A2	GND	Ground

OUTLINE DRAWING

