



AMP3085-2P SOLID STATE HIGH POWER AMPLIFIER

PRELIMINARY

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	16.0 - 18.0 GHz				
Power Output @ Pulse	50 Watt Typ			Peak pulse	
Pulse Characteristics	Width (tp)	Duty (δ)	Rise / Fall	Droop	
	0.2 - 150 μS	up to 20 %	50 nS Typ	0.5 dB Max	
Power Gain	47 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	
Operating Voltage	28 VDC Nom				
Current Consumption	6 Amp Max			At rated Pout	
Max Input Power Protection	+3 dBm Max			<10 Sec without damage	
Load VSWR Protection	∞: 1			Output Isolator (Max rating 20W Avg.)	

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	188 x 92 x 43 mm	Excluding connectors
Weight	TBD	
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	N/A
2	N/A	N/A
3	Current Sensor	I _b @20mV/100mA Typ
4	Temp Sensor	V _T @10mV/°C + 500mV Typ
5	Shutdown	Enable = TTL "High" or Open; Disable = TTL "Low" or short
A1	VDD	32VDC
A2	GND	Ground

e



AMP3085-2P SOLID STATE HIGH POWER AMPLIFIER

PRELIMINARY

PRELIMINARY OUTLINE DRAWING

