AMP1025A
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Class AB linear LDMOS design
Instantaneous ultra wide bandwidth
Designed for broadband EMI/RFI, Lab, Communication applications
Suitable for all single channel modulation standards
Built-in monitoring and protection circuits
High reliability and ruggedness

ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

Parameter	Specification	Notes
Operating Frequency Range	20 - 1000 MHz	
Power Output Psat	100 Watt Min / >120 Watt Typ	CW
Power Output @ P1dB GCP	100 Watt Typ	CW
Power Gain	50 dB Min	
Gain Flatness	4.0 dB p-p Max	Constant input power
Input Return Loss	-10 dB Max	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-20 dBc Typ	40dBm/Tone, Δ = 1MHz
Harmonics 2^{nd} / 3^{rd}	<-25 dBc / -15 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	32 VDC Nom	
Current Consumption	14 Amp Max	At rated Pout
Input Power protection	+8 dBm Max	<10 Sec without damage
Load VSWR Protection	∞ : 1	<1 minute at rated Pout
Turn On / Off Speed	5 µSec Max	

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	162 x 100 x 30 mm	Excluding connectors
Weight	1 Kg.	
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	FWD	N/C
2	VVA	Optional Gain Adjustment - 20 dB Min range
3	CURRENT SENSOR	I_D@50mV/100mA Typ
4	TEMP SENSOR	V_T@10mV/°C + 500mV Typ
5	SHUTDOWN	Enable = High (2.5 - 5V) or Open / Disable = Low (0 - 1.0V) or Short
6, 7	VDD	32VDC
8, 9	GND	Ground

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OUTLINE DRAWING