

AMP1025Z SOLID STATE HIGH POWER AMPLIFIER



FEATURES

- Class AB linear LDMOS booster design
- Instantaneous ultra wide bandwidth
- Suitable for all single channel modulation standards
- Built-in monitoring and protection circuits
- High reliability and ruggedness

ELECTRICAL SPECIFICATIONS @ 25 °C, 50Ω

Parameter	Specification	Notes
Operating Frequency Range	20 - 1000 MHz	
Power Output Psat	100 Watt Min	CW
Power Gain	20 - 30 dB Nom	
Gain Flatness	3.0 dB p-p Max	Constant input power
Input Return Loss	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-30 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	28 - 30 VDC Nom	
Current Consumption	10 Amp Max	At rated Pout
Operating Input Power	1 Watt Nom	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-condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	162 x 100 x 30 mm	Excluding connectors
Weight	900 gr.	Max Weight
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	N/C
3	CURRENT SENSOR	I _D @50mV/100mA Typ
4	TEMP SENSOR	V _T @10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
6, 7	VDD	28 - 30VDC
8, 9	GND	Ground

OUTLINE DRAWING

