



# AMP1025 SOLID STATE HIGH POWER AMPLIFIER

## FEATURES

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

## ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	20 - 1000 MHz	
Power Output Psat	70 Watt Min / 80 W Typ	CW
Power Gain	48.5 dB Min	
Gain Flatness	3.0 dB p-p Max	Constant input power
Input Return Loss	-10 dB Max	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-30 dBc Typ	38dBm/Tone, $\Delta = 1\text{MHz}$
Harmonics 2 <sup>nd</sup> / 3 <sup>rd</sup>	-25 dBc / -15 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	28 - 30 VDC Nom	
Current Consumption	7 Amp Max	At rated Pout
Input Power Protection	+8 dBm Max	<10 Sec without damage
Load VSWR Protection	$\infty : 1$	<1 minute at rated Pout
Turn On / Off Speed	5 $\mu\text{Sec}$ 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 96 x 27 mm	Excluding connectors
Weight	750 gr.	
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	$I_D @ 50\text{mV}/100\text{mA}$ Typ
4	TEMP SENSOR	$V_T @ 10\text{mV}/^\circ\text{C} + 500\text{mV}$ Typ
5	SHUTDOWN	Enable = High (2.5 - 5V) or Open / Disable = Low (0 - 1.0V) or Short
6, 7	VDD	28VDC
8, 9	GND	Ground

## OUTLINE DRAWING

