

AMP5063 SOLID STATE HIGH POWER AMPLIFIER



FEATURES

- Class AB linear LDMOS design
- High power narrow band L-Band frequency
- Suitable for all single channel modulation standards
- Built-in monitoring and protection circuits
- High reliability and ruggedness
- Small form factor, high power density

ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

Parameter	Specification	Notes
Operating Frequency Range	1.75 - 1.85 GHz	
Power Output @ P1dB	200 Watt Min	CW
Power Gain	53 dB Nom	
Input Return Loss	-10 dB Max	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-30 dBc Typ	46dBm/Tone, Δ = 1MHz
Harmonics	-30 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	28 VDC Nom	
Current Consumption	16 Amp Typ	At rated Pout
Input Power Protection	+8 dBm Max	<10 Sec without damage
Load VSWR Protection	5 : 1 Max	<1 minute at rated Pout

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	250 x 100 x 27 mm	Excluding connectors
Weight	-	
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	FWD	NA
2	VVA	NA
3	CURRENT SENSOR	I _b @20mV/100mA Typ
4	TEMP SENSOR	V _T @10mV/°C + 500mV Typ
5	SHUTDOWN	Enable = TTL "Hi" or Open; Disable = TTL "Lo" or Short
A1	VDD	28VDC
A2	GND	Ground



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OUTLINE DRAWING