

AMP7009 / AMP7009B SOLID STATE HIGH POWER AMPLIFIER

FEATURES

- Class AB linear LDMOS design
- Cellular and PCS high power applications
- Suitable for all single channel modulation standards
- Built-in monitoring and protection circuits
- High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification		Notes
Model	AMP7009	AMP7009B	
Operating Frequency Range	900 - 930 MHz	1755 - 1800 MHz	
Power Output Psat	100 Watt Min		CW
Power output @ P1dB	80 Watt Typ	50 Watt Typ	
Power Gain	50 dB Min		
Power Gain Flatness	1.0 dB p-p Max		
Input Return Loss	10 dB Min		Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-30 dBc Typ		40dBm/Tone, Δ = 1MHz
Harmonics	-30 dBc Typ		At rated Pout
Spurious	-60 dBc Max		
Operating Voltage	28 VDC Nom		Non-harmonics
Current Consumption	9 Amp Max		At rated Pout
Max Input Power protection	+8 dBm		<10 Seconds
Load VSWR Protection	∞ : 1 Min		<1 Minute
Turn On / Off Speed	5 μSec Max		Optional

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	700 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/A
2	VVA	N/A
3	CURRENT SENSOR	I _b @20mV/100mA Typ
4	TEMP SENSOR	V _T @10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
6, 7	VDD	28VDC
8, 9	GND	Ground

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OUTLINE DRAWING - STANDARD

