



FEATURES

- Class AB linear GaN design
- Instantaneous wide bandwidth
- Suitable for all modulations standards
- Built-in protection circuits
- High reliability and ruggedness

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	1497 ± 3.0 MHz	
Power Output Psat	50 Watt Min	CW
Power Gain	45 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	37dBm/Tone, Δ = 1MHz
Harmonics	>20 dBc Typ	At rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	27 - 29 VDC	
Current Consumption	6 Amp Max	At rated Pout
Max Input Power	+8 dBm	Without damage
Load VSWR Protection	∞ : 1	
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	147 X 69 X 27 mm	Excluding Connectors
Weight	400 g.	Typical 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	REV	N/C
3	CURRENT SENSOR	I _b @50mV/100mA Typ
4	TEMP SENSOR	V _T @10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
6, 7	VDD	28VDC
8, 9	GND	Ground

AMP5003 SOLID STATE HIGH POWER AMPLIFIER

PRELIMINARY

OUTLINE DRAWING

