



AMP5036 SOLID STATE HIGH POWER AMPLIFIER

FEATURES

- Class AB linear LDMOS design
- UHF high power dual input and dual output
- External divider and combiner required
- Suitable for all single channel modulation standards
- Built-in monitoring and protection circuits
- High reliability and ruggedness

ELECTRICAL SPECIFICATIONS: Per channel

Parameter	Specification	Notes
Operating Frequency Range	215 - 220 MHz	
Power Output @Psat	600 Watt Min	CW - Per output
Power Gain	56 dB Min	
Input Return Loss	-10 dB Max	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	<-30 dBc Typ	45dBm/Tone, Δ = 1MHz
Harmonics	-30dBc Max	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	50 VDC Nom	
Current Consumption	56 Amp Max	At rated Pout
Input Power Protection	+3 dBm Max	<10 Sec without damage
Load VSWR Protection	5 : 1 Min	<1 minute at rated Pout
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	270 x 250 x 27 mm	Excluding connectors
Weight	-	
RF Connectors In/Out	SMA-F / Type-N	
DC Power / Interface Connector	9-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT per channel

Pin	Function	Description
1	FWD PWR INDICATOR	N/C
2	REV PWR INDICATOR	N/C
3	CURRENT SENSOR	I _D @ 20mV/100mA Typ
4	TEMP SENSOR	V _T @10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
A1, A2	VDD	50VDC
A3, A4	GND	Ground

OUTLINE DRAWING

