



AMP1126 SOLID STATE HIGH POWER AMPLIFIER

FEATURES

- Class AB linear LDMOS design
- Instantaneous wide bandwidth
- Suitable for all single channel modulations standards
- Small form factor & light weight
- Built-in protection circuits
- High reliability and ruggedness

ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

| Parameter | Specification | Notes |
|--|------------------------|-------------------------|
| Operating Frequency Range | 6 - 20 MHz | |
| Power Output CW | 220 Watt Typ | |
| Power Output @ P1dB GCP | 200 Watt Min | 100Watt Typ |
| Power Gain | 53 dB Min | |
| Power Gain Flatness | 2.0 dB p-p Max | Constant input power |
| Input / Output Return Loss | -10 dB Max | Relative to 50 Ohm |
| Harmonics 2 nd /3 rd | <-20 dBc / -12 dBc Typ | At rated Pout |
| Non Harmonics Spurious | >60 dBc | |
| Noise Figure | 6 dB Max | |
| Operating Voltage | 32 VDC Nom | |
| Current Consumption | 12 Amp Max | At rated Pout |
| Input Power Protection | +8 dBm Max | <10 Sec without damage |
| Load VSWR Protection | ∞ : 1 | <1 minute at rated Pout |

ENVIRONMENTAL CHARACTERISTICS

| Parameter | Specification | Notes |
|----------------------------|---------------|----------------|
| Operating Case Temperature | -20 to +65 °C | |
| Storage Temperature | -40 to +85 °C | |
| Relative Humidity | 5 to 95 % | Non-condensing |

MECHANICAL SPECIFICATIONS

| Parameter | Specification | Notes |
|--------------------------------|---------------------|----------------------|
| Dimensions | 200 x 106 x 28 mm | Excluding connectors |
| Weight | | |
| RF Connectors In/Out | SMA / Type-N female | |
| DC Power / Interface Connector | 9-Pin D-Sub | |
| Cooling | External Heatsink | Forced air required |

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D-SUB CONNECTOR PIN ASSIGNMENT

| Pin | Function | Description |
|-----|----------------|--|
| 1 | FWD | OPTION 101 - Forward power detect |
| 2 | VVA | OPTION 103 - Variable Voltage Attenuator |
| 3 | CURRENT SENSOR | $I_D @ 50mV/100mA$ Typ |
| 4 | TEMP SENSOR | $V_T @ 10mV/^{\circ}C + 500mV$ Typ |
| 5 | SHUTDOWN | TTL |
| A1 | VDD | 32VDC |
| A2 | GND | Ground |

OUTLINE DRAWING

