# AMP5024
# SOLID STATE HIGH POWER AMPLIFIER

**FEATURES**

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

**ELECTRICAL SPECIFICATIONS**

| Parameter | Specification | Notes |
|---|---|---|
| Operating Frequency Range | 704 ± 10 MHz Min | |
| Power Output @ P1dB | 250 Watt Min | CW |
| Power Gain | 54 dB Min | |
| Input Return Loss | 10 dB Min | Relative to 50 Ohm |
| 2-Tone Intermodulation (IMD) | >30 dBc Typ | 45dBm/Tone, Δ = 1MHz |
| Harmonics | >30dBc | At rated Pout |
| Non Harmonics Spurious | >60 dBc | |
| Operating Voltage | 32 VDC | |
| Current Consumption | 22 Amp Max | At rated Pout |
| Max Input Power | +8 dBm | Without damage |
| Load VSWR Protection | ∞ : 1 Min | |
| 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 Condensing |

**MECHANICAL SPECIFICATIONS**

| Parameter | Specification | Notes |
|---|---|---|
| Dimensions | Standard Module: 200 x 120 x 28mm<br>Options 101/102: 240 x 120 x 28mm | Excluding Connectors |
| Weight | 750 gr. | Typical Weight |
| RF Connectors In/Out | SMA-F / Type-N | |
| 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 PWR INDICATOR | Option-101 - Analog Forward Power Indicator |
| 2 | REV PWR INDICATOR | Option-102 - Analog Reveres Power Indicator |
| 3 | CURRENT SENSOR | $I_D$ @ 20mV/100mA Typ |
| 4 | TEMP SENSOR | $V_T$@10mV/°C + 500mV Typ |
| 5 | SHUTDOWN | TTL |
| A1 | VDD | 32VDC |
| A2 | GND | Ground |

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**OUTLINE DRAWING - OPT101 & OPT102**