

Model – AB1.82.4G4750AC

1.8 - 2.4 GHz

50 watts CW

Linear Power Amplifier

Solid State Wideband Power Amplifier



General Description:

This system is a broadband power amplifier designed for CW/Digital/Pulse signals and general-purpose amplification. Using advanced high power density LDMOS and GaN semiconductor devices, these high-performance amplifiers achieve high efficiency, high gain, and wide dynamic range. Like all Elite RF amplifiers, the product comes with an industry leading

5-year warranty

Features

1800-2400 MHz
50 watts
50 dB gain
Class A
100/240 VAC
Circulator for VSWR Protection

Protections

Thermal Overload
Input Overload
VSWR

Rev 1: 4/1/18:
Specifications subject to change,
consult sales for latest information

ELECTRICAL SPECIFICATIONS

| Parameter | Symbol | Min | Typ | Max | Unit |
|----------------------------------|------------|-----|-----------|-----|-------|
| Frequency Range | BW | 1.8 | | 2.4 | GHz |
| Output Power CW | Psat | | 100 | | Watt |
| Output Power at 1 dB Compression | P1dB | | 50 | | Watt |
| Small Signal Gain | Gp | 45 | 50 | | dB |
| Gain Flatness at Psat | Delta Gp 1 | | +/- 1 | | dB |
| Input VSWR | S11 | | 2:1 | | - |
| IMD | IP3 | | N/A | | dBm |
| Small Signal Gain Flatness | Delta Gp 2 | | +/- 2 | | dB |
| Harmonics at 50 Watts | H | | -15 | | dBc |
| Spurious Signals | Spur | | -60 | | dBc |
| Operating Voltage (1 phase) | VAC | | 100 - 240 | | VAC |
| AC Input Power | AC input | | 500 | | Watts |
| Class of Operation | C | | AB | | Class |
| Noise Figure | NF | | N/A | | dB |
| Gain Adjustment Range | GA | | N/A | | dB |

ENVIRONMENTAL CHARACTERISTICS

| Parameter | Symbol | Min | Typ | Max | Unit |
|------------------------------------|--------|-----|------------------------|--------|-------|
| Operating Case Temperature | Tc | 0 | | +40 | Deg C |
| Storage Temperature | Tstg | -40 | | +85 | Deg C |
| Relative Humidity (non-condensing) | RH | | | 95 | % |
| Altitude | ALT | | | 10,000 | Feet |
| Vibration/Shock | VI /SH | | Normal Truck Transport | | |

MECHANICAL CHARACTERISTICS

| Dimensions | Symbol | Min | Typ | Max | Unit |
|-------------------------|---------|-----|-----------------|-----|--------|
| Dimensions (rack mount) | Dim | | 19 x 14.5 x 3.5 | 2U | Inches |
| Weight | Wt. | | 30 | | lbs. |
| Connectors | RF Conn | | N - type | | - |
| Cooling | Fans | | Forced Air | | - |