

Model – MB5.06.0G494828



85 watts 5000 to 6000 MHz 28 VDC

General Description:

Elite RF's **MB Series** amplifier is a wideband power amplifier designed for CW signals fabricated on GaN on SiC process and can operate up to **6.0 GHz**. These amplifiers offer high power density, decade bandwidth performance, low thermal resistance, and wideband performance. They can be widely used for military and commercial applications.

Like all **Elite RF amplifiers**, this product comes with an industry leading warranty.

Features

Wide Freq. Range
High Output Power
High Gain

Protections

Over Heat
Over Current

ELECTRICAL SPECIFICATIONS

| Parameter | Symbol | Min | Typ | Max | Unit |
|-------------------------------------|------------|------|-------|------|-------|
| Frequency Range | BW | 5000 | | 6000 | MHz |
| Output Power CW | Psat | 85 | | | Watt |
| Output Power at 1 dB Compression | P1dB | | 46 | | dBm |
| Small Signal Gain | Gp | | 48 | | dB |
| Gain Flatness | Delta Gp 1 | | +/- 3 | | dB |
| Input VSWR (at 50 ohm) | S11 | | | 2:1 | Ratio |
| Harmonics | H | | -15 | | dBc |
| Spurious Signals | Spur | | -60 | | dBc |
| Operating Voltage | VDC | | 28 | | VDC |
| Class of Operation | C | | AB | | Class |
| Power Consumption (at rated output) | Pc | | | 300 | Watt |
| Input Power | Pin | | | 5 | dBm |

ENVIRONMENTAL CHARACTERISTICS

| Parameter | Symbol | Min | Typ | Max | Unit |
|------------------------------------|--------|-----|------------------------|-----|--------|
| Operating Case Temperature | Tc | 0 | | +40 | Deg. C |
| Storage Temperature | Tstg | -20 | | +75 | Deg. C |
| Relative Humidity (non-condensing) | RH | | | 95 | % |
| Vibration/Shock | VI /SH | | Normal Truck Transport | | - |

MECHANICAL CHARACTERISTICS

| Parameter | Symbol | Min | Typ | Max | Unit |
|------------------------------------|---------|-----|-------------------------|-----|--------|
| Dimensions | Dim | | 6.30 x 4.72 x 0.94 | | Inches |
| Weight | Wt. | | 1 | | kg |
| Connectors In/Out | RF Conn | | SMA-Female / SMA-Female | | - |
| Cooling (Need to adapt heat sink) | Th | | Fan Cooling | | - |
| Control mode | CM | | EN +5V | | - |
| Power/Control Supply Connector | PCON | | 7WV2- Male | | - |