## **LINEAR WIDEBAND POWER AMPLIFIER**



Model - HS.501.6M6768AC



## **General Description:**

Elite RF's high power amplifier is a wideband power amplifier designed for CW signals fabricated on LDMOS process and can operate up to 1.6 MHz. These amplifiers offer high power density, 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 **2 year warranty**.

#### <u>Features</u>

Wide Freq. Range High Output Power High Gain High Reverse Isolation Built-in Protection Thermal Overload Over Voltage High VSWR

**Protections** 

#### **ELECTRICAL SPECIFICATIONS**

| Parameter                        | Symbol     | Min | Тур         | Max | Unit  |
|----------------------------------|------------|-----|-------------|-----|-------|
| Frequency Range                  | BW         | 0.5 |             | 1.6 | MHz   |
| Output Power CW                  | Psat       |     | 5,000       |     | Watt  |
| Output Power at 1 dB Compression | P1dB       |     | N/A         |     | Watt  |
| Small Signal Gain                | Gp         |     | 68          |     | dB    |
| Gain Flatness                    | Delta Gp 1 |     | +/- 1       |     | dB    |
| Input VSWR                       | S11        |     | 2:1         |     | Ratio |
| IMD                              | IP3        |     | N/A         |     | dBm   |
| Harmonics                        | Н          |     | -20         |     | dBc   |
| Spurious Signals                 | Spur       |     | -60         |     | dBc   |
| Operating Voltage                | Opv        | 380 | 480 3 PHASE | 490 | VAC   |
| AC Power at 5,000 watts          | Pd         |     | 8,000       |     | Watt  |
| Class of Operation               | С          |     | AB          |     | Class |
| Noise Figure                     | NF         |     | N/A         |     | dB    |
| Large Signal Gain                | Lsg        |     | 65          |     | dB    |
| Max Load VSWR @ 5,000 Watts      | ML         |     | 10: 1       |     | Ratio |

#### **ENVIRONMENTAL CHARACTERISTICS**

| Parameter                          | Symbol | Min | Тур                    | Max    | Unit   |
|------------------------------------|--------|-----|------------------------|--------|--------|
| Operating Temperature              | Tc     | 0   |                        | +50    | 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**

| Parameter         | Symbol  | Min | Тур                | Max | Unit   |
|-------------------|---------|-----|--------------------|-----|--------|
| Dimensions        | Dim     |     | 24 x 36 x 48       |     | Inches |
| Weight            | Wt.     |     | 220                |     | lbs.   |
| Connectors In/Out | RF Conn |     | N / 7/16 DIN       |     | -      |
| Cooling           | Th      |     | Forced air cooling |     | -      |

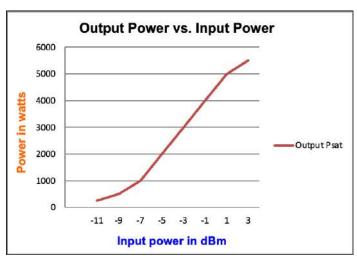
## **OPTIONS**

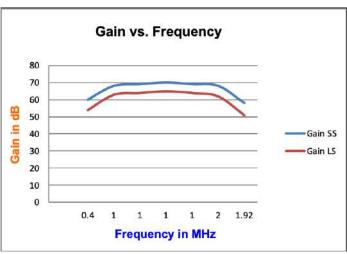
| Parameter   | Add suffix to part number |
|---|---------------------------|
| Heat sink and fans                                | N/A                       |
| Isolator with forward and reverse voltage outputs | N/A                       |
| TTL Input Trigger                                 | N/A                       |



# **Mechanical Drawings**









Rev 1 02/08/2023: Specifications subject to change, consult sales for latest information ECCN: EAR99 USHTS: 8543.70.8000