

LINEAR WIDEBAND POWER AMPLIFIER

Model – AB002250M5650AC



General Description:

Elite RF's **AB Series** amplifier is a wideband power amplifier designed for CW signals fabricated on LDMOS process and can operate **up to 250MHz**. 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 warranty.

Features

- Wide Freq. Range
- High Output Power
- High Gain
- High Reverse Isolation
- Built-in Protection

Protections

- Thermal Overload
- Over Voltage
- High VSWR

ELECTRICAL SPECIFICATIONS

| Parameter | Symbol | Min | Typ | Max | Unit |
|----------------------------------|------------|-----|-------|-----|-------|
| Frequency Range | BW | 2 | | 250 | MHz |
| Output Power CW | Psat | | 400 | | Watt |
| Output Power at 1 dB Compression | P1dB | | 200 | | Watt |
| Small Signal Gain | Gp | | 50 | | dB |
| Gain Flatness | Delta Gp 1 | | +/- 1 | | dB |
| Input VSWR | S11 | | 2:1 | | Ratio |
| IMD | IP3 | | N/A | | dBm |
| Harmonics | H | | -20 | | dBc |
| Spurious Signals | Spur | | -60 | | dBc |
| Operating Voltage | Opv | 100 | 120 | 240 | VAC |
| AC Power at 400 watts | Pd | | 900 | | Watt |
| Class of Operation | C | | AB | | Class |
| Noise Figure | NF | | N/A | | dB |
| Large Signal Gain | Lsg | | 48 | | dB |
| Max Load VSWR @ 400 Watts | ML | | 6: 1 | | Ratio |

ENVIRONMENTAL CHARACTERISTICS

| Parameter | Symbol | Min | Typ | 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 |

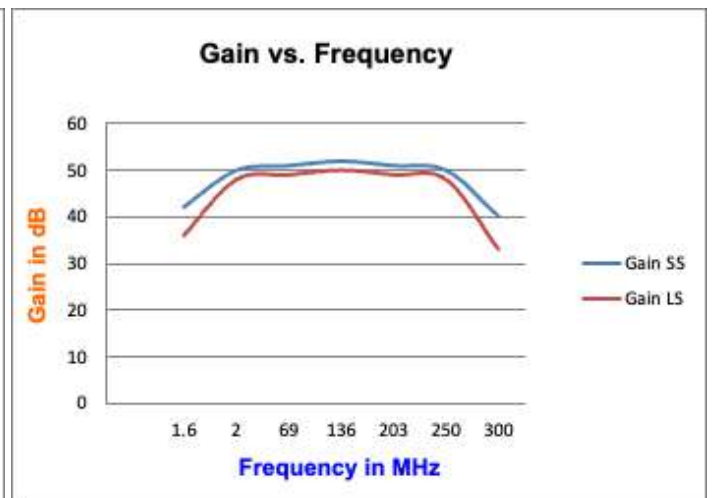
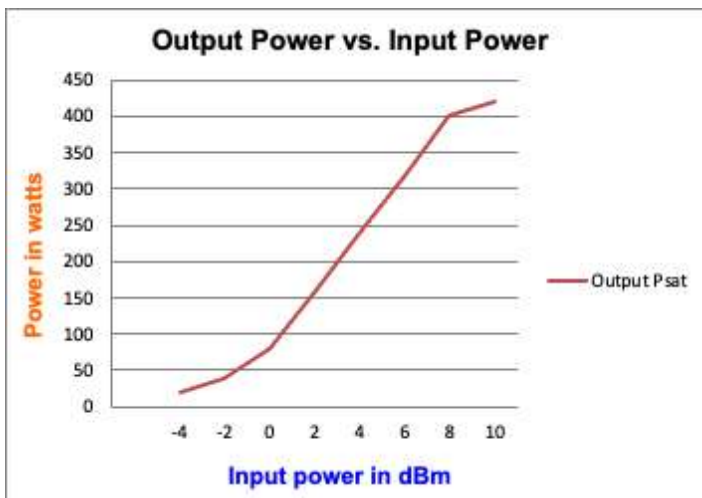
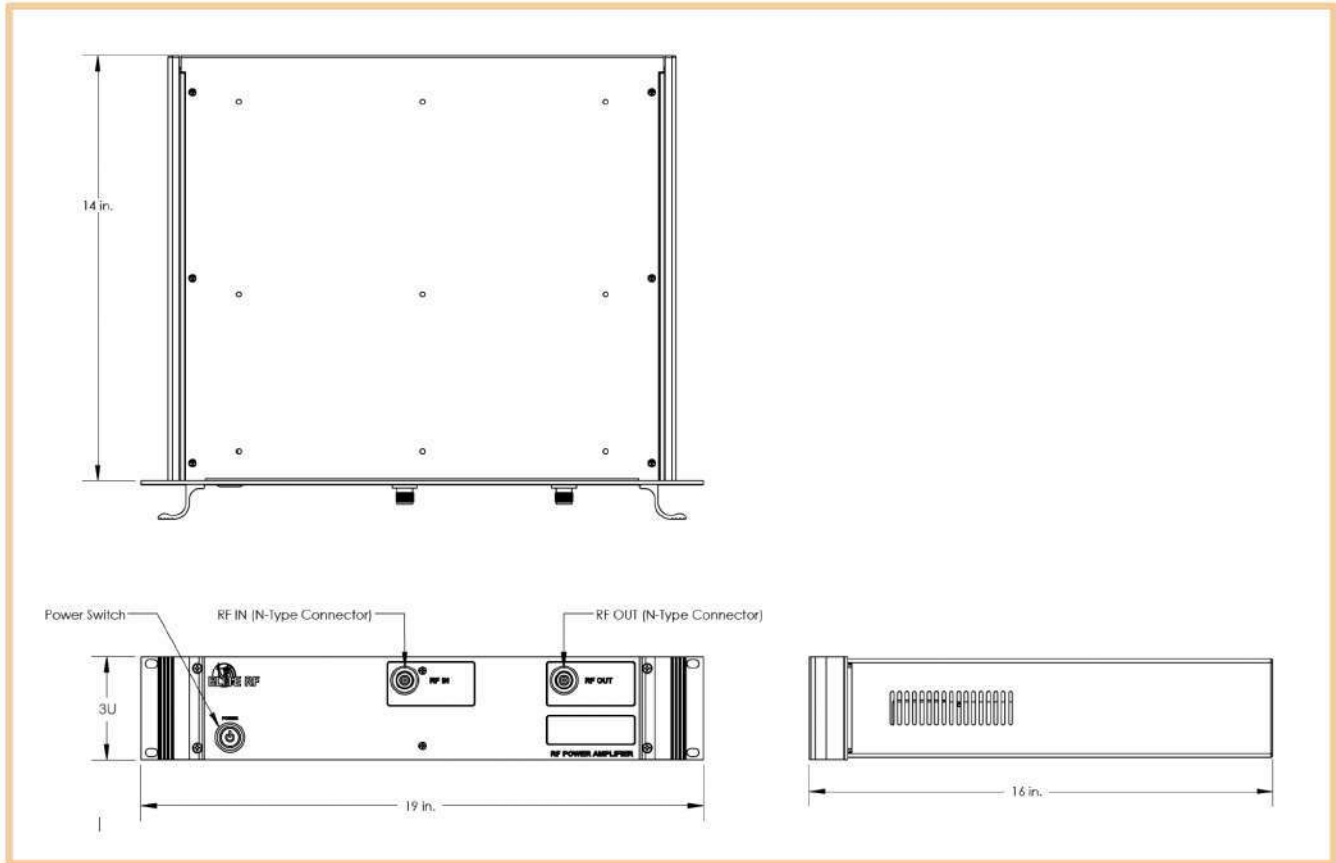
MECHANICAL CHARACTERISTICS

| Parameter | Symbol | Min | Typ | Max | Unit |
|-------------------|---------|-----|--------------------|-----|--------|
| Dimensions | Dim | | 19 x 15 x 5.25 | | Inches |
| Weight | Wt. | | 25 | | lbs. |
| Connectors In/Out | RF Conn | | N-Type | | - |
| 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



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Specifications subject to change,
consult sales for latest information