

# LINEAR WIDEBAND POWER AMPLIFIER

**Model – AB1.32.3G5657AC**



## General Description:

Elite RF's **AB Series** amplifier is a wideband power amplifier designed for CW/Pulse signals fabricated on GaN on SiC process and can operate up to **2.3 GHz**. 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  
VSWR

## ELECTRICAL SPECIFICATIONS

| Parameter                                 | Symbol     | Min  | Typ   | Max  | Unit  |
|---|------------|------|-------|------|-------|
| Frequency Range                           | BW         | 1300 |       | 2300 | MHz   |
| Output Power CW                           | Psat       |      | 400   |      | Watt  |
| Output Power at 1 dB Compression          | P1dB       |      | 200   |      | Watt  |
| Small Signal Gain                         | Gp         |      | 58    |      | dB    |
| Gain Flatness @ P1dB                      | Delta Gp 1 |      | +/- 2 |      | dB    |
| Input VSWR                                | S11        |      | 2:1   |      | Ratio |
| IMD @ 2 GHz @ 1 watt/tone / 1 MHz spacing | IP3        |      | 60    |      | dBm   |
| Harmonics @ P1dB                          | H          |      | -20   |      | dBc   |
| Spurious Signals                          | Spur       |      | -60   |      | dBc   |
| Operating Voltage                         | Opv        | 180  | 220   | 264  | VAC   |
| AC power at 200 watts                     | Pd         |      | 800   |      | Watt  |
| Class of Operation                        | C          |      | AB    |      | Class |
| Noise Figure                              | NF         |      | 7     |      | dB    |
| Large Signal Gain                         | Lsg        |      | 57    |      | dB    |
| Max Load VSWR @ 200 Watts                 | ML         |      | 6:1   |      | Ratio |

## ENVIRONMENTAL CHARACTERISTICS

| Parameter                          | Symbol | Min | Typ | Max    | Unit                   |
|------------------------------------|--------|-----|-----|--------|------------------------|
| Operating Case 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 |

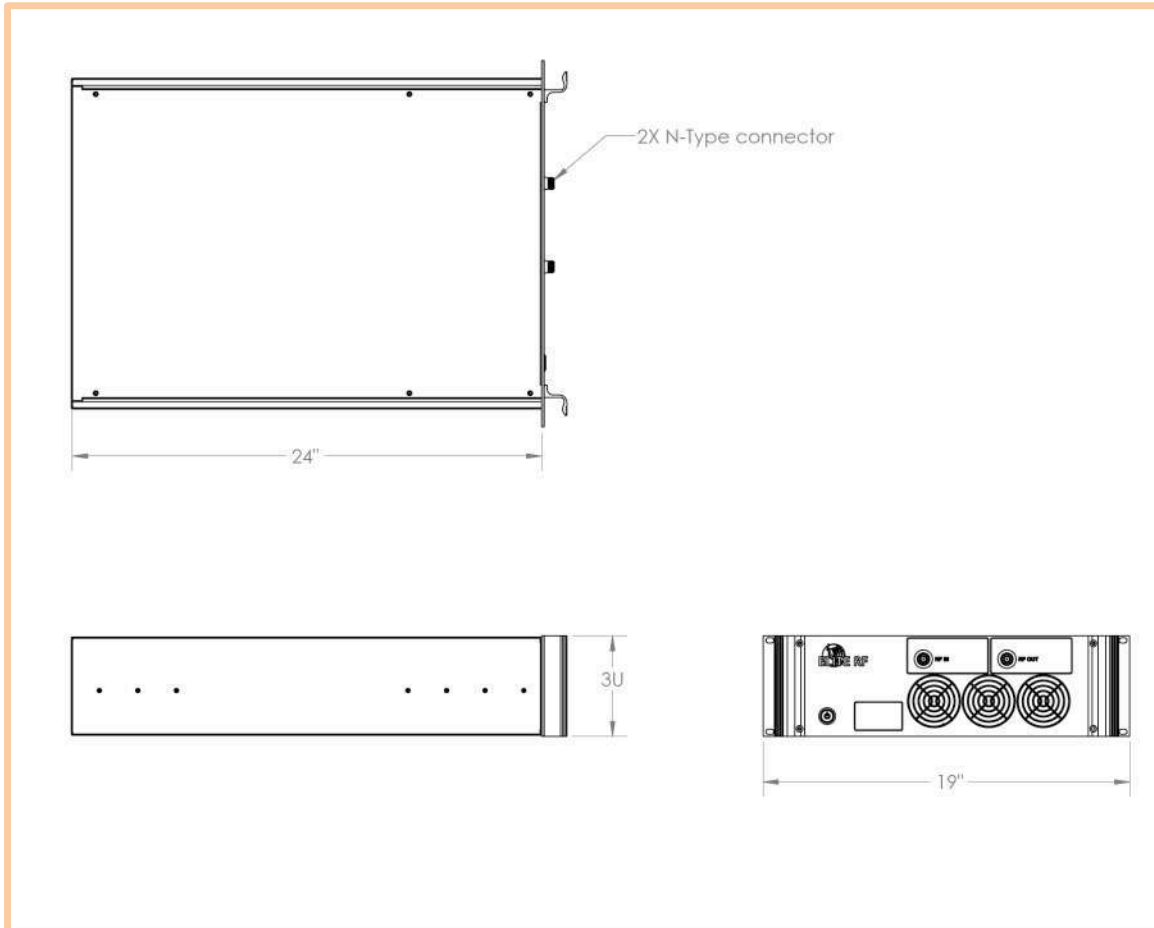
## MECHANICAL CHARACTERISTICS

| Parameter         | Symbol  | Min | Typ                | Max | Unit   |
|-------------------|---------|-----|--------------------|-----|--------|
| Dimensions        | Dim     |     | 19 x 24 x 5.25     |     | Inches |
| Weight            | Wt.     |     | 40                 |     | lbs.   |
| Connectors In/Out | RF Conn |     | N-Type             |     | -      |
| Cooling           | Th      |     | Forced air cooling |     | -      |

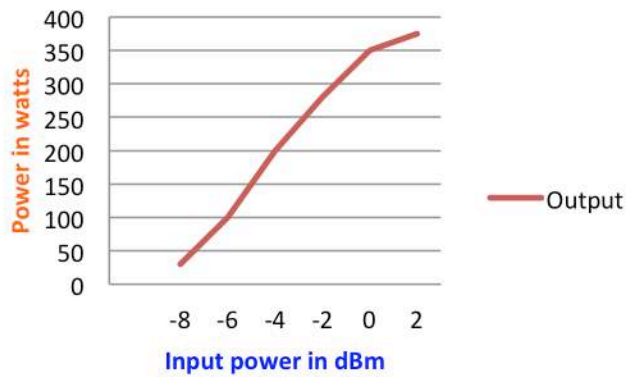
## OPTIONS

| 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                       |

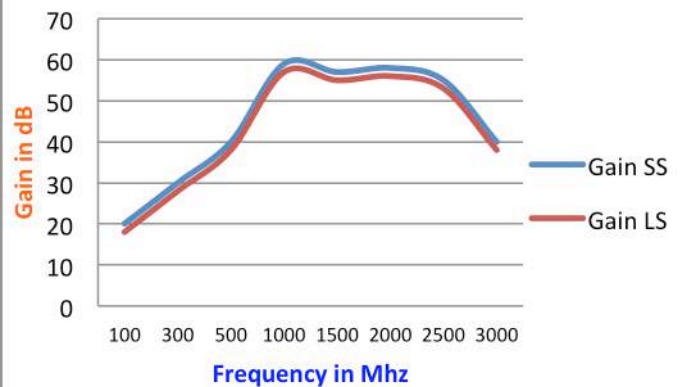
## Mechanical Drawings



### Output Power vs. Input Power



### Gain vs. Frequency



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 Specifications subject to change, consult  
 sales for latest information