

## Features

- ◆ Broadband Power Amplifier
- ◆ Class AB design
- ◆ Built-in protection circuits
- ◆ High reliability and ruggedness
- ◆ 50 ohm input/output impedance



## Applications

- ◆ Test Equipment
- ◆ Communication Systems

## Electrical Specifications: 50Ω, 25°C

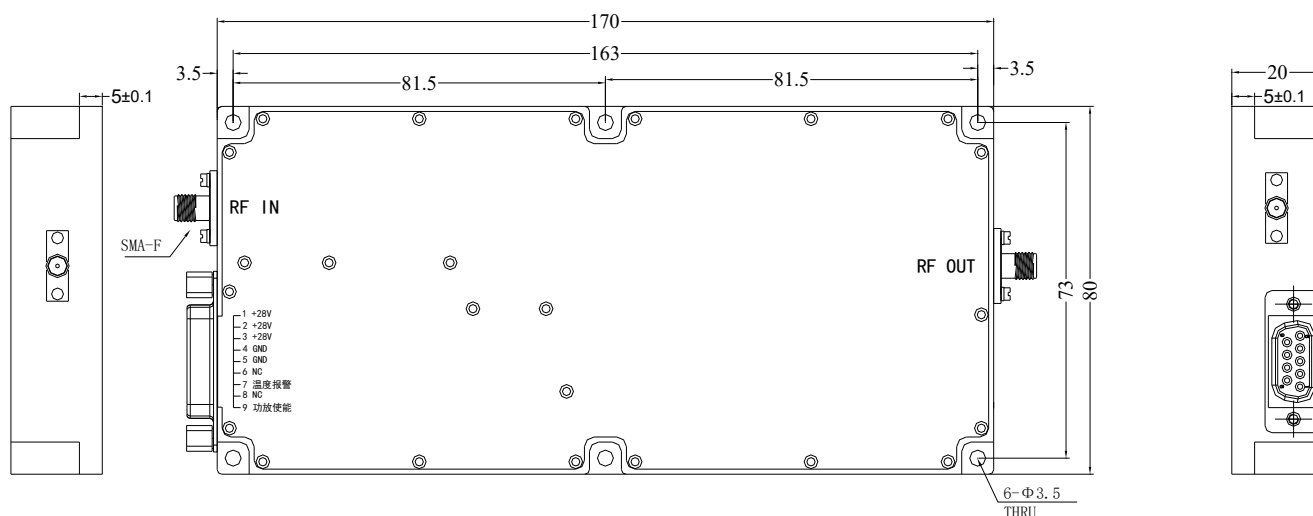
| Parameter                                | Min | Typ | Max  | Units |
|------------------------------------------|-----|-----|------|-------|
| Operating Frequency                      | 20  |     | 1000 | MHz   |
| RF Power Output CW                       | 47  | 48  |      | dBm   |
| Output Power for 1 dB Compression (P1dB) |     | 45  |      | dBm   |
| Gain                                     | 47  | 50  |      | dB    |
| Gain Flatness                            |     | ±3  |      | dB    |
| Input VSWR                               |     | 1.5 |      | :1    |
| Harmonics                                |     | -10 |      | dBc   |
| IMD3, 2-Tone @ 40dBm/Tone, 1MHz Spacing  |     | -20 |      | dBc   |
| Spurious                                 |     |     | -60  | dBc   |
| Supply Voltage                           | 26  | 28  | 30   | V     |
| Supply Current(VCC=28V)                  |     | 1.5 | 10   | A     |
| Input RF drive level without damage      |     |     | +5   | dBm   |

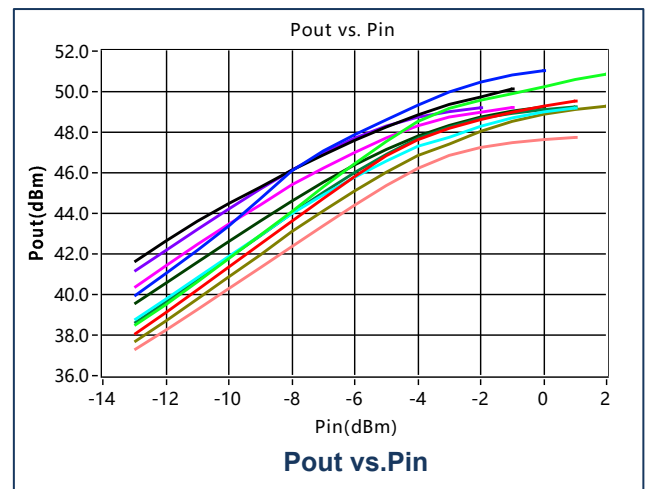
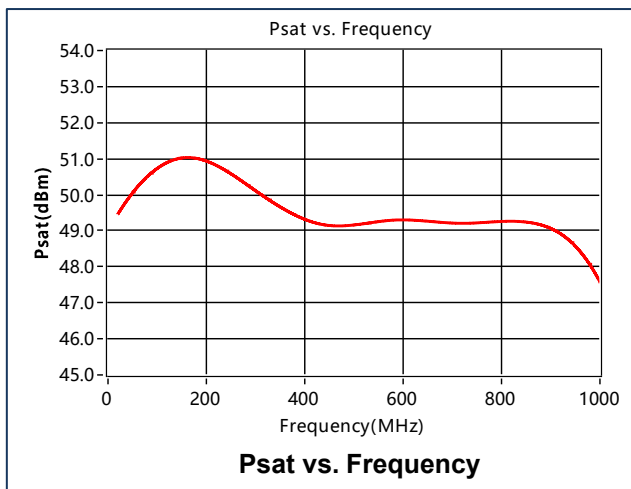
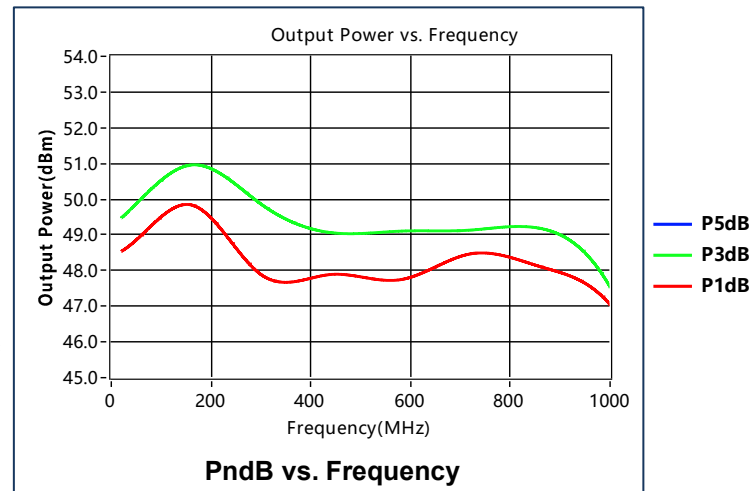
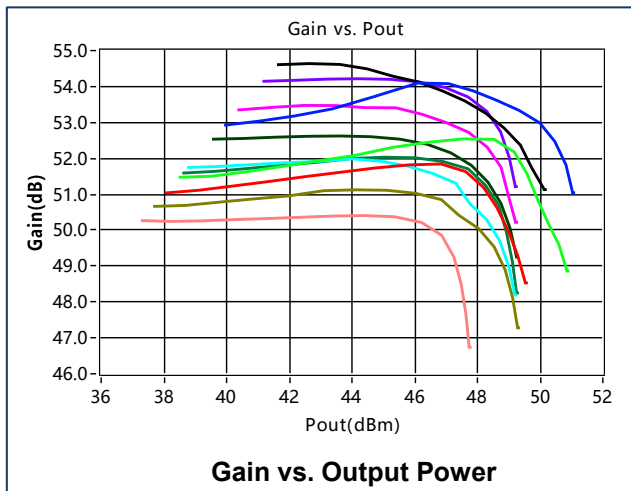
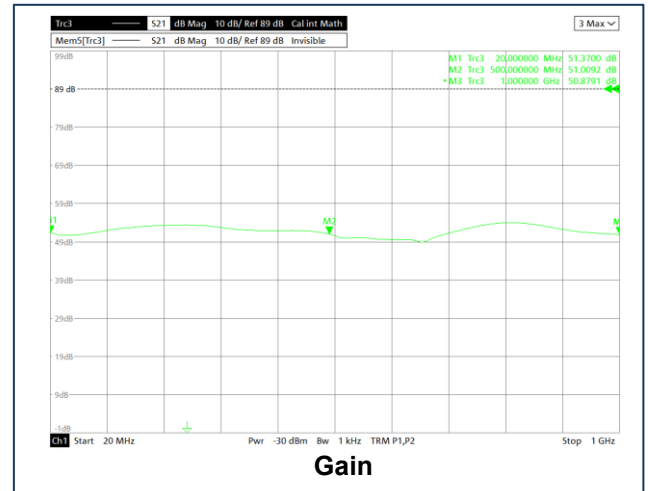
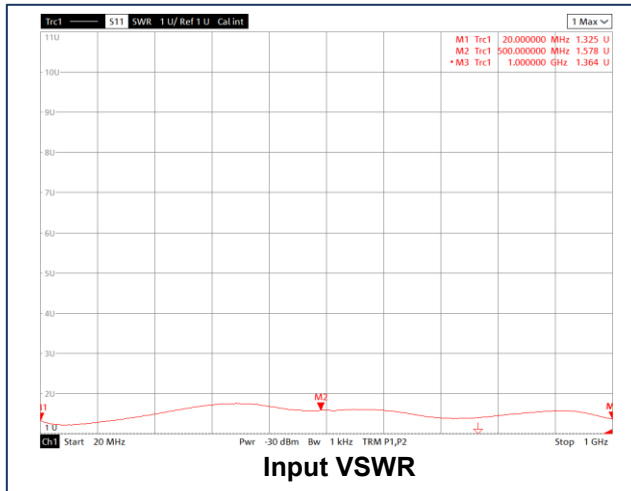
## Environmental Specifications

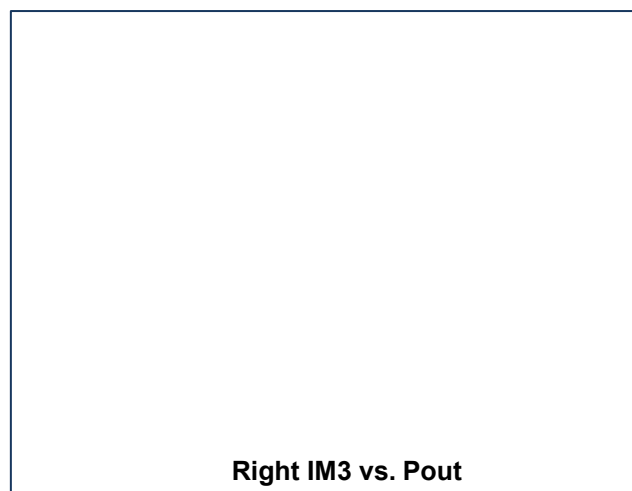
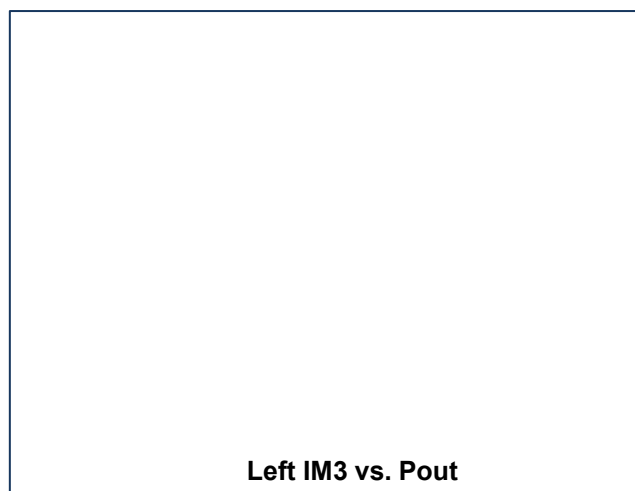
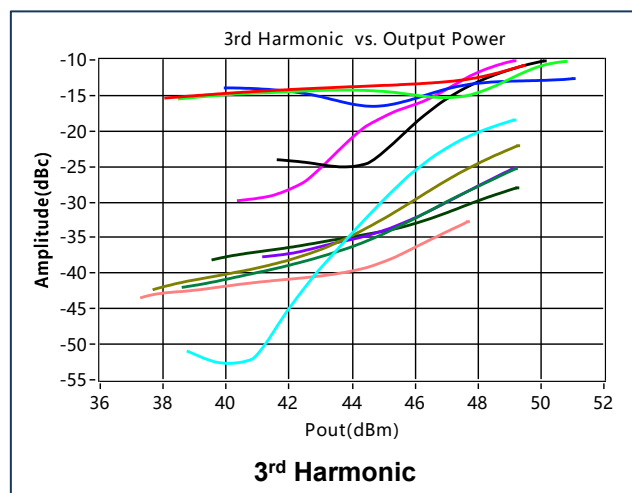
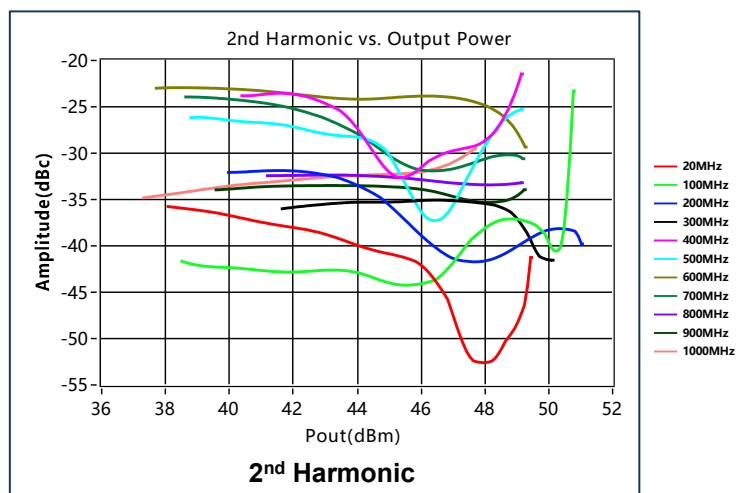
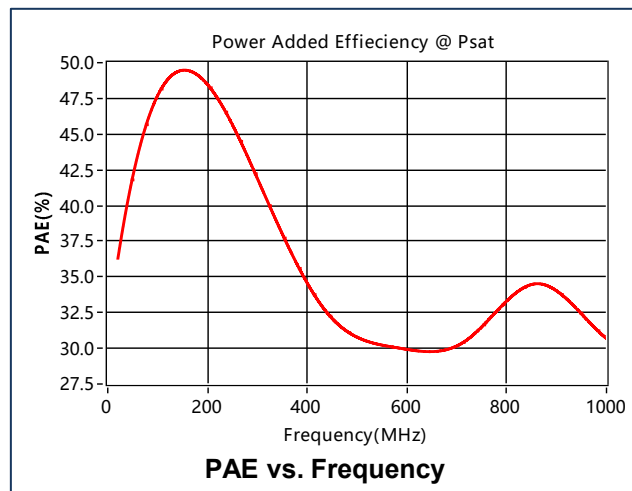
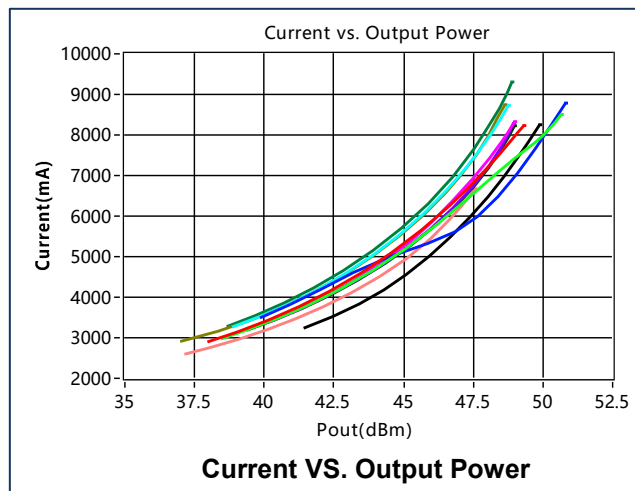
|                            |                 |
|----------------------------|-----------------|
| Operating Case Temperature | -30°C to +70°C  |
| Storage Temperature        | -50°C to +105°C |

## Mechanical Specifications

|                                      |                                 |
|--------------------------------------|---------------------------------|
| Dimensions<br>(Excluding Connectors) | 170 X 80 X 20 mm                |
| RF Connectors                        | SMA-Female                      |
| DC Interface Connector               | D-SUB-9                         |
| Weight                               | -                               |
| Cooling                              | Forced air required<br>(Option) |







## DC Interface Connector: D-sub, 9-Pin, Female

| Pin # | Name  | Function                                                                                                                                                                                                                                             |
|-------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | VDD   | +26.0-30.0VDC                                                                                                                                                                                                                                        |
| 2     | VDD   | +26.0-30.0VDC                                                                                                                                                                                                                                        |
| 3     | VDD   | +26.0-30.0VDC                                                                                                                                                                                                                                        |
| 4     | GND   | Ground                                                                                                                                                                                                                                               |
| 5     | GND   | Ground                                                                                                                                                                                                                                               |
| 6     | NC    | Not connected                                                                                                                                                                                                                                        |
| 7     | TEMP  | When the temperature of the case exceeds 70 °C, the power amplifier will turn off and this pin will be pulled high. If the temperature of case drops to 60 °C, the power amplifier will return to normal operation, and this pin will be pulled low. |
| 8     | NC    | Not connected                                                                                                                                                                                                                                        |
| 9     | PA-EN | Amplifier Enable: TTL Logic High (5V)<br>(Internally Pulled-High)                                                                                                                                                                                    |