

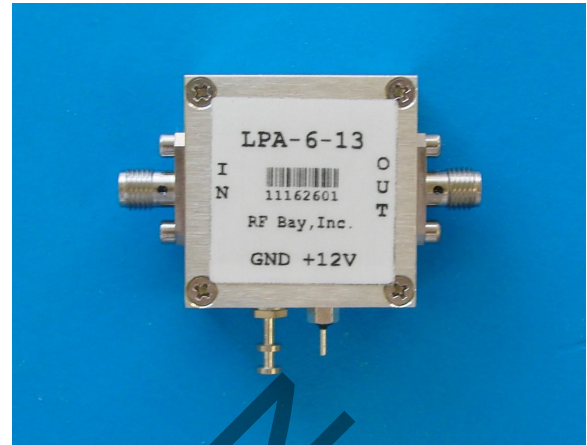
## LPA Series

## 1000 – 6000MHz RF Amplifier

### Features

- Frequency Range: 1000–6000MHz
- Gain: 13dB
- P<sub>1dB</sub>: +12dBm
- IP3: +23dBm
- Noise Figure: 7dB
- DC Power: 12V@45mA
- Internally Voltage Regulated
- SMA-Female Connector

### Photo



### Description

LPA-6-13 is a 13dB gain RF Amplifier, with standard frequency range of 1000MHz to 6000MHz.

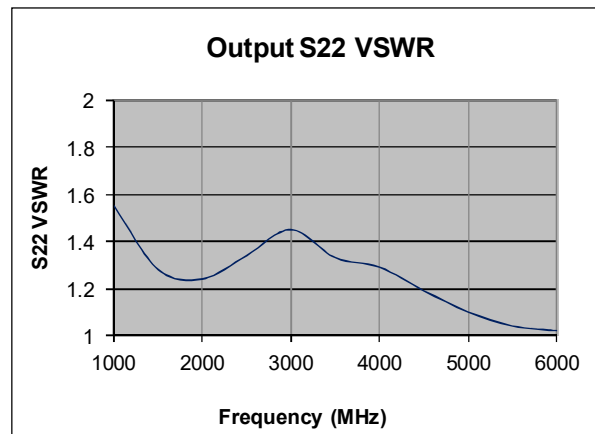
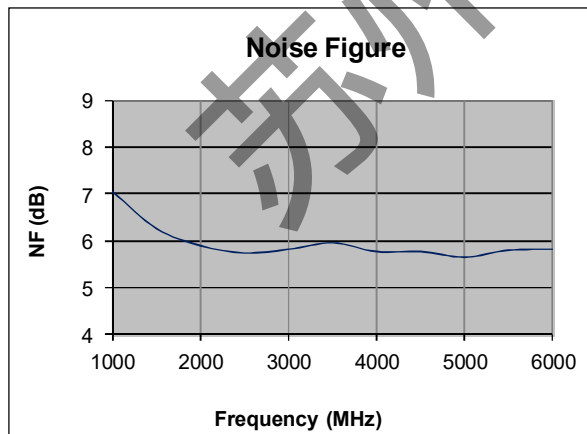
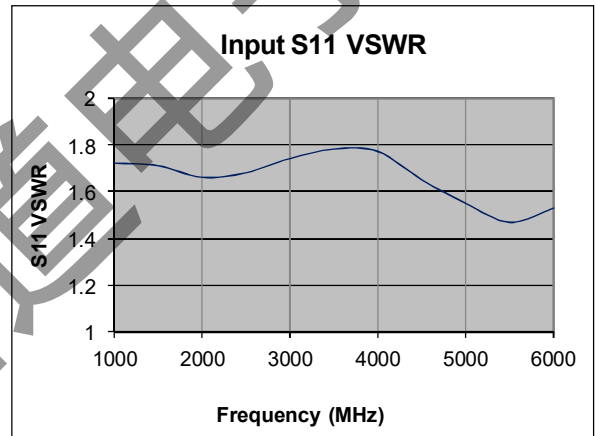
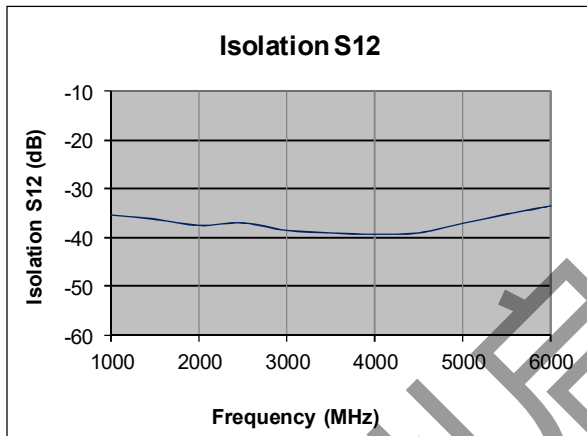
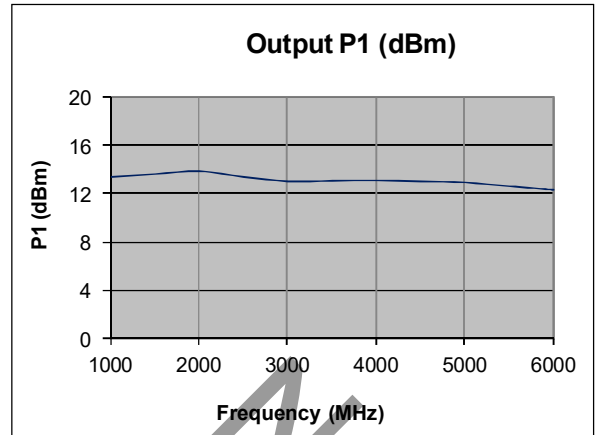
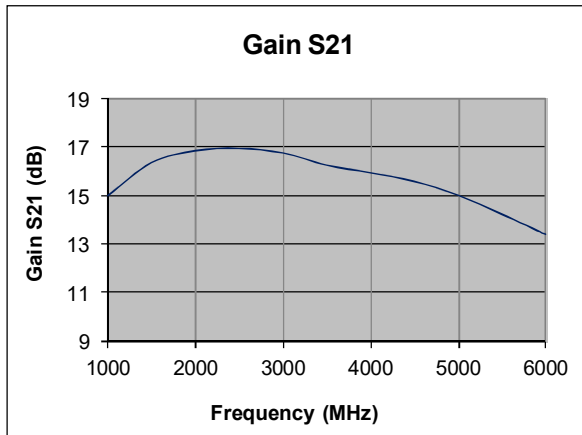
### Electrical Specifications @+25°C, Z<sub>in</sub>=Z<sub>out</sub>=50 Ω, V<sub>supply</sub> = +12VDC

| Parameter                            | Unit    | Minimum | Typical | Maximum |
|--------------------------------------|---------|---------|---------|---------|
| Frequency Range                      | MHz     | 1000    |         | 6000    |
| Gain (S <sub>21</sub> )              |         |         |         |         |
| f=1000MHz                            | dB      |         | 15.0    |         |
| f=2000MHz                            | dB      |         | 16.8    |         |
| f=3000MHz                            | dB      |         | 16.7    |         |
| f=4000MHz                            | dB      |         | 16.0    |         |
| f=5000MHz                            | dB      |         | 15.0    |         |
| f=6000MHz                            | dB      |         | 13.5    |         |
| Gain Flatness                        | dB      |         | ±2.0    |         |
| Output Power P <sub>1dB</sub>        | dBm     |         | +12     |         |
| Output IP3                           | dBm     |         | +23     |         |
| Noise Figure                         | dB      |         | 7       |         |
| Reverse Isolation (S <sub>12</sub> ) | dB      |         | -35     |         |
| VSWR-Input (S <sub>11</sub> )        | ratio:1 |         | 1.8:1   |         |
| VSWR-Output (S <sub>22</sub> )       | ratio:1 |         | 1.5:1   |         |
| DC Power Supply - voltage            | V       | 12      | 15      | 24      |
| DC Power Supply - current            | mA      |         | 45      |         |

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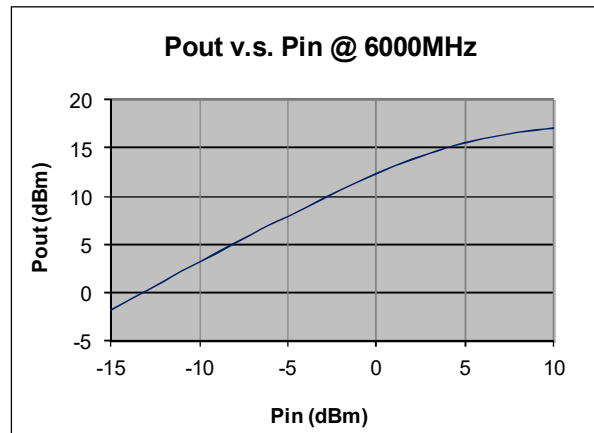
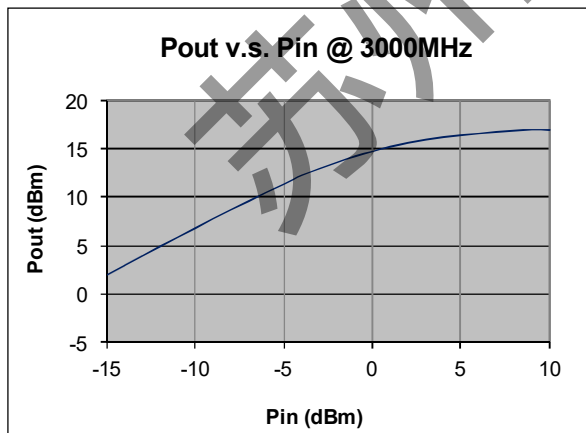
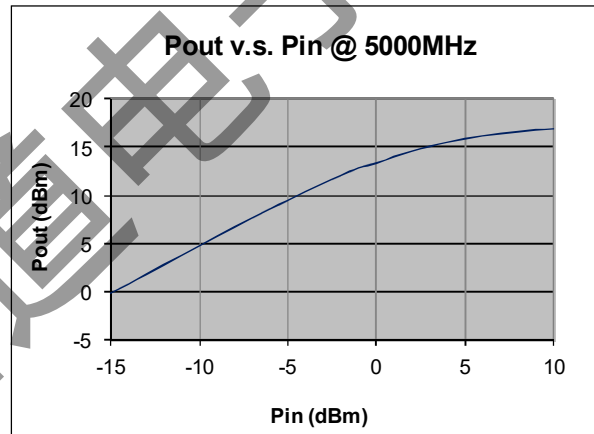
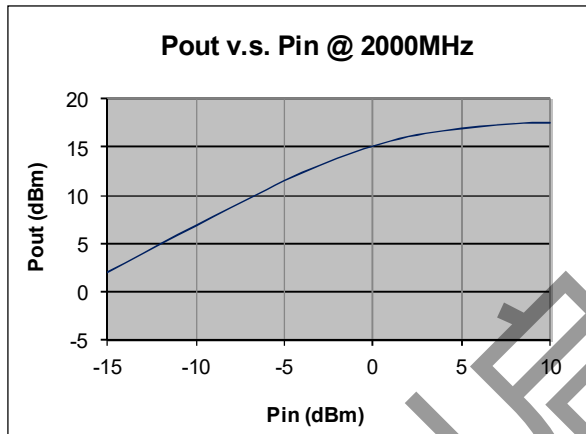
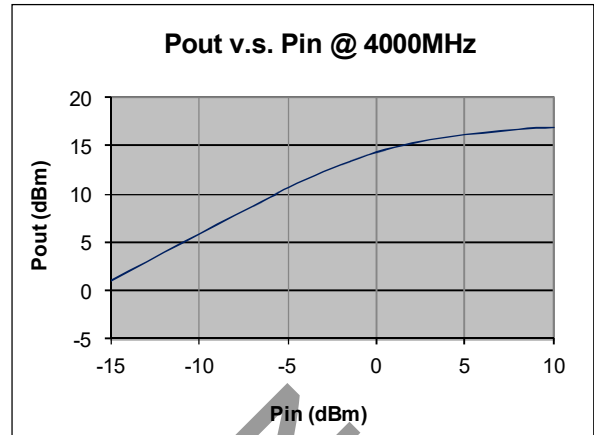
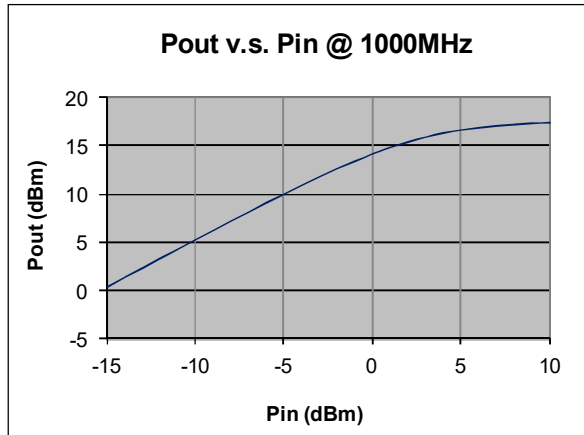
**Typical Performance @ +25 °C**



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**1000 – 6000MHz RF Amplifier**

**Typical Performance @ +25 °C**



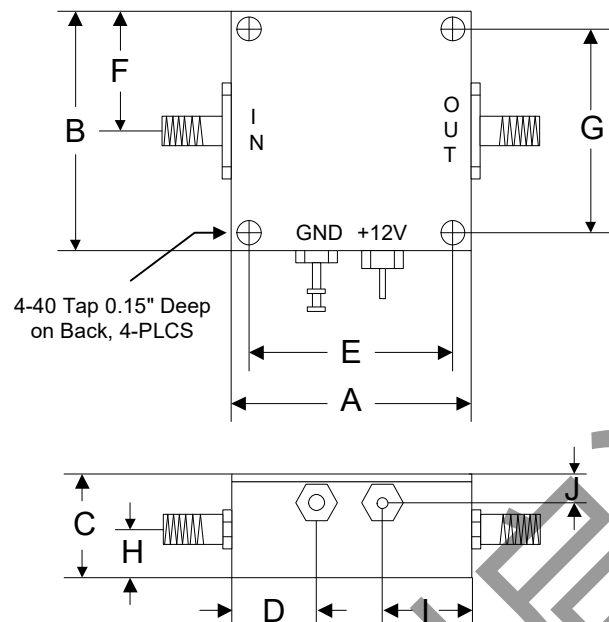
## LPA Series

## 1000 – 6000MHz RF Amplifier

### Absolute Maximum Ratings

| Parameter             | Absolute Maximum  |
|-----------------------|-------------------|
| RF Input Power        | +15dBm            |
| Supply Voltage        | +25V              |
| Operating Temperature | -40 °C to +85 °C  |
| Storage Temperature   | -55 °C to +125 °C |

### Outline



|      | A     | B     | C     | D     | E     | F     | G     | H     | I     | J     |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Inch | 1.250 | 1.250 | 0.563 | 0.450 | 1.000 | 0.625 | 1.000 | 0.250 | 0.500 | 0.187 |
| mm   | 31.75 | 31.75 | 14.29 | 11.43 | 25.40 | 15.88 | 25.40 | 6.35  | 12.70 | 4.76  |