

## EPA Series

## 100 – 8000MHz RF Amplifier

### Features

- Frequency Range: 100-8000MHz
- Gain: 30dB
- P<sub>1dB</sub>: +10dBm
- OIP3: +23dBm
- Noise Figure: 6dB (typ.)
- DC Power: 9V to 15V @ 120mA
- SMA-female

### Photo



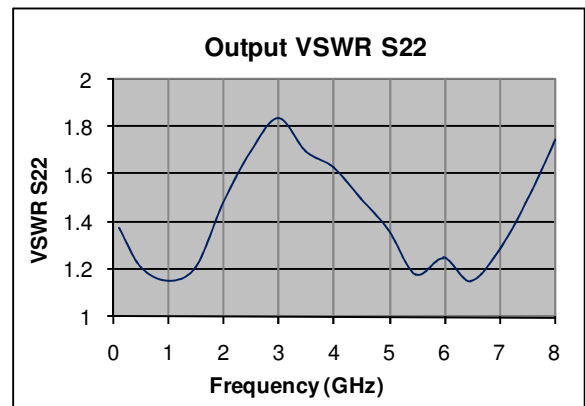
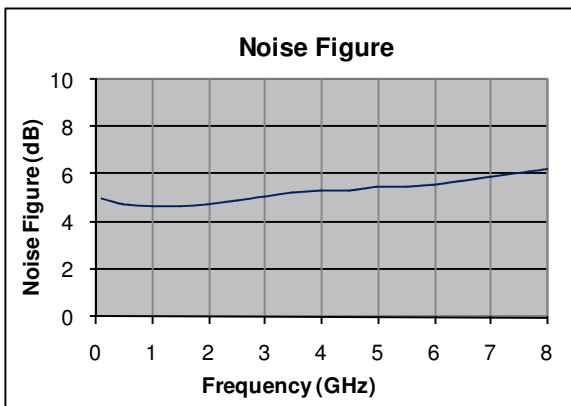
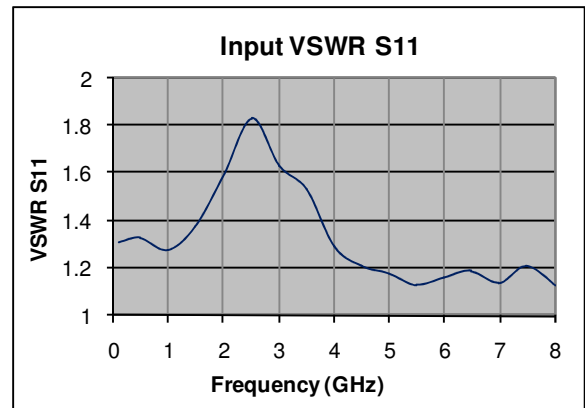
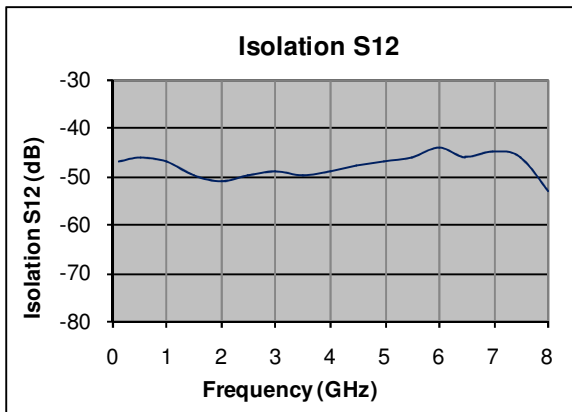
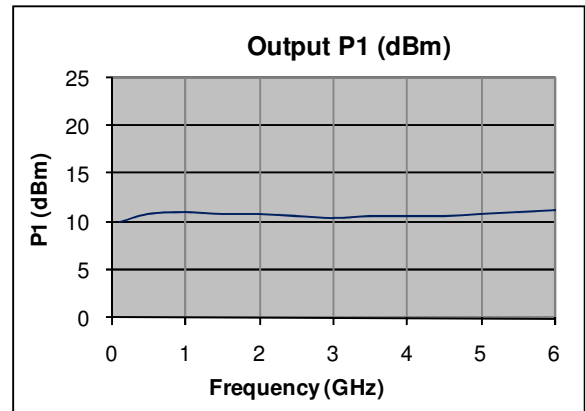
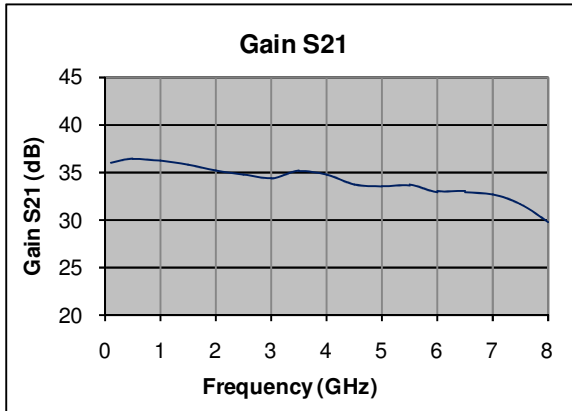
### Description

EPA-160T is a 30dB gain RF Amplifier, with frequency range of 100 MHz to 8000MHz.

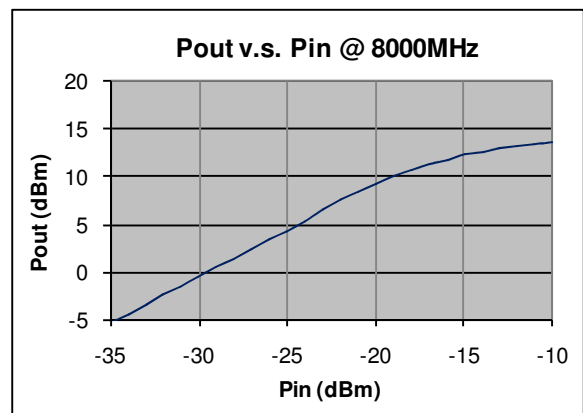
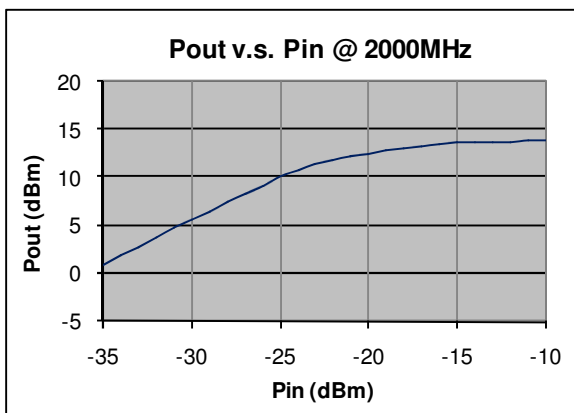
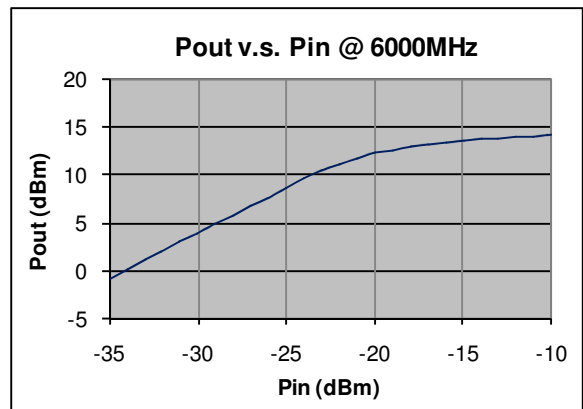
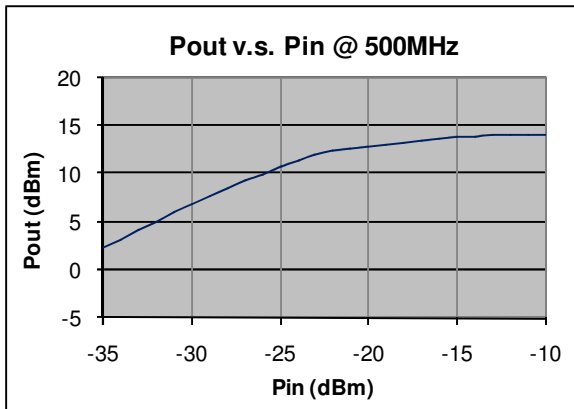
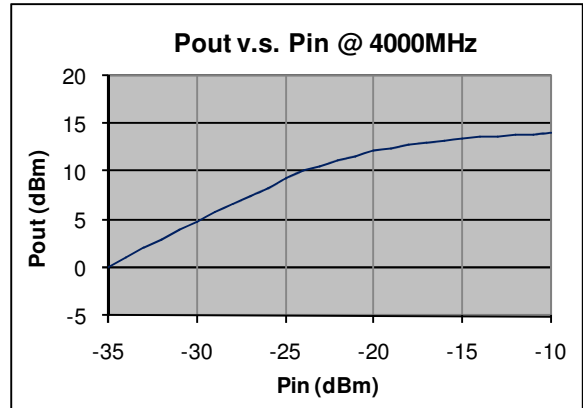
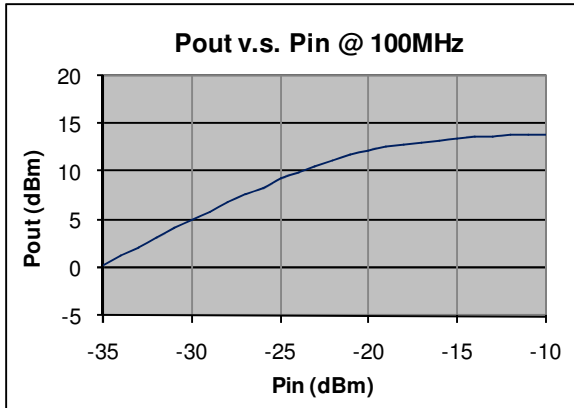
### Electrical Specifications @+25 °C, Z<sub>in</sub>=Z<sub>out</sub>=50 Ω, V<sub>supply</sub> = +12VDC

| Parameter                               | Unit       | Minimum                        | Typical     | Maximum     |
|---|------------|--------------------------------|-------------|-------------|
| Frequency Range                         | MHz        | 100                            |             | 8000        |
| Gain (S21) f = 100MHz                   | dB         |                                | 36.0        |             |
| f = 4000MHz                             | dB         |                                | 34.7        |             |
| f = 8000MHz                             | dB         |                                | 29.7        |             |
| Gain Flatness                           | dB         |                                | ±3.0        |             |
| Output Power P <sub>1dB</sub> @4000MHz  | dBm        |                                | +10         |             |
| Saturated Output Power P <sub>Sat</sub> | dBm        |                                | +13         |             |
| Output Third Order Intercept IP3        | dBm        |                                | +23         |             |
| Noise Figure                            | dB         |                                | 6.0         | 6.5         |
| Reverse Isolation (S12) @4000MHz        | dB         |                                | -45         |             |
| VSWR-Input (S11)                        | ratio:1    | 1.3@100MHz                     | 1.3@4000MHz | 1.2@8000MHz |
| VSWR-Output (S22)                       | (unitless) | 1.4@100MHz                     | 1.6@4000MHz | 1.8@8000MHz |
| DC Power Supply - voltage               | V          | 9                              | 12          | 15          |
| DC Power Supply - current               | mA         |                                | 120         | 135         |
| Operating Temperature                   | °C         | -40                            |             | +85         |
| Size                                    | Inch       | 1.79 (L) x 1.10 (W) x 0.45 (H) |             |             |
| Weight                                  | Oz         | 1.4                            |             |             |

**Typical Performance @+25 °C**



**Typical Performance @+25 °C**



**Absolute Maximum Ratings**

| Parameter             | Absolute Maximum  |
|-----------------------|-------------------|
| RF Input Power        | +13dBm            |
| Supply Voltage        | +25V              |
| Operating Temperature | -40 °C to +85 °C  |
| Storage Temperature   | -55 °C to +125 °C |

**Outline**

