

## EPA Series

## 4.0-6.0GHz 1W Power Amplifier

### Features

- Frequency Range: 4.0 – 6.0GHz
- Gain: 27dB
- P<sub>1dB</sub>: +30dBm
- OIP3: +41dBm
- Noise Figure: 8dB
- DC Voltage: +9V @ 850mA
- RF Connector: SMA-F

### Photo



### Description

EPA-4060 is a 1W high performance RF Power Amplifier, with standard frequency range of 4.0 to 6.0GHz.

### Electrical Specifications @+25°C, Z<sub>in</sub>=Z<sub>out</sub>=50 Ω, V<sub>supply</sub> = +9VDC

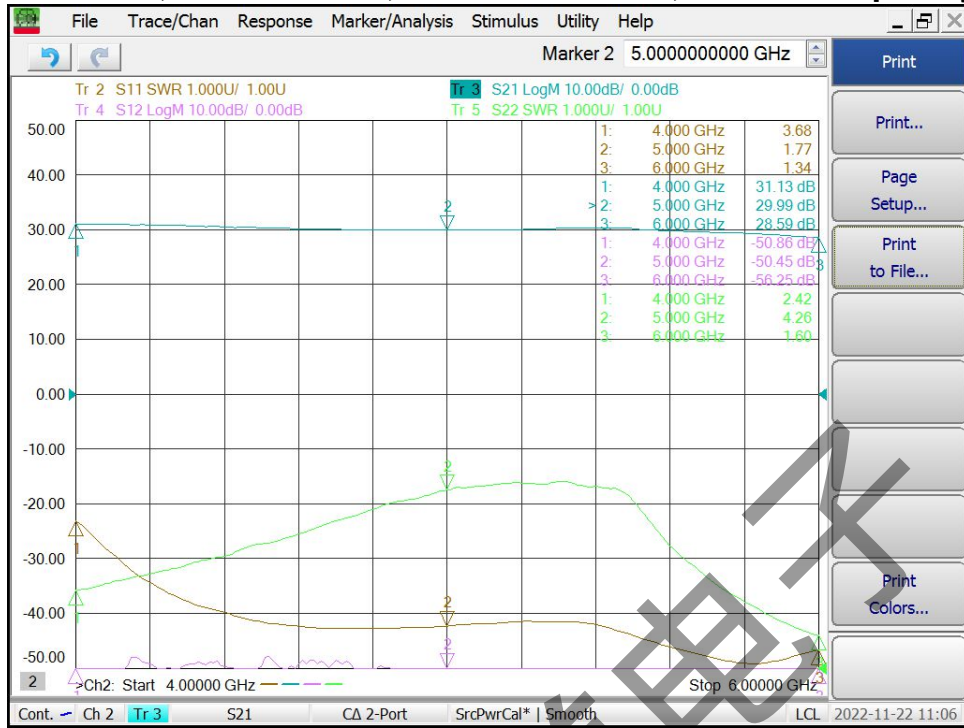
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	4.0		6.0
Gain (S21)	dB	27	30	
Gain Flatness	dB		±1.2	±1.7
Output Power P <sub>1dB</sub>	dBm	+30	+31	
Output Third Order Intercept IP3	dBm	+41	+42	
Noise Figure	dB		8.0	9.0
Isolation S12	dB	-40	-50	
VSWR-Input (S11)			1.8:1	2.2:1
DC Power Supply - voltage	V	+8.5	+9.0	+9.5
DC Power Supply - current				
No RF Input	mA		750	850
P <sub>OUT</sub> =+30dBm	mA		850	1050
Operating Temperature	°C	-40		+85
Size (RF/DC feedthru's excluded)	Inch/mm	1.79x1.10x0.45/45.47x27.94x11.43(LxWxH)		
Weight	Oz	2.0 (56.7 grams)		

**WARNING: MUST USE HEAT SINK**

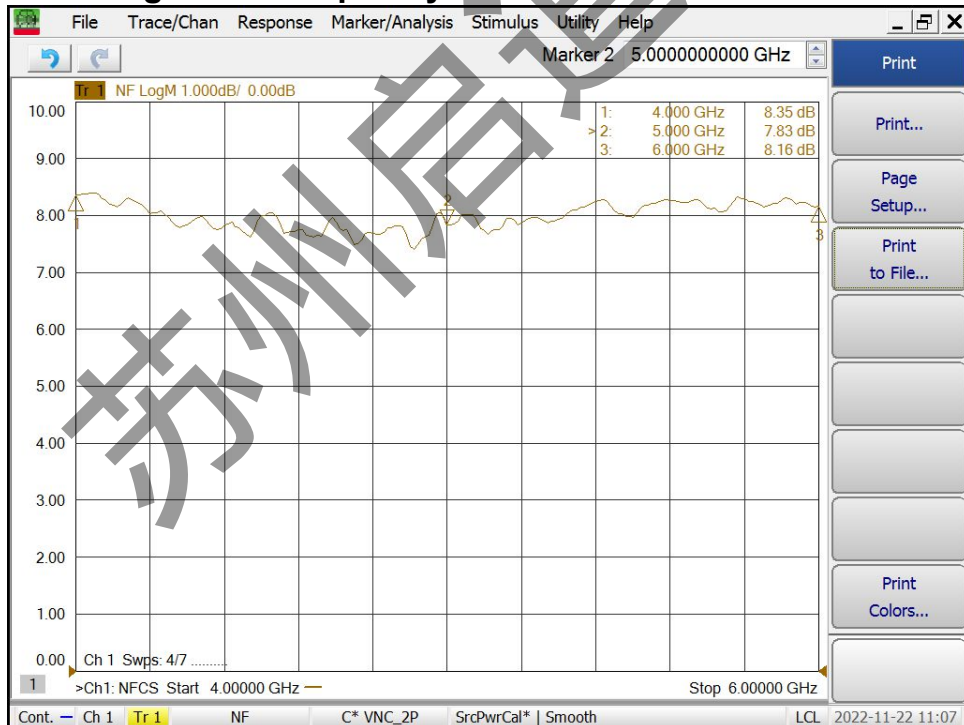
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**Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency**



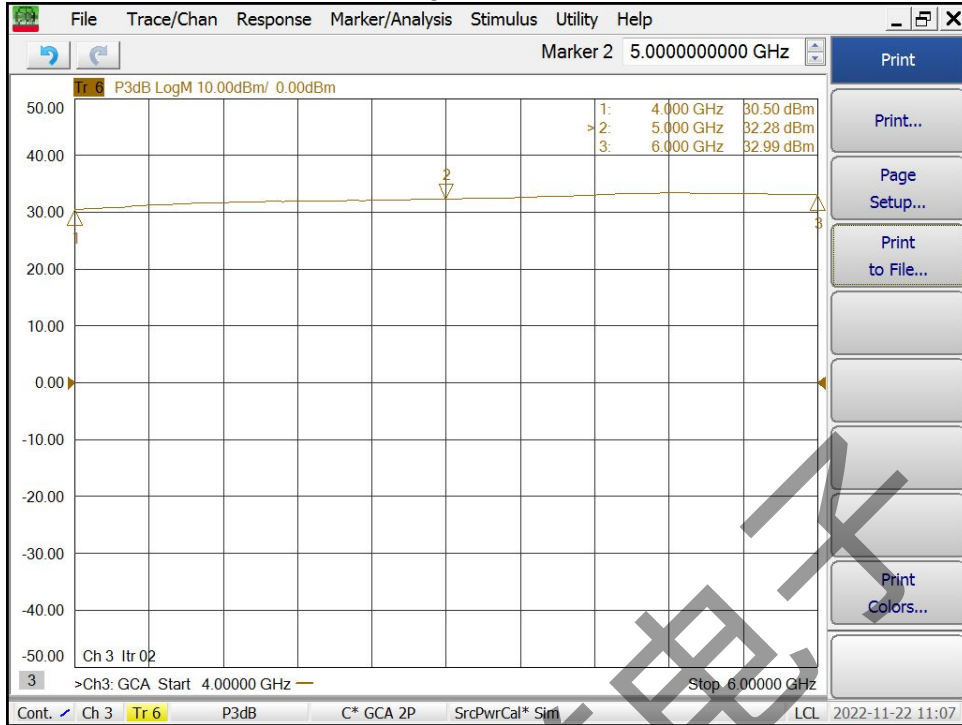
**Noise Figure vs Frequency**



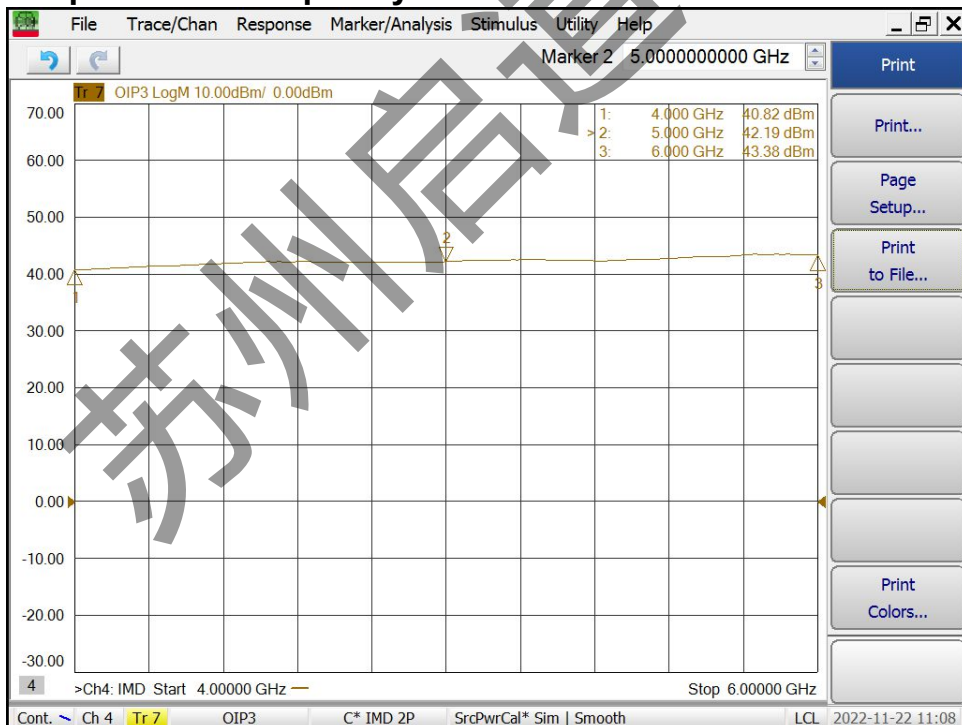
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**Output P1dB vs Frequency**



**Output IP3 vs Frequency**



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**Absolute Maximum Ratings**

Parameter	Absolute Maximum
RF Input Power	+10dBm
DC Supply Voltage	+12V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

**ESD Sensitive Material**



**Outline**

