

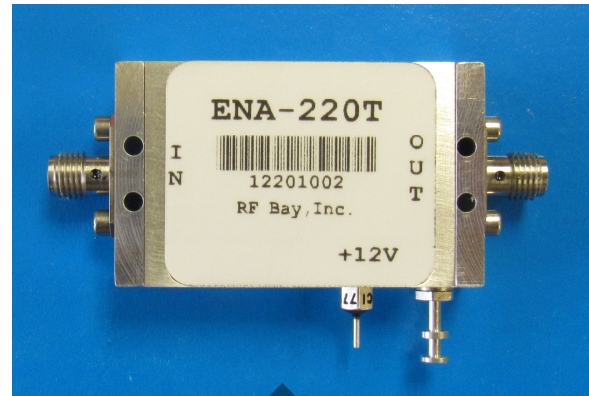
## ENA Series

## 10 – 1000MHz Low Noise Amplifier

### Features

- Frequency Range: 10-1000MHz
- Gain: 30dB
- $P_{1dB}$ : +29dBm
- OIP3: +42dBm
- Noise Figure: 1.4dB (typ.)
- DC Power: 12V @ 380mA
- Internally Voltage Regulated
- SMA-female

### Photo



### Description

ENA-220T is a high dynamic range Low Noise Amplifier, with frequency range of 10 to 1000MHz.

### Electrical Specifications @+25 °C, $Z_{in}=Z_{out}=50 \Omega$ , DC Supply = +12VDC

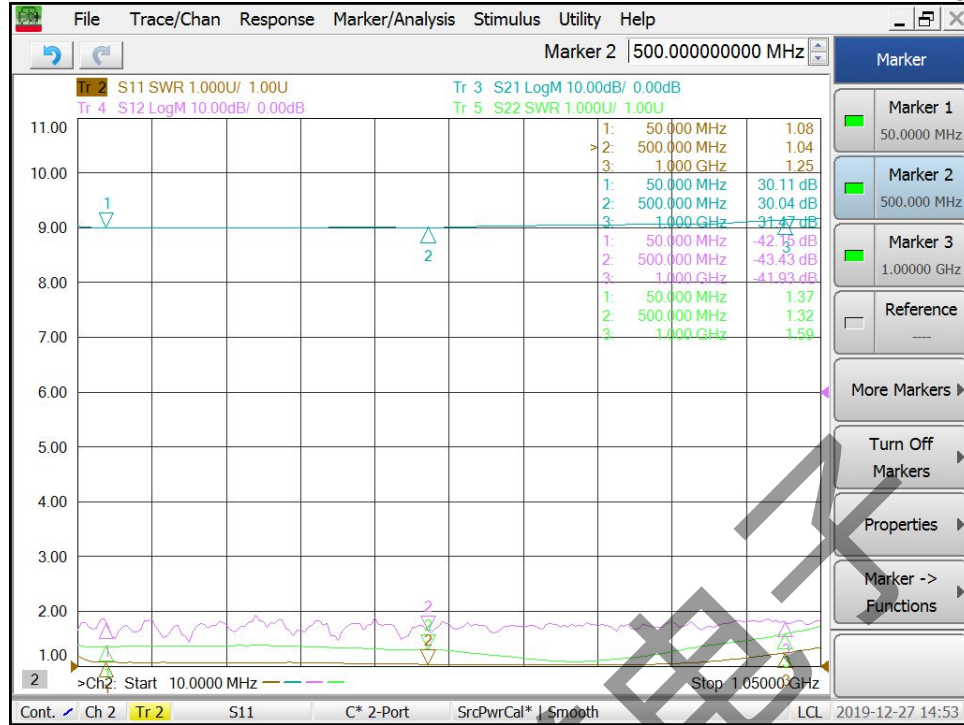
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	10		1000
Gain S21	f = 10MHz	28	30	
	f = 500MHz	28	30	
	f = 1000MHz	29	31	
Gain Flatness	dB		±0.7	±1.0
Output Power $P_{1dB}$	f = 500MHz	+28	+29	
Saturated Output Power $P_{Sat}$	f = 500MHz	+29	+30	
Output Third Order Intercept IP3	f = 500MHz	+40	+42	
Noise Figure	f = 500MHz		1.4	1.7
Reverse Isolation S12	f = 500MHz	-40	-43	
Input VSWR S11	f = 500MHz		1.2:1	1.8:1
Output VSWR S22	f = 500MHz		1.4:1	1.8:1
DC Power Supply - voltage	V	11.5	12	12.5
DC Power Supply - current	mA		380	420

**WARNING: MUST USE HEAT SINK IF CASE TEMPERATURE EXCEEDS 50 °C**

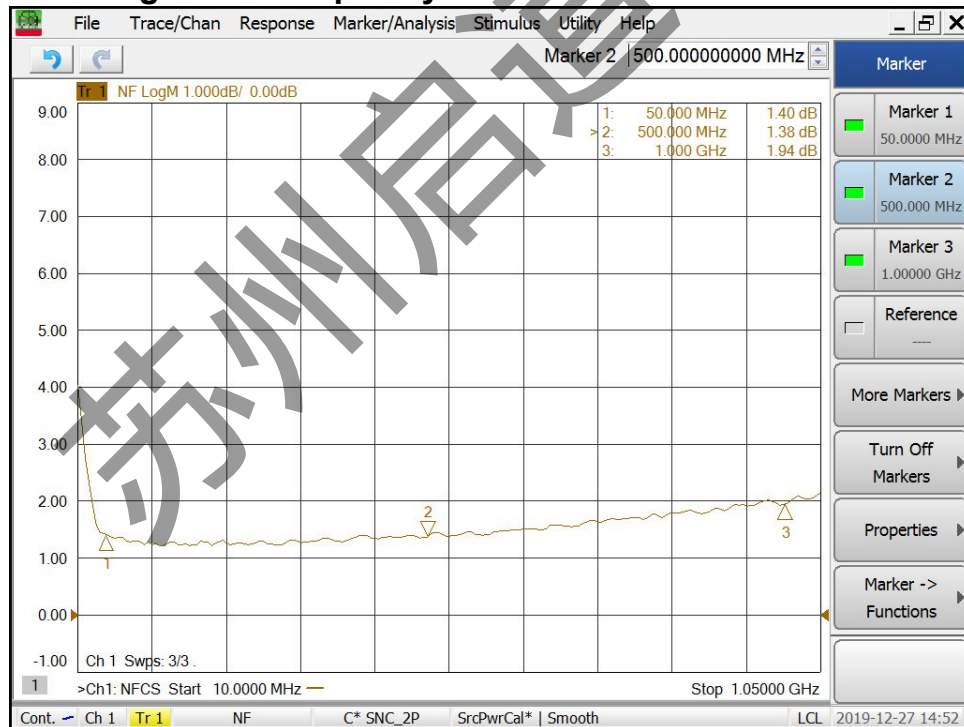
**ENA Series**

**10 – 1000MHz Low Noise Amplifier**

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



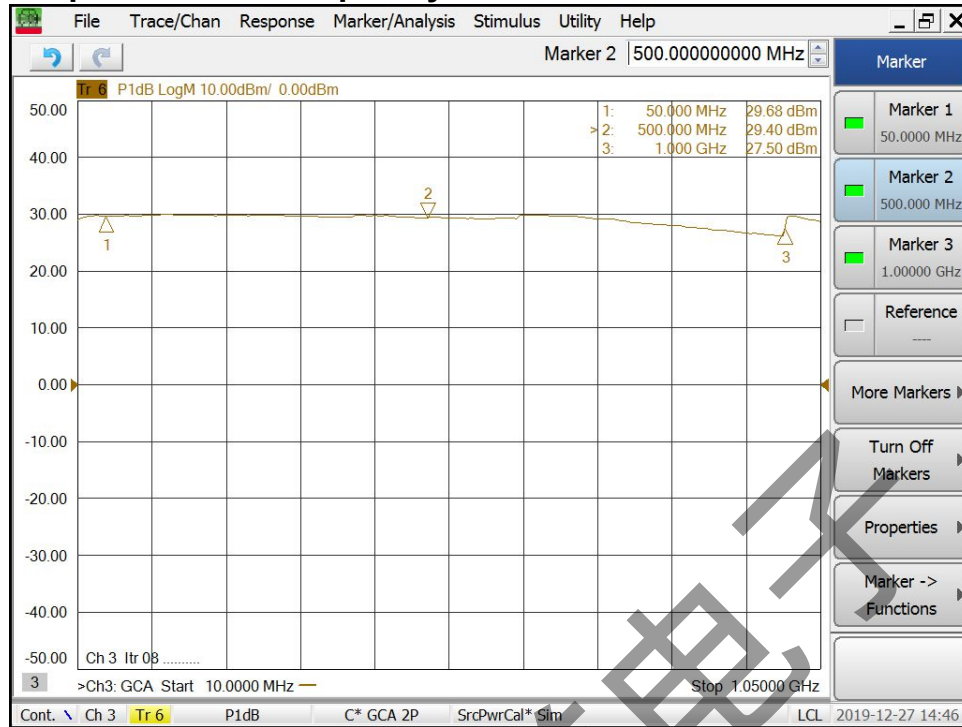
**Noise Figure vs Frequency**



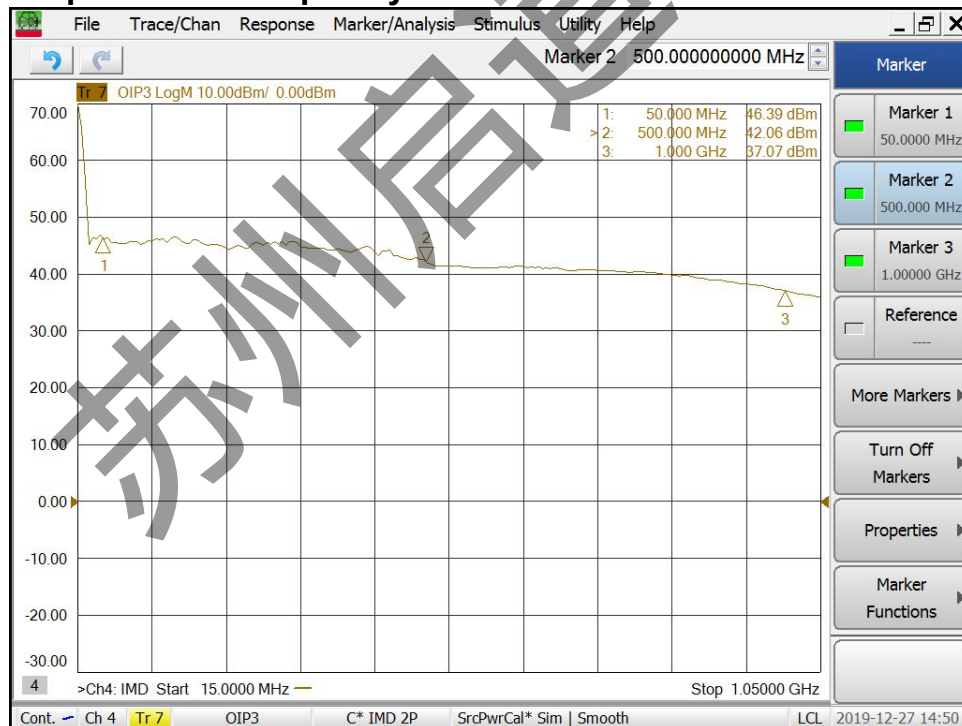
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### Output P1dB vs Frequency



### Output IP3 vs Frequency



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### Absolute Maximum Ratings

Parameter	Absolute Maximum
Supply Voltage	+13V
RF Input Power	+15dBm
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

### ESD Sensitive Material



### Outline

