

## ENA Series

## 50 – 8000MHz Low Noise Amplifier

### Features

- Frequency Range: 50-8000MHz
- Gain: 47dB
- P<sub>1dB</sub>: +19dBm
- OIP3: +30dBm
- Noise Figure: 2.0dB (typ.)
- DC Power: 12V @ 240mA
- Internally Voltage Regulated
- SMA-female

### Photo



### Description

ENA-320T is a high gain Low Noise Amplifier, with frequency range of 50 to 8000MHz.

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

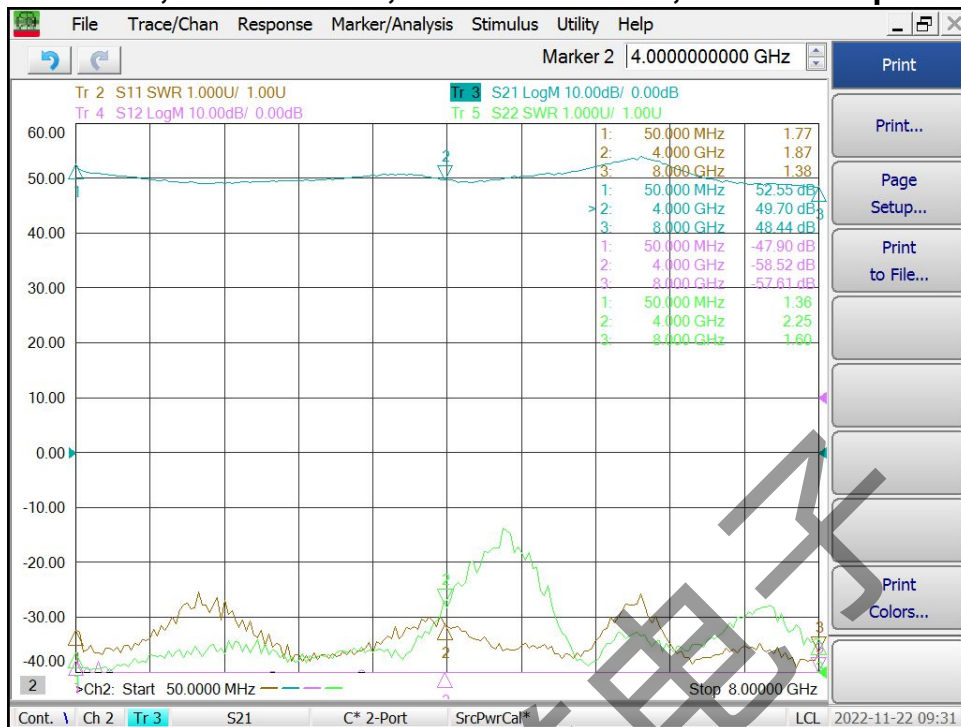
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	50		8000
Gain S <sub>21</sub>	f = 50MHz		52	
	f = 4000MHz	47	50	
	f = 8000MHz		48	
Gain Flatness	dB		±2.0	±3.0
Output Power P <sub>1dB</sub>	f = 4000MHz	+18	+19	
Output Third Order Intercept IP3	f = 4000MHz	+28	+30	
Noise Figure	f = 4000MHz		2.0	3.0
Reverse Isolation S <sub>12</sub>	f = 4000MHz	-50	-58	
Input VSWR S <sub>11</sub>	f = 4000MHz		1.9:1	2.5:1
Output VSWR S <sub>22</sub>	f = 4000MHz		2.2:1	2.8:1
DC Power Supply - Voltage	V	9	12	15
DC Power Supply - Current	mA		240	290

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

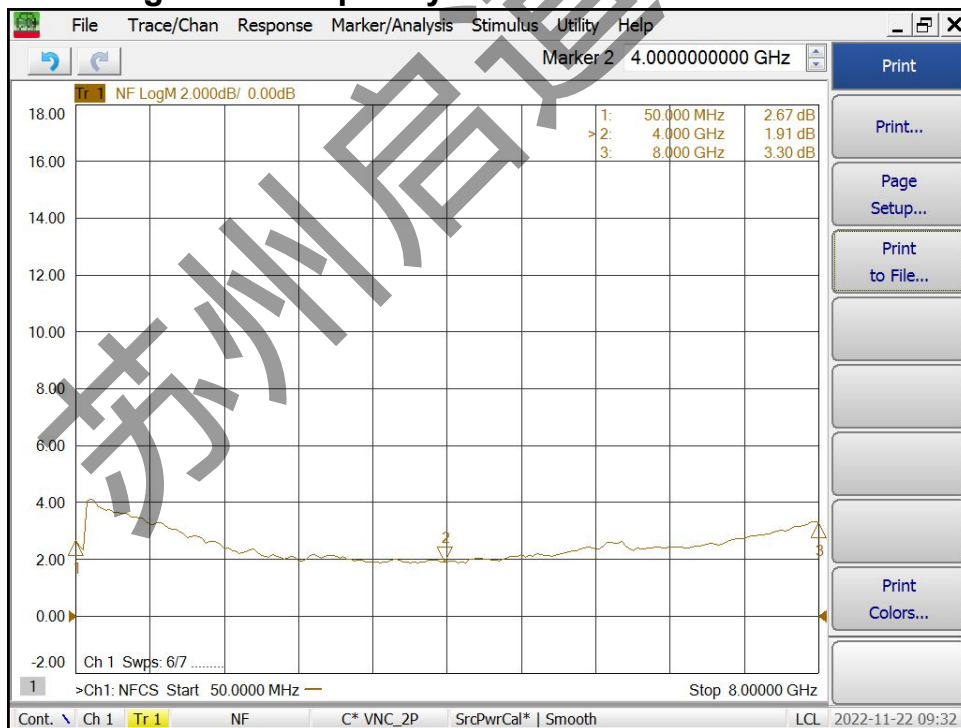
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### Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency



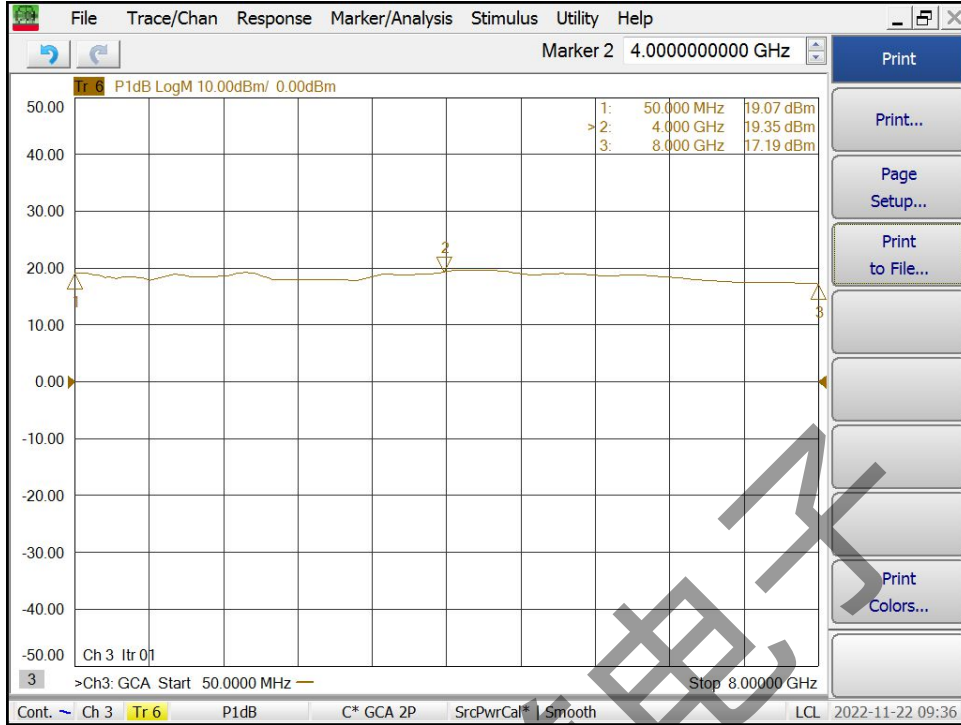
### Noise Figure vs Frequency



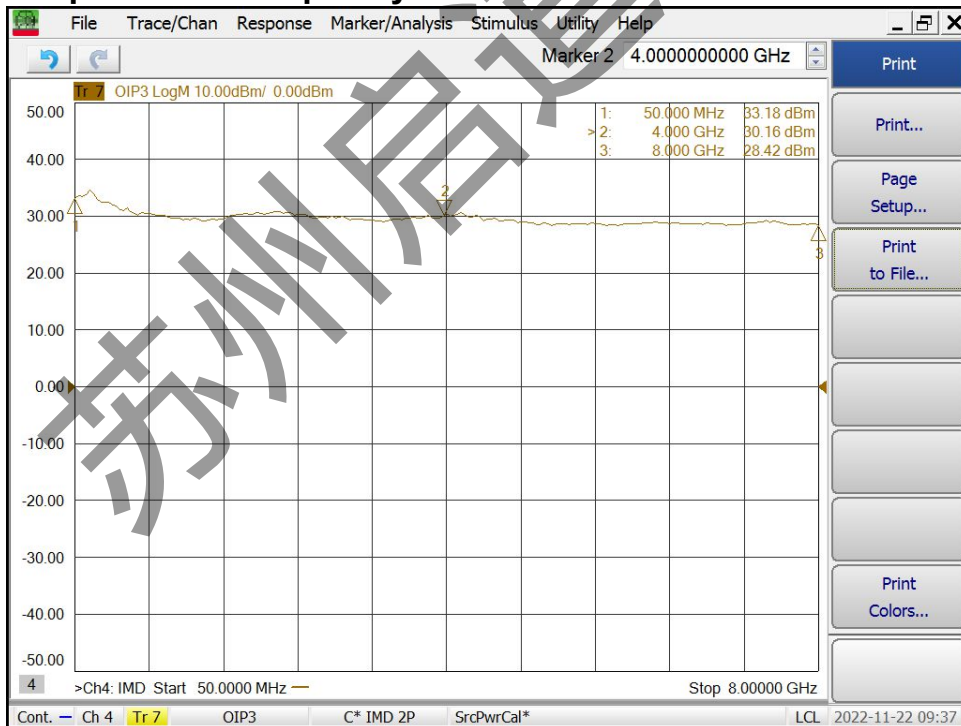
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**Output P1dB vs Frequency**



**Output IP3 vs Frequency**



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### Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	-10dBm
DC Supply Voltage	+20V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

### ESD Sensitive Material



### Outline

Unit: Inch [mm]

