

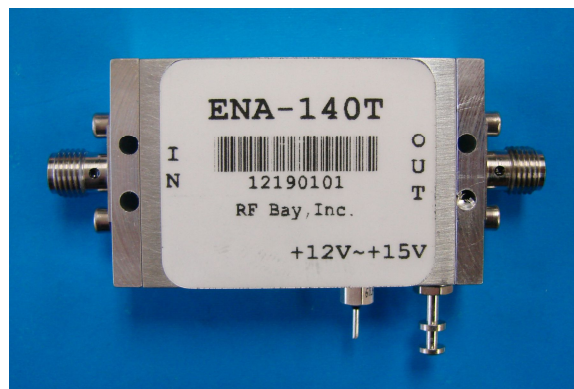
## ENA Series

## 50 – 1000MHz Low Noise Amplifier

### Features

- Frequency Range: 50-1000MHz
- Gain: 44dB
- P<sub>1dB</sub>: +26dBm
- OIP3: +40dBm
- Noise Figure: 0.7dB (typ.)
- DC Power: 12V or 15V @ 300mA
- Internally Voltage Regulated
- SMA-female

### Photo



### Description

ENA-140T is a high dynamic range Low Noise Amplifier, with frequency range of 50 to 1000MHz.

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

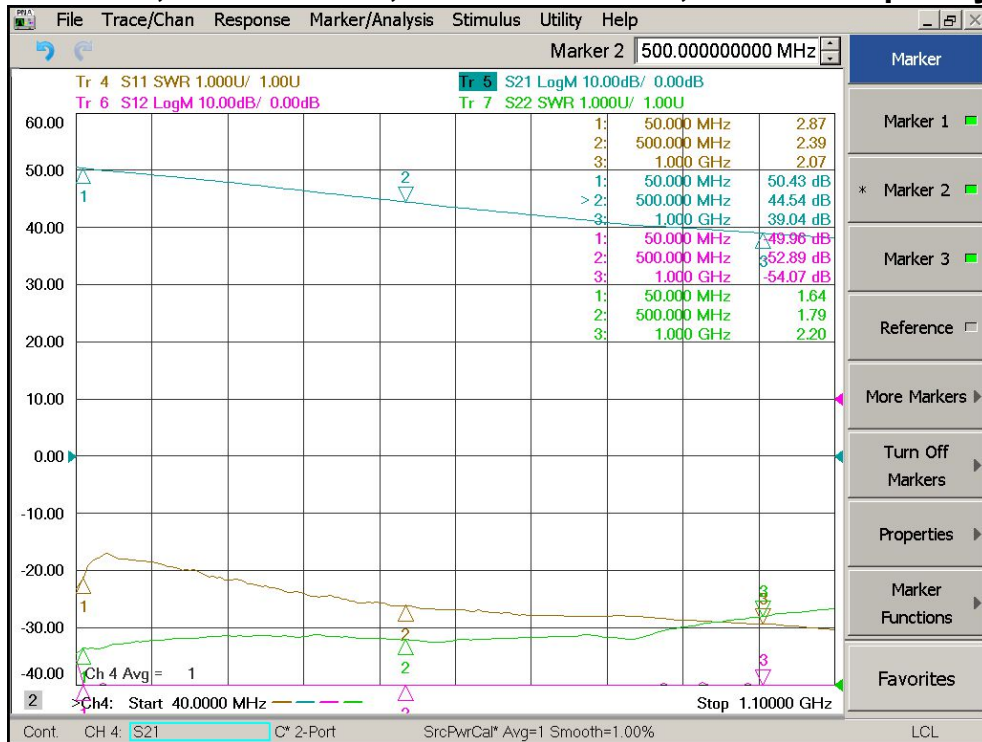
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	50		1000
Gain S <sub>21</sub>	f = 50MHz	48.5	50.0	
	f = 500MHz	43.0	44.5	
	f = 1000MHz	37.5	39.0	
Gain Flatness	dB		±5.5	±6.0
Output Power P <sub>1dB</sub>	f = 500MHz	+25	+26	
Saturated Output Power P <sub>Sat</sub>	f = 500MHz	+28	+29	
Output Third Order Intercept IP <sub>3</sub>	f = 500MHz	+38	+40	
Noise Figure	f = 500MHz		0.7	0.9
Reverse Isolation S <sub>12</sub>	f = 500MHz	-45	-50	
Input VSWR S <sub>11</sub>	f = 500MHz		2.5:1	3.0:1
Output VSWR S <sub>22</sub>	f = 500MHz		1.8:1	2.3:1
DC Power Supply - voltage	V	11	12	15
DC Power Supply - current	mA		300	350

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

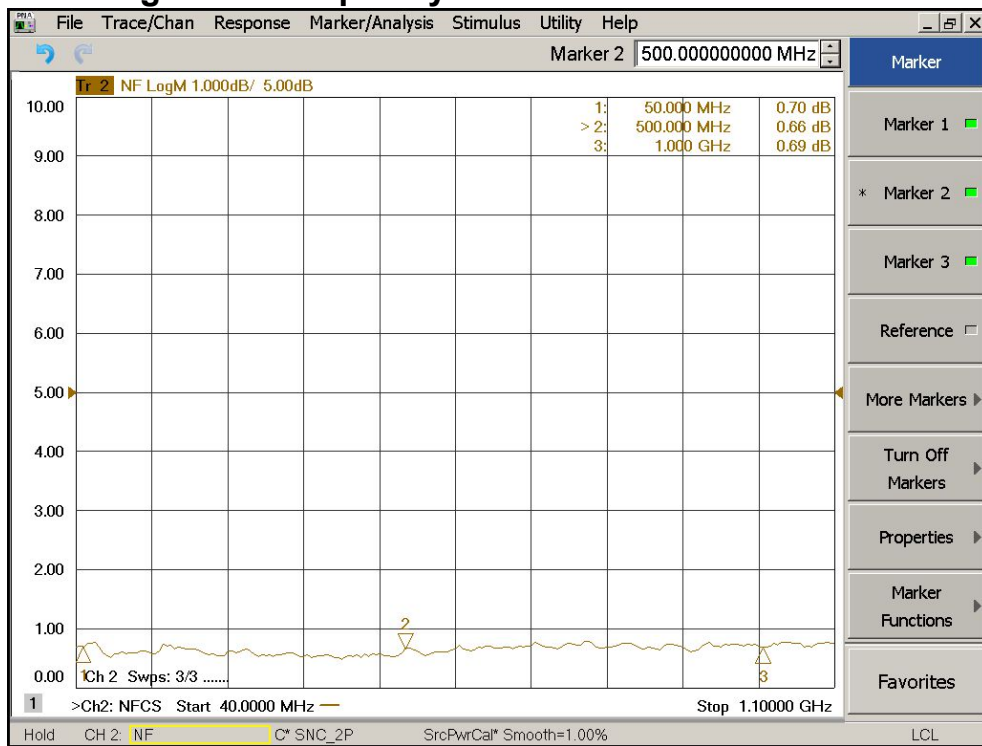
**ENA Series**

**50 – 1000MHz Low Noise Amplifier**

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



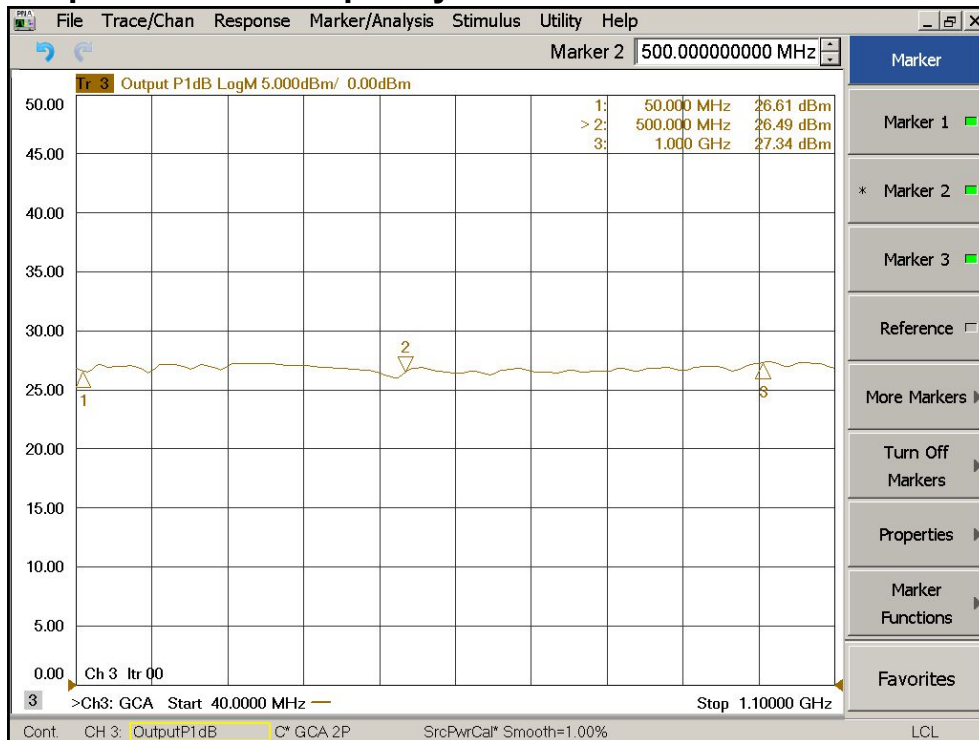
**Noise Figure vs Frequency**



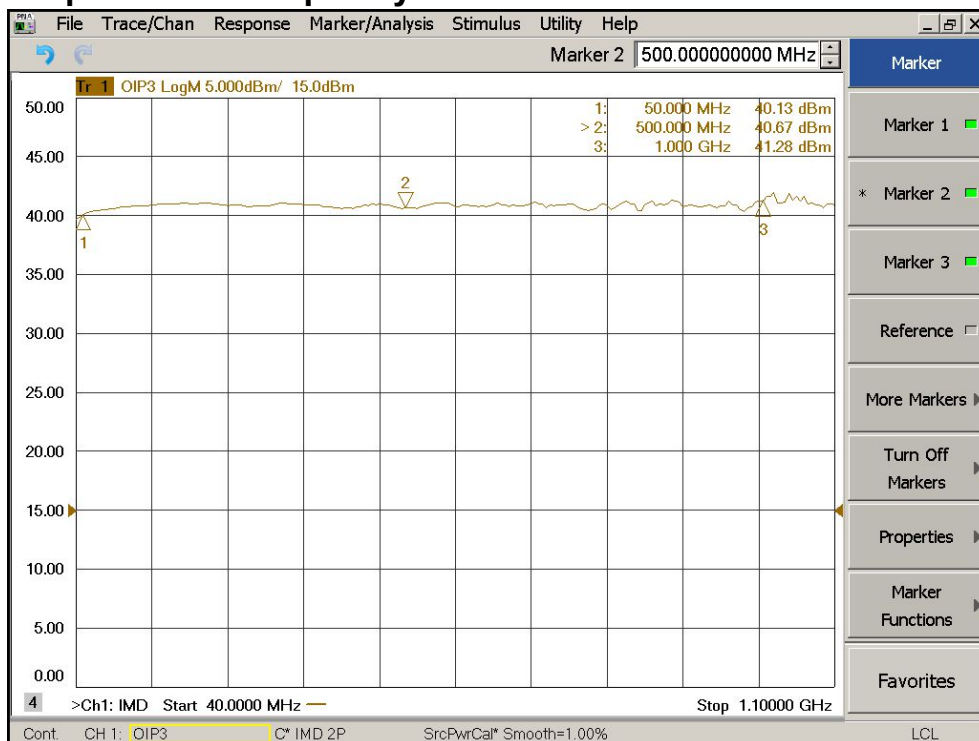
**ENA Series**

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**Output P1dB vs Frequency**



**Output IP3 vs Frequency**



## ENA Series

## 50 – 1000MHz Low Noise Amplifier

### Absolute Maximum Ratings

Parameter	Absolute Maximum
Supply Voltage	+20V
RF Input Power	+22dBm
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

### ESD Sensitive Material



### Outline

