

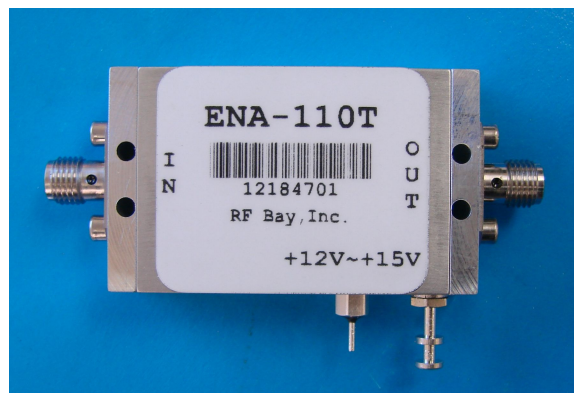
## ENA Series

## 20 – 600MHz Low Noise Amplifier

### Features

- Frequency Range: 20-600MHz
- Gain: 38dB
- P<sub>1dB</sub>: +29dBm
- OIP3: +44dBm
- Noise Figure: 1.0dB (typ.)
- DC Power: 12V to 15V @ 400mA
- SMA-female

### Photo



### Description

ENA-110T is a high dynamic range Low Noise Amplifier, with frequency range of 20 to 600MHz.

### Electrical Specifications @+25 °C, Z<sub>in</sub>=Z<sub>out</sub>=50 Ω, DC Supply = +15VDC

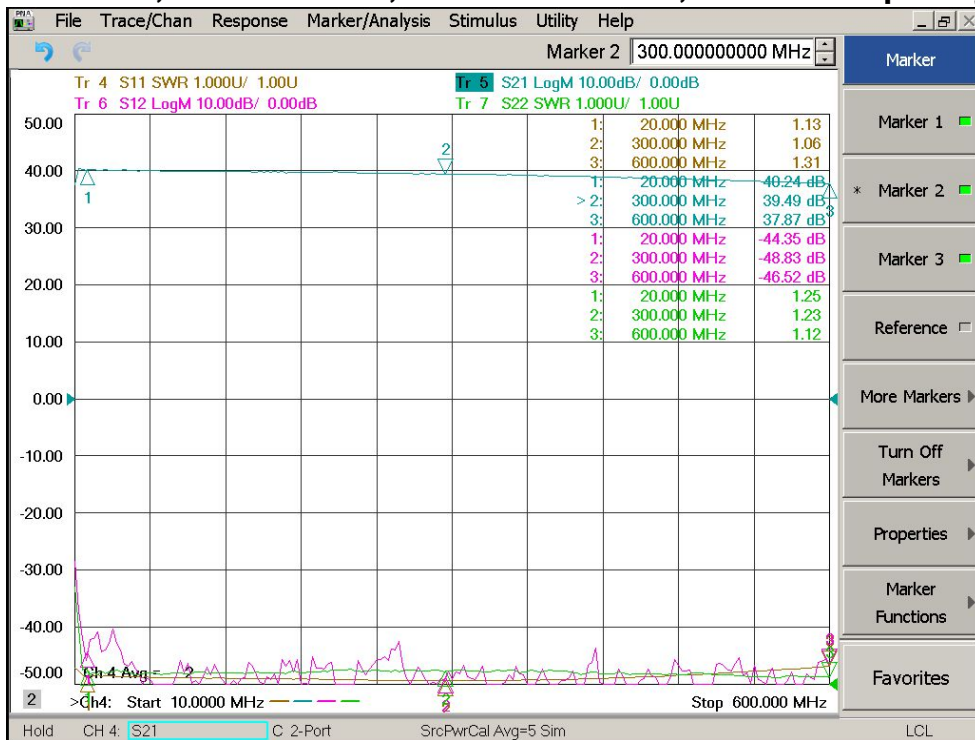
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	20		600
Gain S <sub>21</sub>				
f = 20MHz	dB	38.5	40.0	
f = 300MHz	dB	38.0	39.5	
f = 600MHz	dB	36.0	37.8	
Gain Flatness	dB		±1.2	±1.5
Output Power P <sub>1dB</sub>	f = 300MHz	dBm	+27	+29
Saturated Output Power P <sub>Sat</sub>	f = 300MHz	dBm	+28	+30
Output Third Order Intercept IP <sub>3</sub>	f = 300MHz	dBm	+42	+44
Noise Figure	f = 300MHz	dB	1.0	1.3
Reverse Isolation S <sub>12</sub>	f = 300MHz	dB	-45	-48
Input VSWR S <sub>11</sub>	f = 300MHz		1.2:1	1.5:1
Output VSWR S <sub>22</sub>	f = 300MHz		1.2:1	1.5:1
DC Power Supply - voltage	V	12	15	
DC Power Supply - current	mA		400	450

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

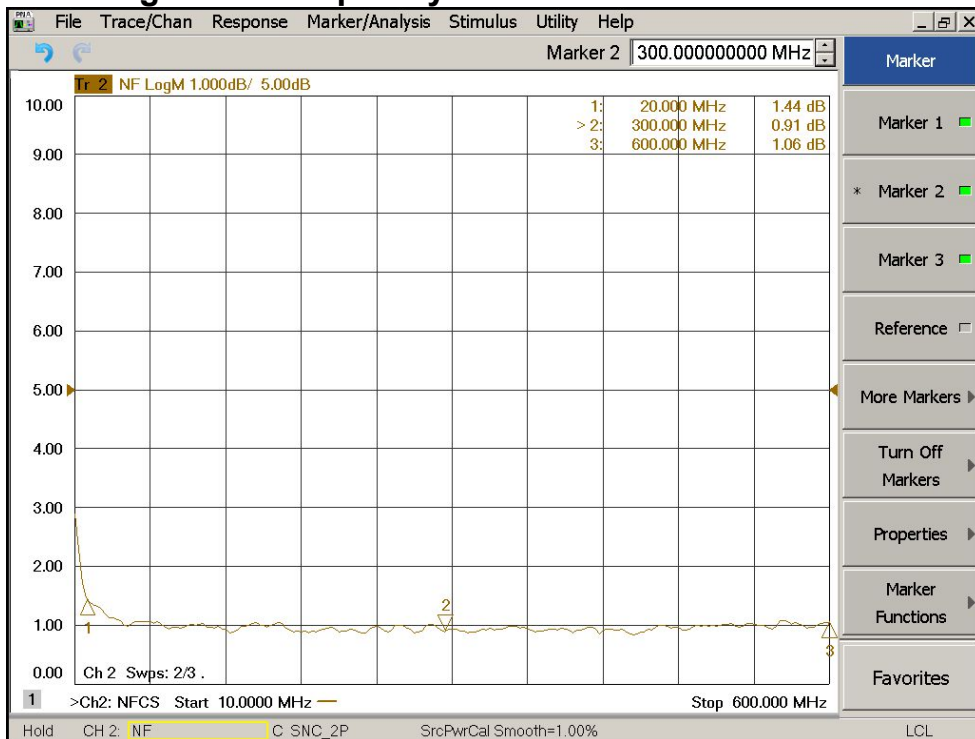
**ENA Series**

**20 – 600MHz Low Noise Amplifier**

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



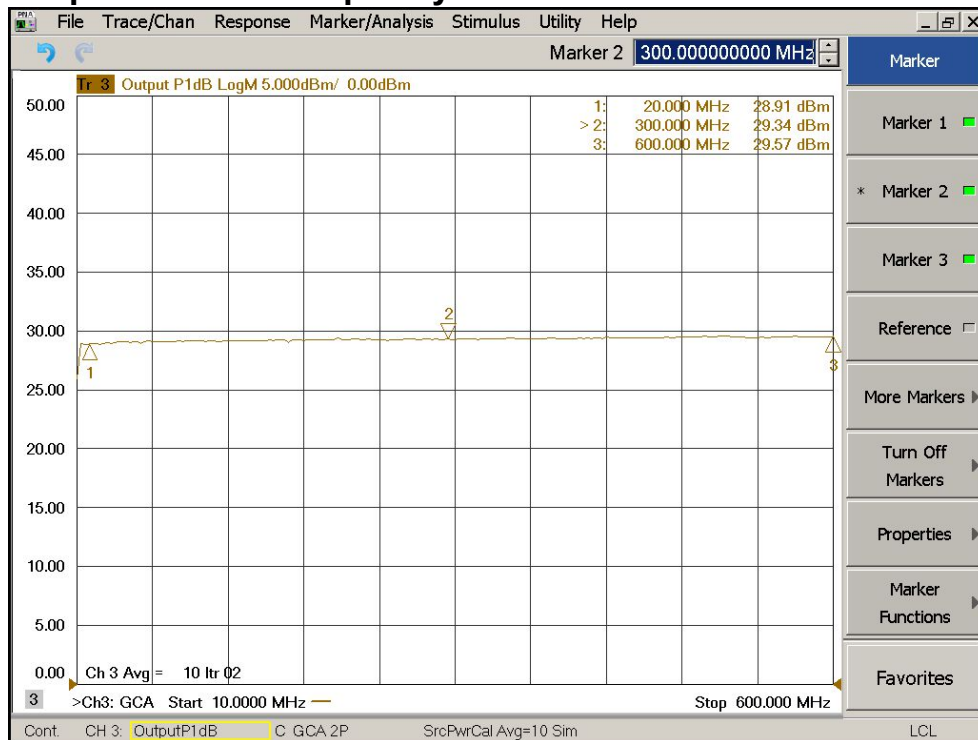
**Noise Figure vs Frequency**



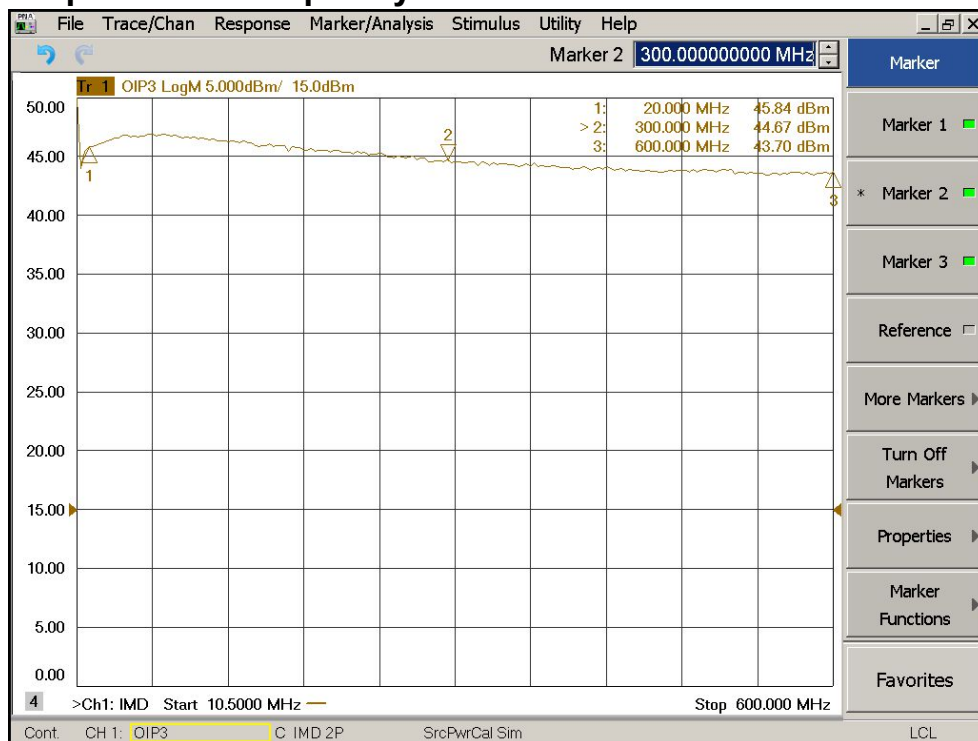
**ENA Series**

**20 – 600MHz Low Noise Amplifier**

**Output P1dB vs Frequency**



**Output IP3 vs Frequency**



## ENA Series

## 20 – 600MHz Low Noise Amplifier

### Absolute Maximum Ratings

Parameter	Absolute Maximum
Supply Voltage	+20V
RF Input Power	15dBm
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

### ESD Sensitive Material



### Outline

