

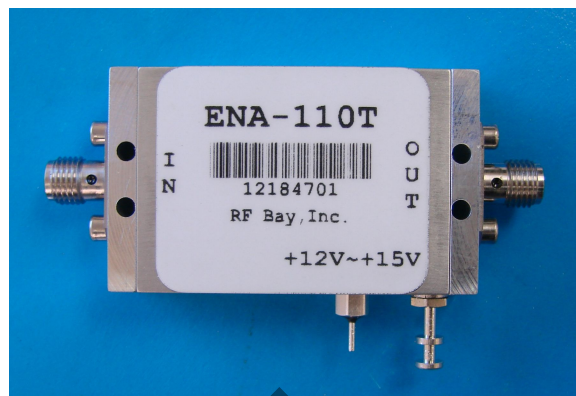
ENA Series

20 – 600MHz Low Noise Amplifier

Features

- Frequency Range: 20-600MHz
- Gain: 38dB
- P_{1dB} : +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, $Z_{in}=Z_{out}=50 \Omega$, DC Supply = +15VDC

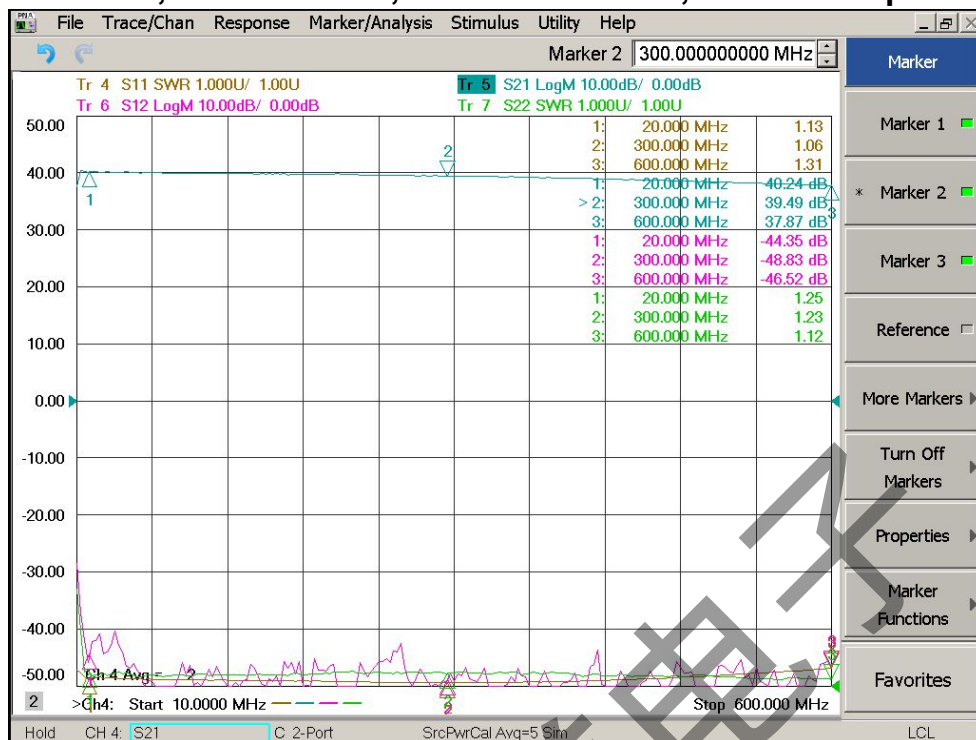
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	20		600
Gain S21	f = 20MHz	dB	38.5	40.0
	f = 300MHz	dB	38.0	39.5
	f = 600MHz	dB	36.0	37.8
Gain Flatness	dB		±1.2	±1.5
Output Power P_{1dB}	f = 300MHz	dBm	+27	+29
Saturated Output Power P_{Sat}	f = 300MHz	dBm	+28	+30
Output Third Order Intercept IP3	f = 300MHz	dBm	+42	+44
Noise Figure	f = 300MHz	dB	1.0	1.3
Reverse Isolation S12	f = 300MHz	dB	-45	-48
Input VSWR S11	f = 300MHz		1.2:1	1.5:1
Output VSWR S22	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

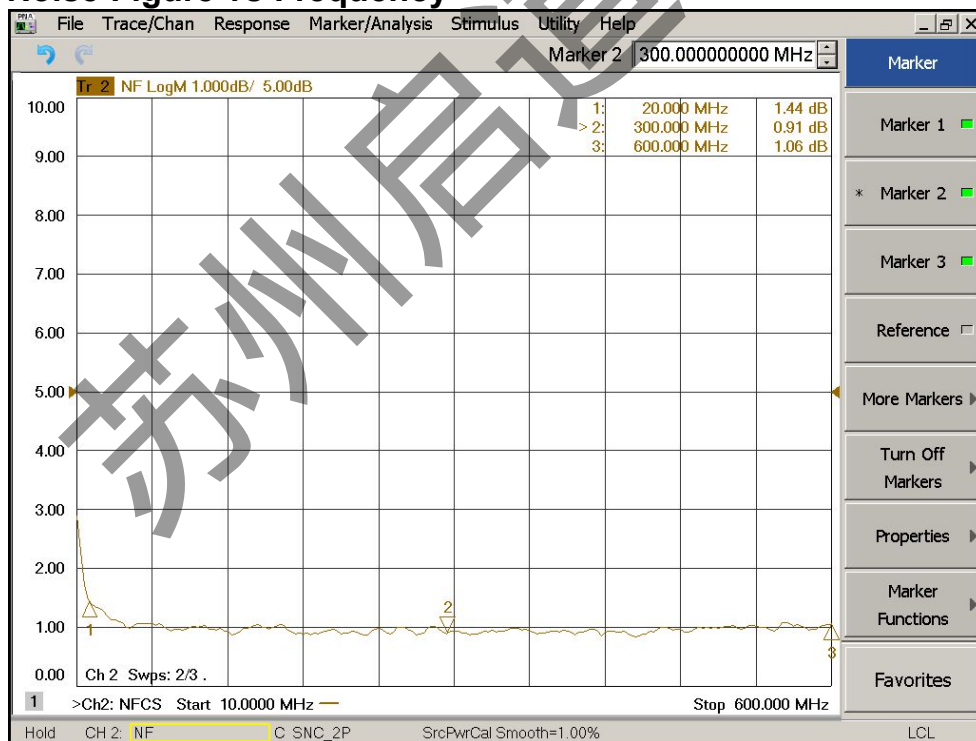
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Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency



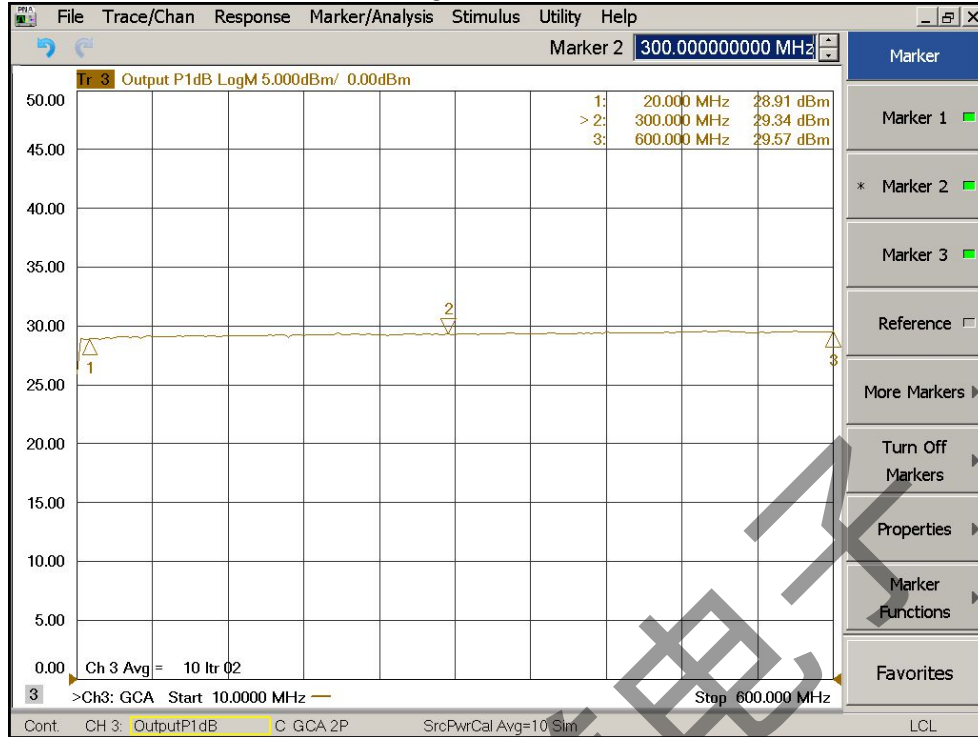
Noise Figure vs Frequency



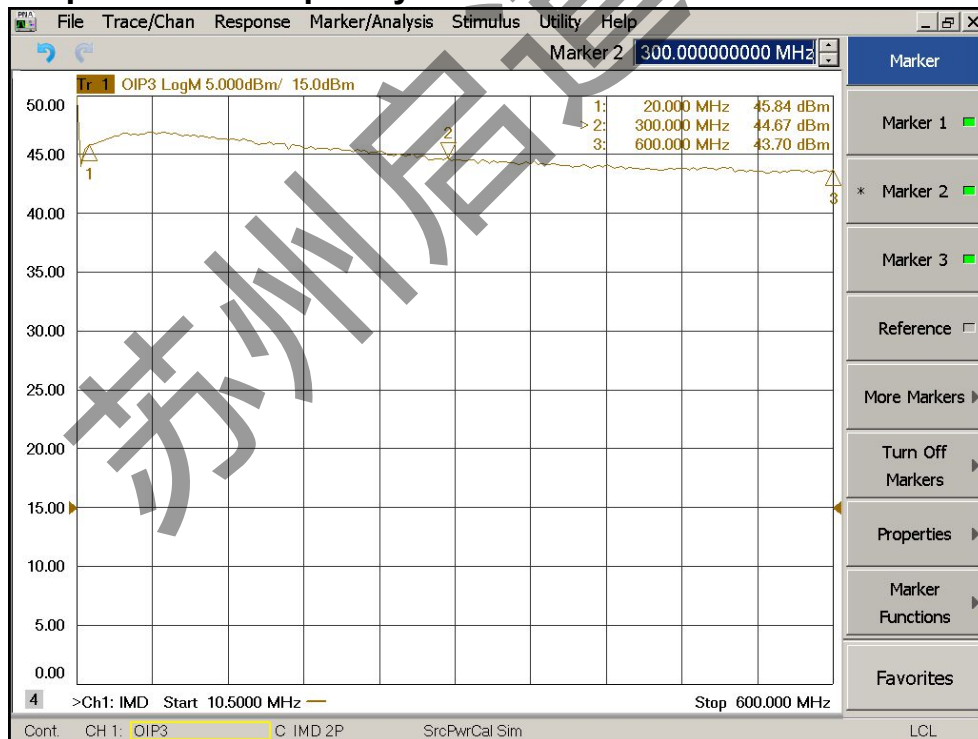
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Output P1dB vs Frequency



Output IP3 vs Frequency



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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

