

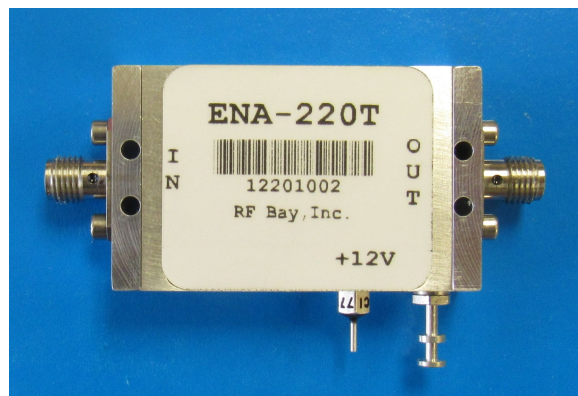
ENA Series

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

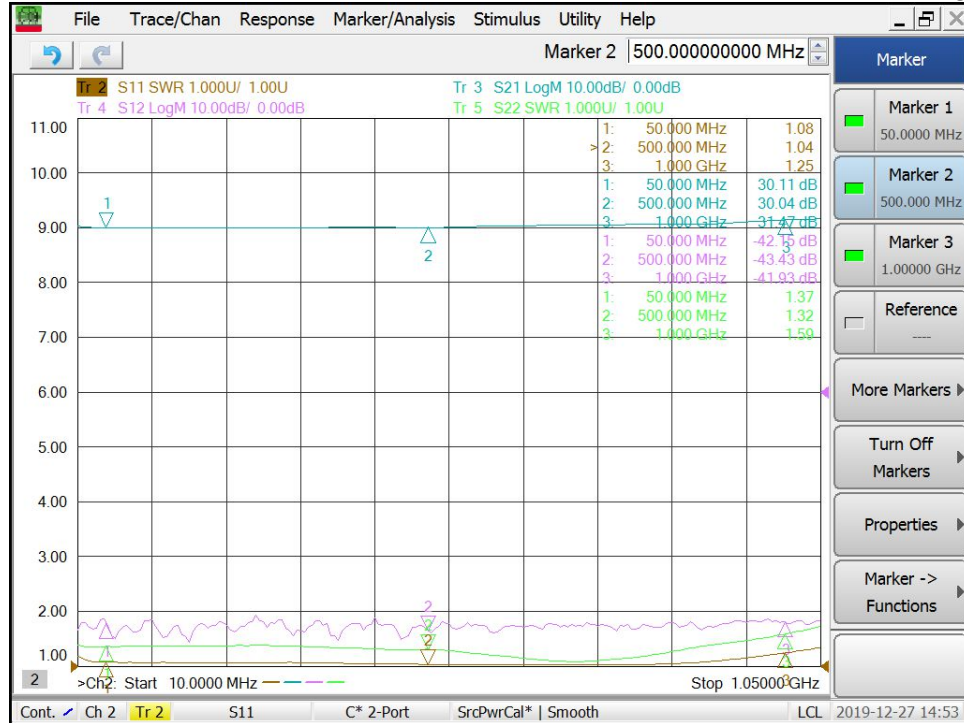
ENA-220T is a high dynamic range Low Noise Amplifier, with frequency range of 10 to 1000MHz.

Electrical Specifications @+25 °C, Z_{in}=Z_{out}=50 Ω, DC Supply = +12VDC

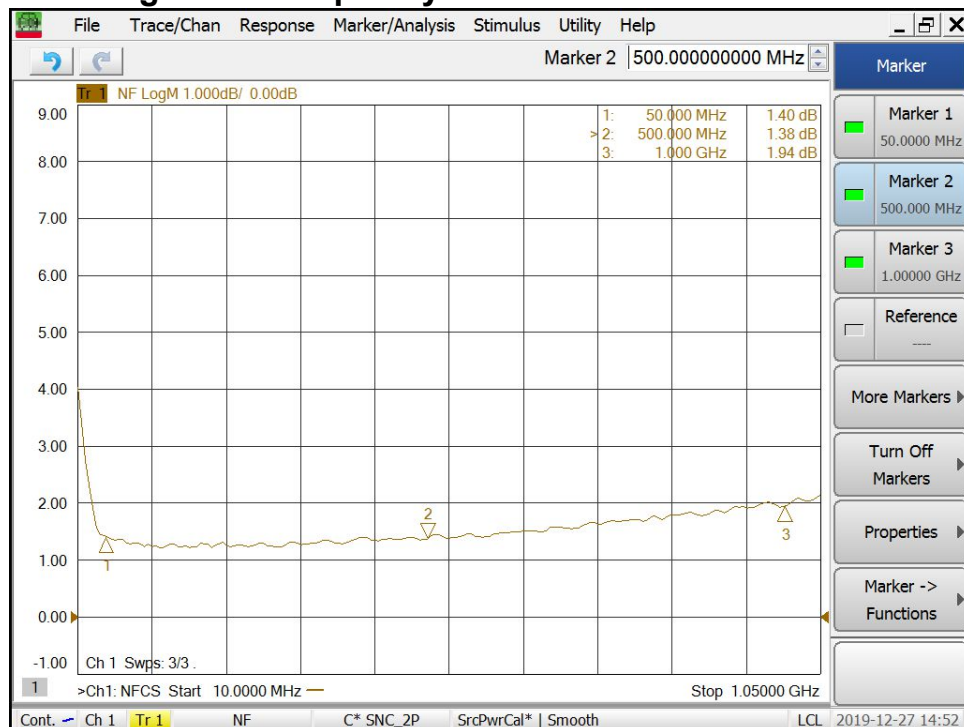
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	10		1000
Gain S ₂₁	f = 10MHz	28	30	
	f = 500MHz	28	30	
	f = 1000MHz	29	31	
Gain Flatness	dB		±0.7	±1.0
Output Power P _{1dB}	f = 500MHz	+28	+29	
Saturated Output Power P _{Sat}	f = 500MHz	+29	+30	
Output Third Order Intercept IP3	f = 500MHz	+40	+42	
Noise Figure	f = 500MHz		1.4	1.7
Reverse Isolation S ₁₂	f = 500MHz	-40	-43	
Input VSWR S ₁₁	f = 500MHz		1.2:1	1.8:1
Output VSWR S ₂₂	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

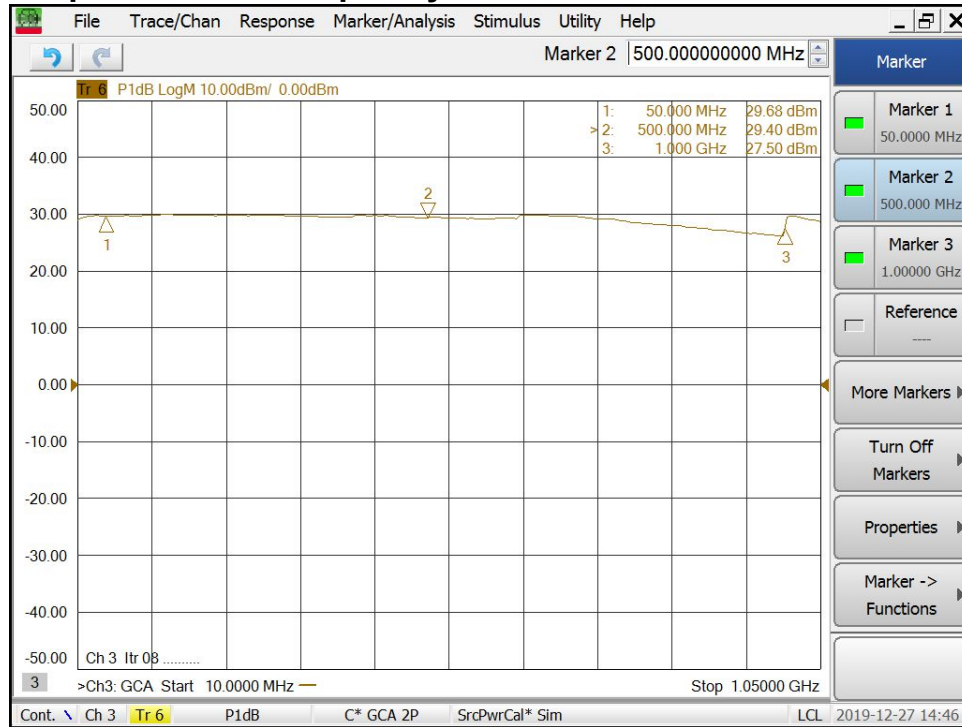
Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency



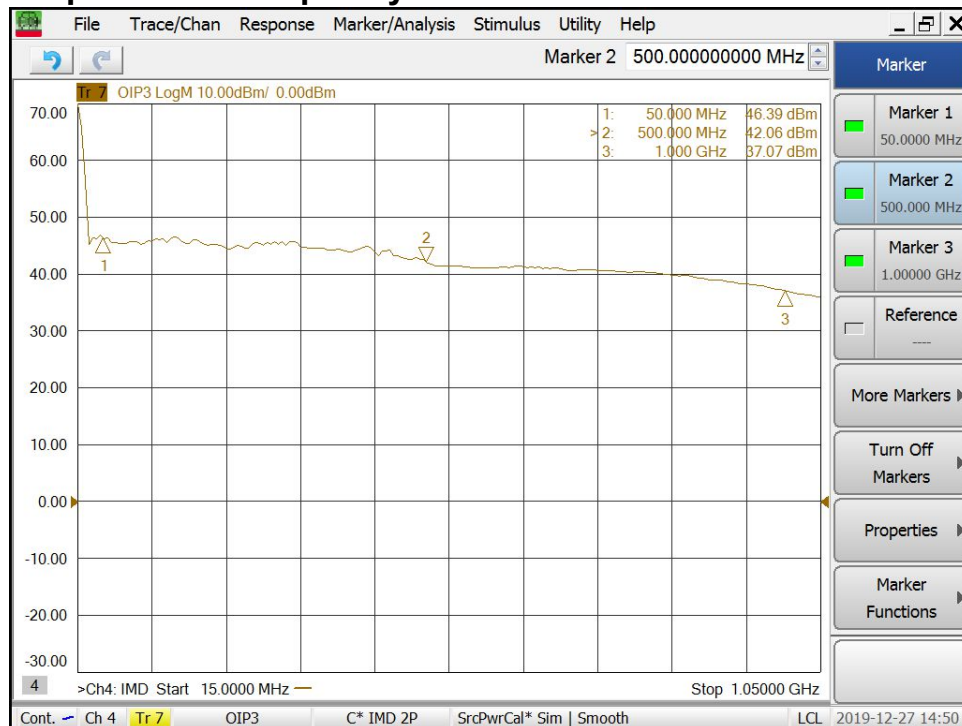
Noise Figure vs Frequency



Output P1dB vs Frequency



Output IP3 vs Frequency



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10 – 1000MHz Low Noise Amplifier

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

