

ENA Series

10 – 1000MHz Low Noise Amplifier

Features

- Frequency Range: 10-1000MHz
- Gain: 33dB
- P_{1dB}: +27dBm
- OIP3: +41dBm
- Noise Figure: 1.3dB (typ.)
- DC Power: 12V to 15V @ 260mA
- Internally Voltage Regulated
- SMA-female

Photo



Description

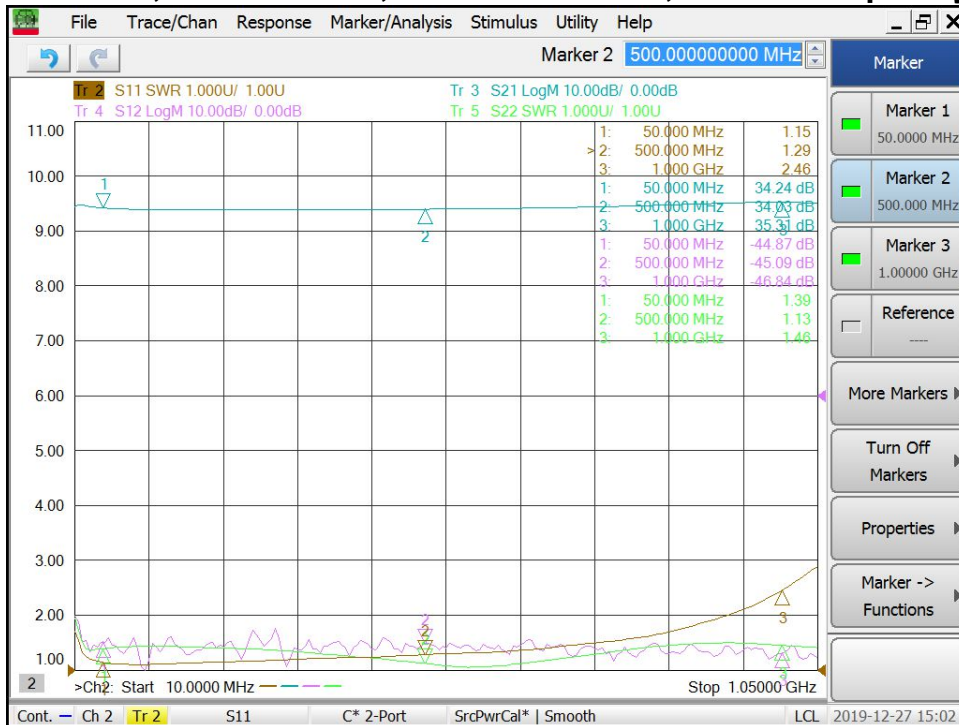
ENA-210T is a high dynamic range Low Noise Amplifier, with frequency range of 10 to 1000MHz.

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

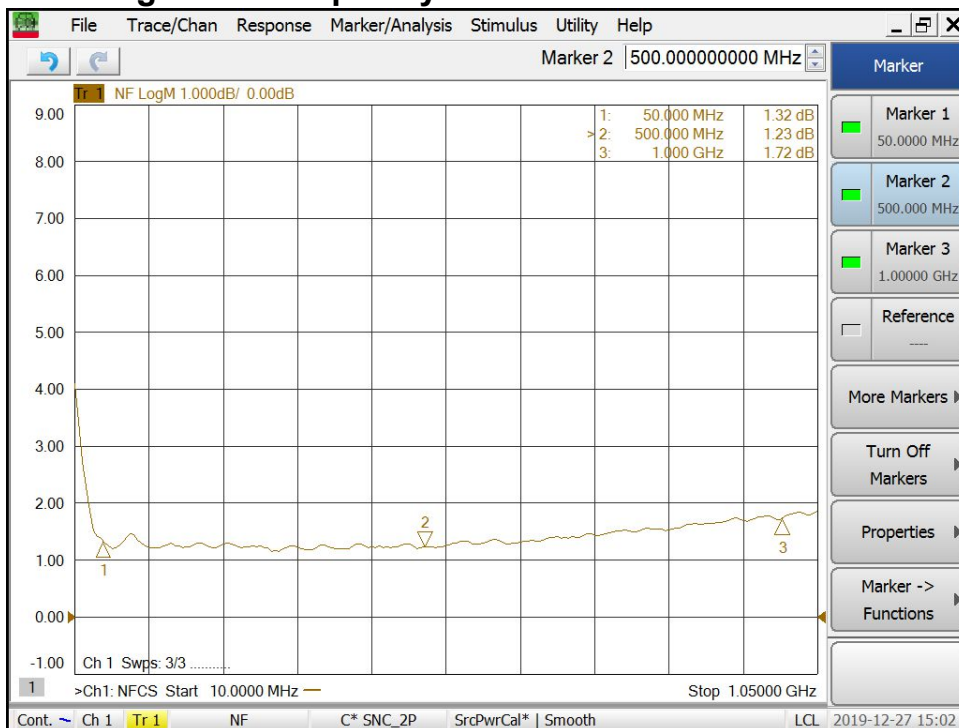
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	10		1000
Gain S ₂₁	f = 10MHz	dB	33	34
	f = 500MHz	dB	33	34
	f = 1000MHz	dB	33	35
Gain Flatness	dB		±0.7	±1.0
Output Power P _{1dB}	f = 500MHz	dBm	+26	+27
Saturated Output Power P _{Sat}	f = 500MHz	dBm	+27	+28
Output Third Order Intercept IP ₃	f = 500MHz	dBm	+39	+41
Noise Figure	f = 500MHz	dB	1.3	1.5
Reverse Isolation S ₁₂	f = 500MHz	dB	-42	-45
Input VSWR S ₁₁	f = 500MHz		1.3:1	1.8:1
Output VSWR S ₂₂	f = 500MHz		1.3:1	1.8:1
DC Power Supply - voltage	V	11	12	15
DC Power Supply - current	mA		260	300

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

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



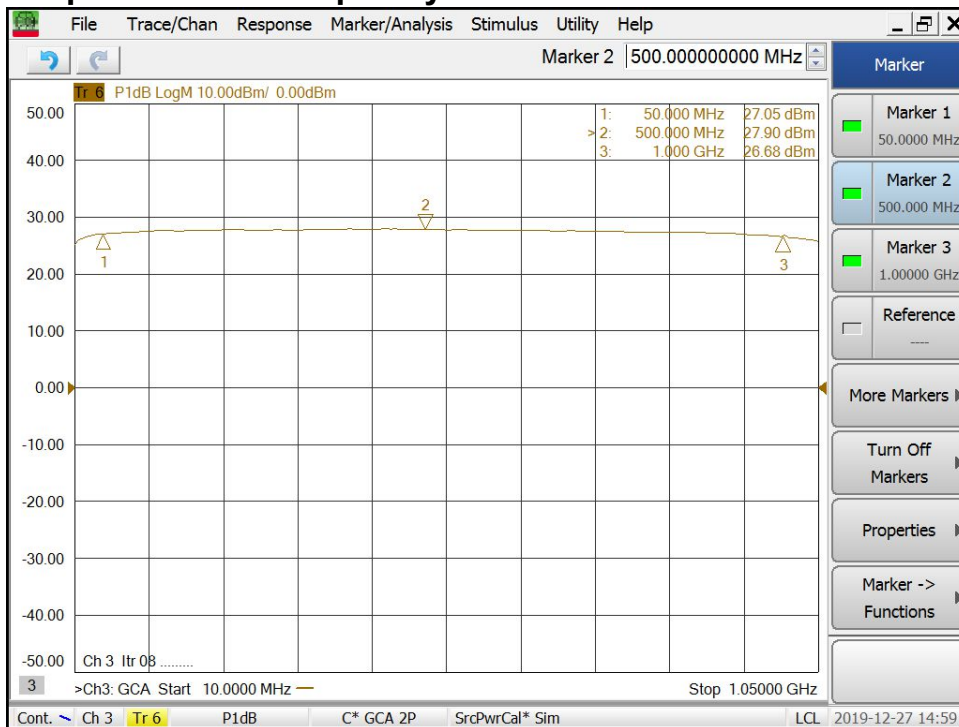
Noise Figure vs Frequency



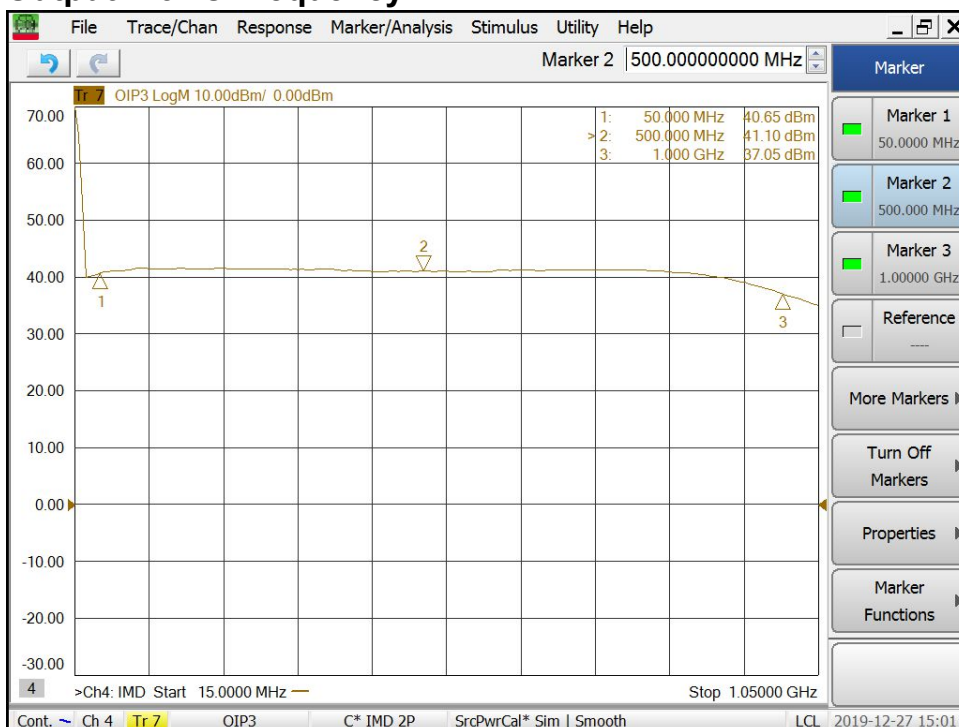
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Output P1dB vs Frequency



Output IP3 vs Frequency



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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

