

ENA Series

50 – 8000MHz Low Noise Amplifier

Features

- Frequency Range: 50-8000MHz
- Gain: 47dB
- P_{1dB}: +19dBm
- OIP3: +30dBm
- Noise Figure: 2.0dB (typ.)
- DC Power: 12V @ 240mA
- Internally Voltage Regulated
- SMA-female

Photo



Description

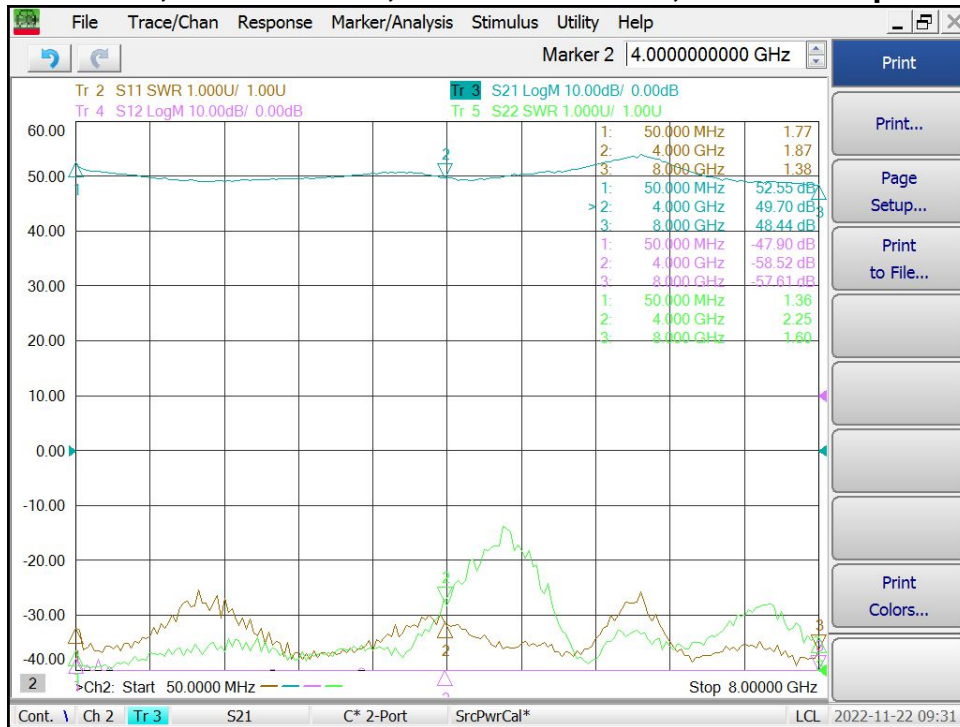
ENA-320T is a high gain Low Noise Amplifier, with frequency range of 50 to 8000MHz.

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

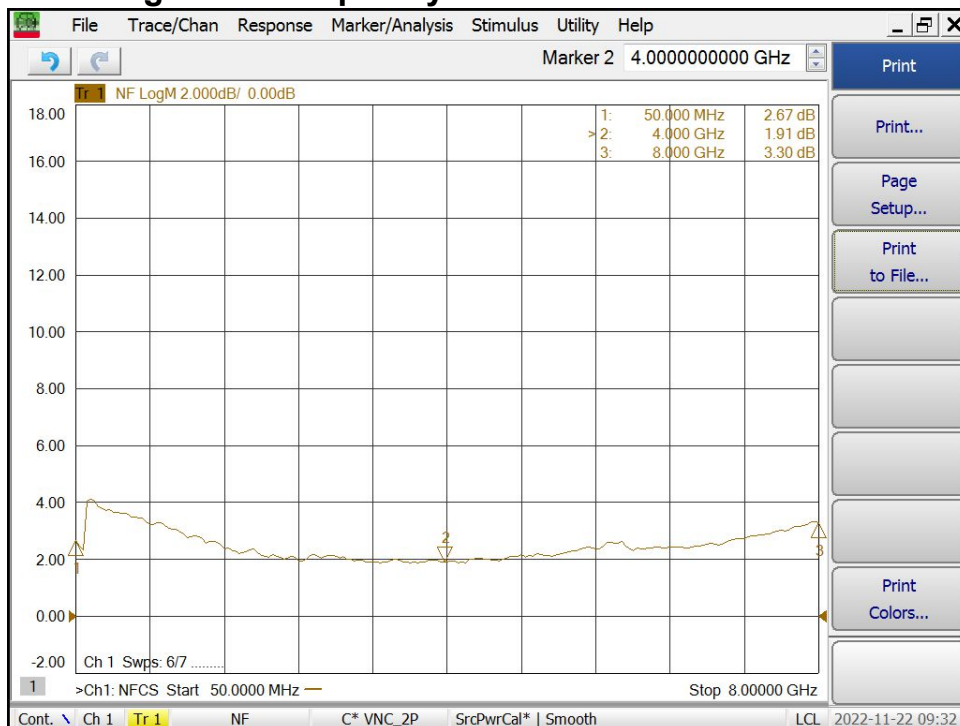
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	50		8000
Gain S ₂₁	f = 50MHz		52	
	f = 4000MHz	47	50	
	f = 8000MHz		48	
Gain Flatness	dB		±2.0	±3.0
Output Power P _{1dB}	f = 4000MHz	+18	+19	
Output Third Order Intercept IP3	f = 4000MHz	+28	+30	
Noise Figure	f = 4000MHz		2.0	3.0
Reverse Isolation S ₁₂	f = 4000MHz	-50	-58	
Input VSWR S ₁₁	f = 4000MHz		1.9:1	2.5:1
Output VSWR S ₂₂	f = 4000MHz		2.2:1	2.8:1
DC Power Supply - Voltage	V	9	12	15
DC Power Supply - Current	mA		240	290

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

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



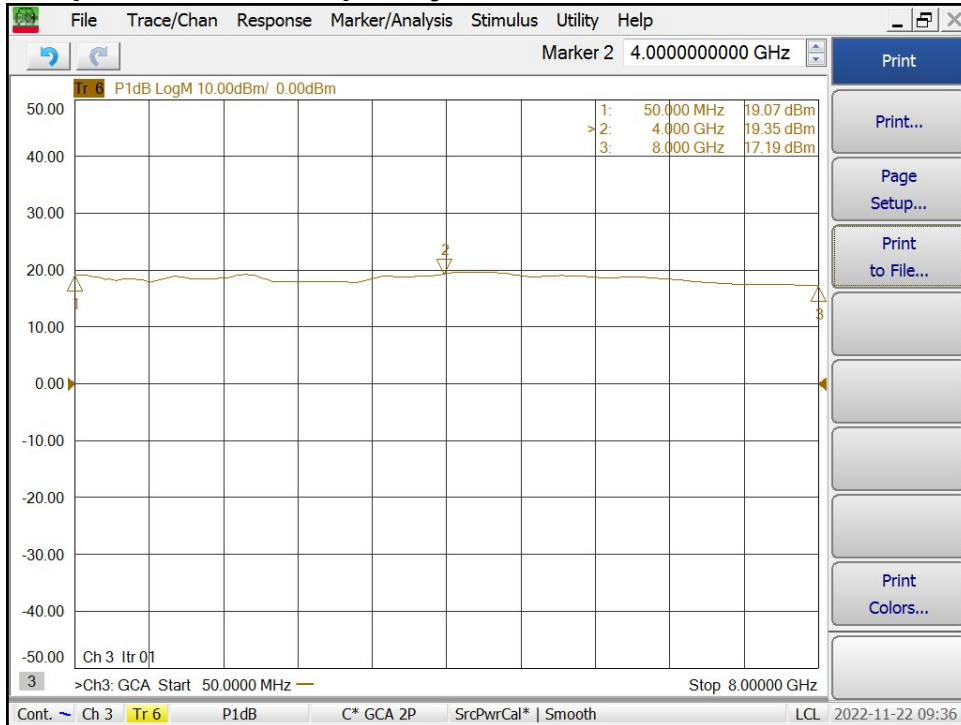
Noise Figure vs Frequency



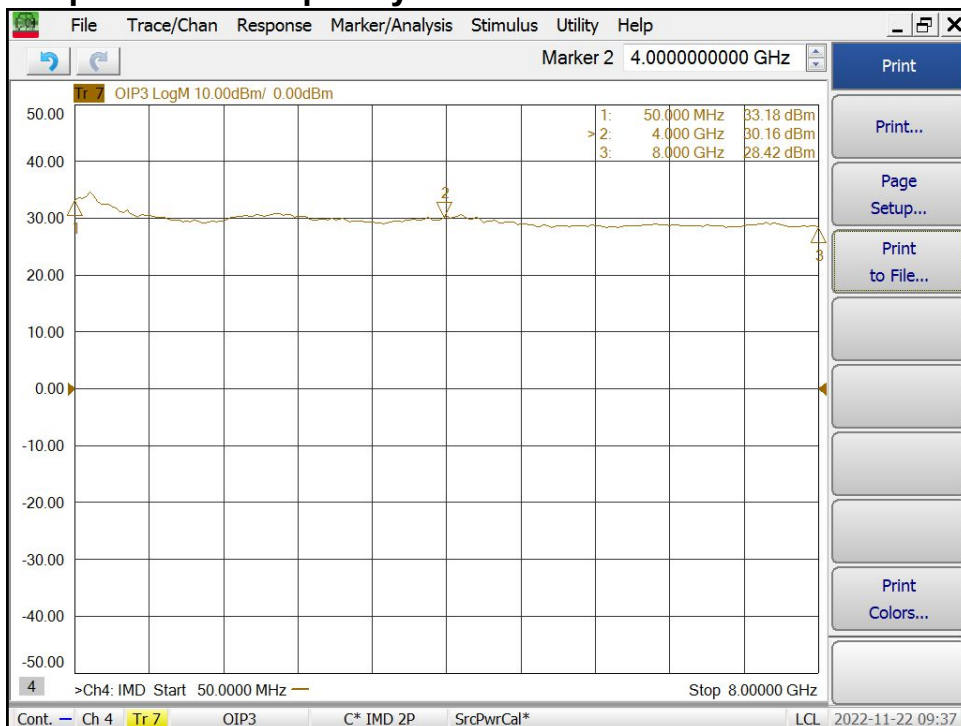
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Output P1dB vs Frequency



Output IP3 vs Frequency



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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	-10dBm
DC Supply Voltage	+20V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

ESD Sensitive Material



Outline

Unit: Inch [mm]

