

ENA Series

30 – 6000MHz Low Noise Amplifier

Features

- Frequency Range: 30-6000MHz
- Gain: 47dB
- P_{1dB}: +21dBm
- OIP3: +35dBm
- Noise Figure: 2.7dB (typ.)
- DC Power: 12V @ 250mA
- Internally Voltage Regulated
- SMA-female

Photo



Description

ENA-300T is a high gain Low Noise Amplifier, with frequency range of 30 to 6000MHz.

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

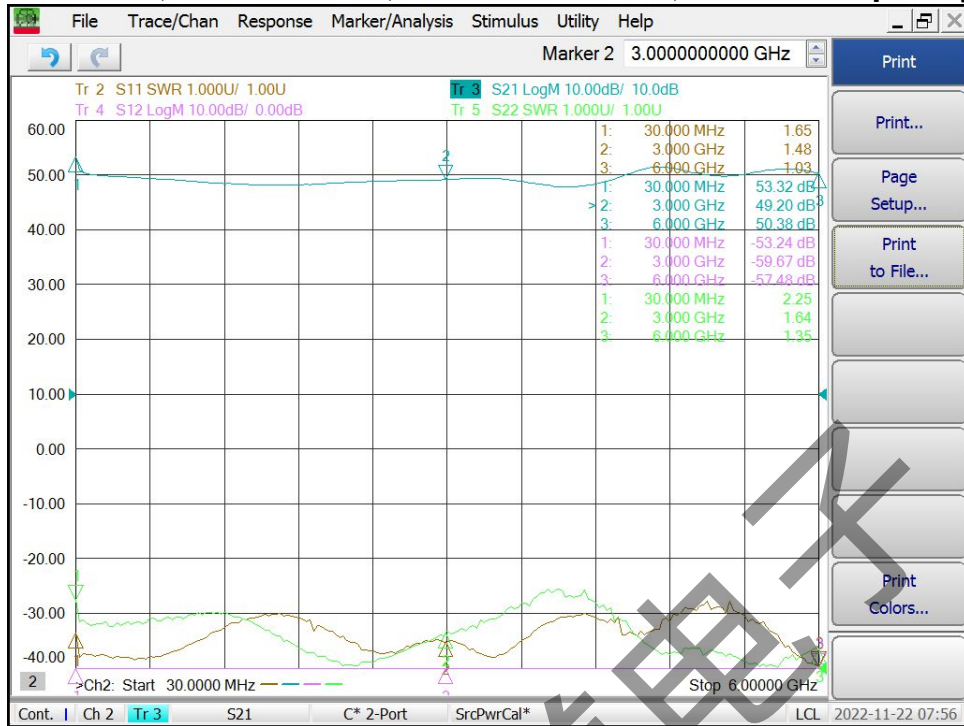
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	30		6000
Gain S ₂₁	f = 30MHz	47	53	
	f = 3000MHz	47	49	
	f = 6000MHz	47	50	
Gain Flatness	dB		±2.0	±3.0
Output Power P _{1dB}	f = 3000MHz	+20	+21	
Output Third Order Intercept IP ₃	f = 3000MHz	+33	+35	
Noise Figure	f = 3000MHz		2.7	3.5
Reverse Isolation S ₁₂	f = 3000MHz	-50	-60	
Input VSWR S ₁₁	f = 3000MHz		1.5:1	2.5:1
Output VSWR S ₂₂	f = 3000MHz		1.7:1	2.5:1
DC Power Supply - Voltage	V	9	12	15
DC Power Supply - Current	mA		250	300

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

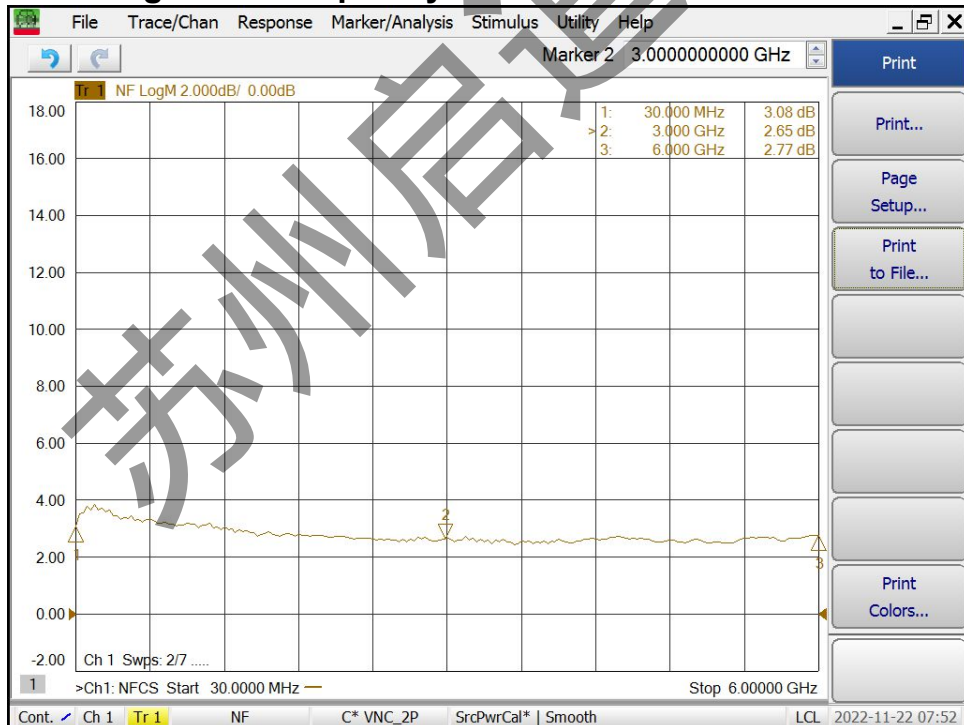
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Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency



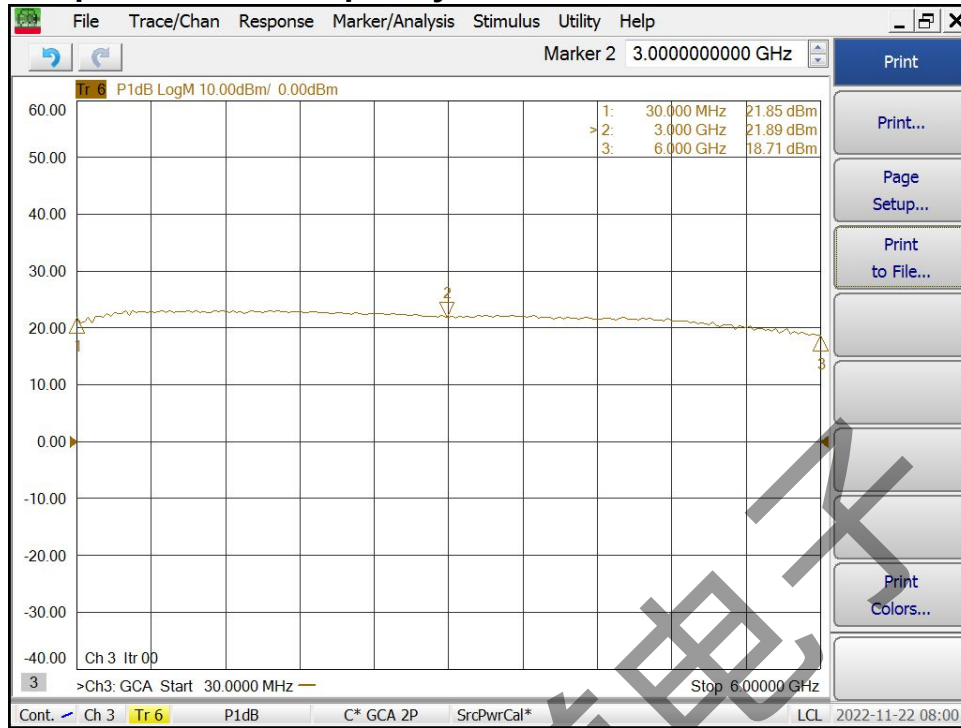
Noise Figure vs Frequency



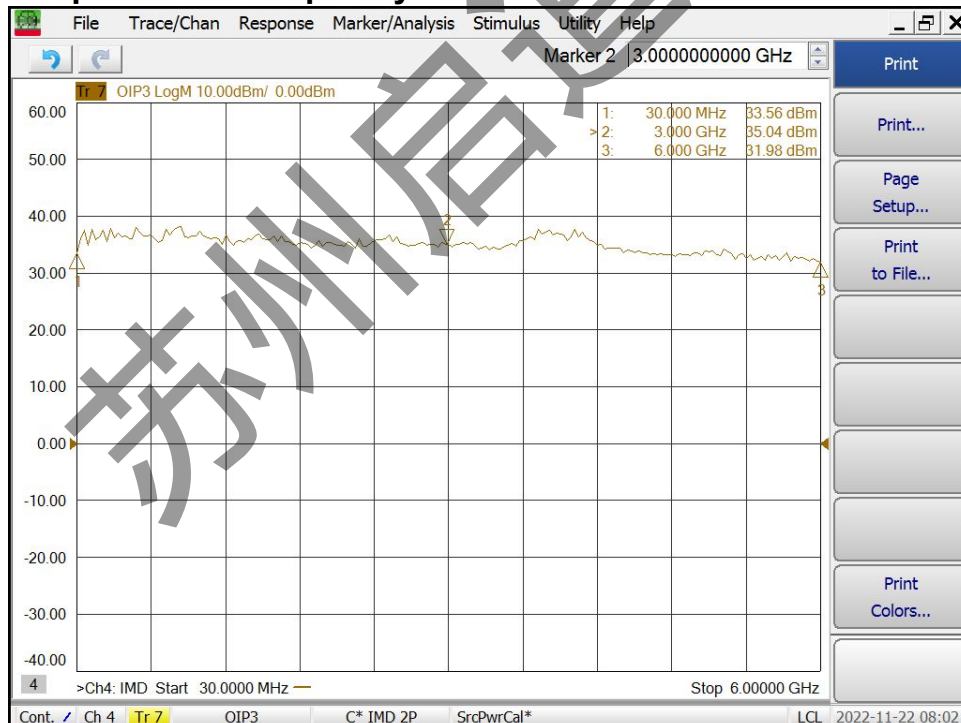
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Output P1dB vs Frequency



Output IP3 vs Frequency



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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	-3dBm
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]

