

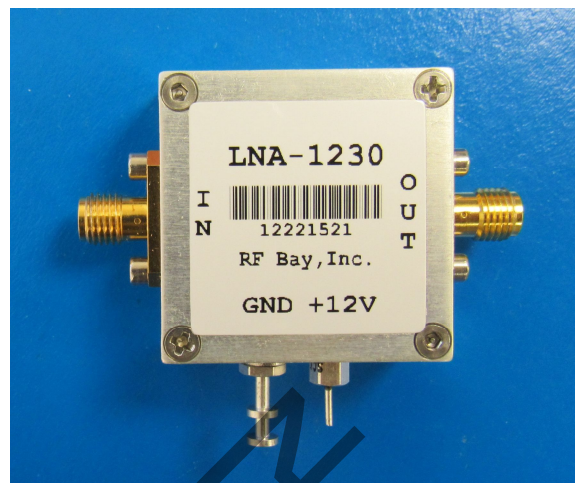
LNA Series

30 – 1200MHz Low Noise Amplifier

Features

- Frequency Range: 30 - 1200MHz
- Gain: 30dB
- P_{1dB}: +18dBm
- IP3: +32dBm
- Noise Figure: 1.7dB
- DC Power: 12V/105mA
- Internal Voltage Regulated
- Reverse DC Protected
- SMA Connector

Picture



Description

LNA-1230 is a flat response Low Noise Amplifier operates in frequency range from 30MHz to 1200MHz.

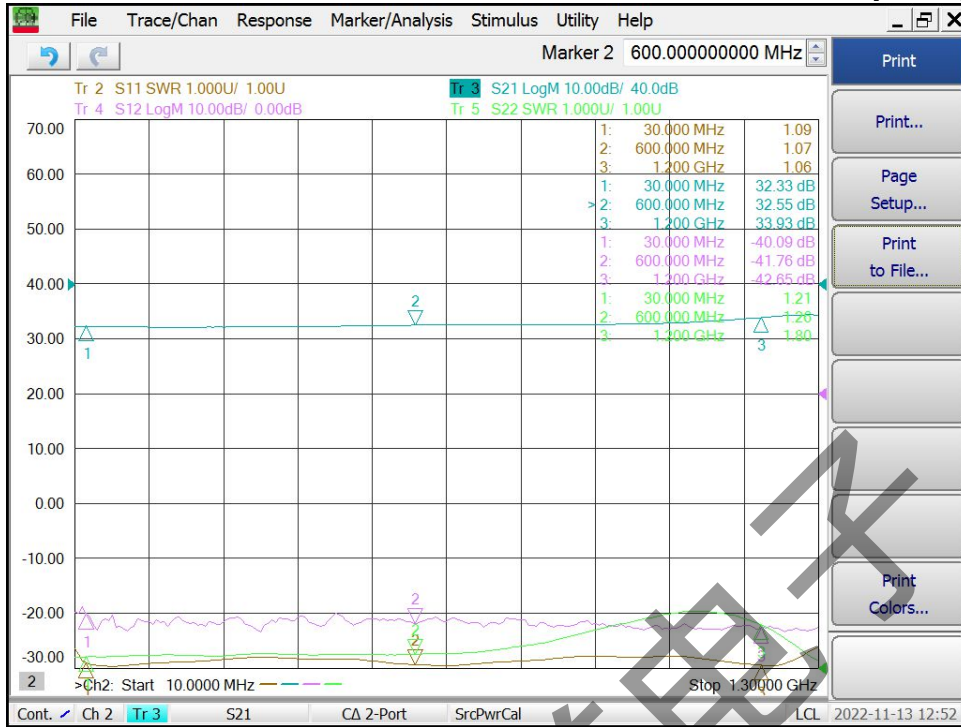
Electrical Specifications @ +25 °C, Z_{in} = Z_{out} = 50 Ω, DC Voltage = +12V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	30		1200
Gain S ₂₁ f = 30MHz	dB	30.0	32.0	
f = 600MHz	dB	30.0	32.5	
f = 1200MHz	dB	30.0	33.0	
Gain Flatness	dB		±0.5	±1.0
P _{1dB} f = 600MHz	dBm	+16	+18	
IP3 f = 600MHz	dBm	+30	+32	
Noise Figure f = 600MHz	dB		1.7	2.2
Reverse Isolation S ₁₂ f = 600MHz	dB	-30	-40	
Input VSWR S ₁₁ f = 600MHz			1.3:1	1.8:1
Output VSWR S ₂₂ f = 600MHz			1.3:1	1.8:1
DC Power Supply	V	11	12	15
Supply Current	mA		105	120

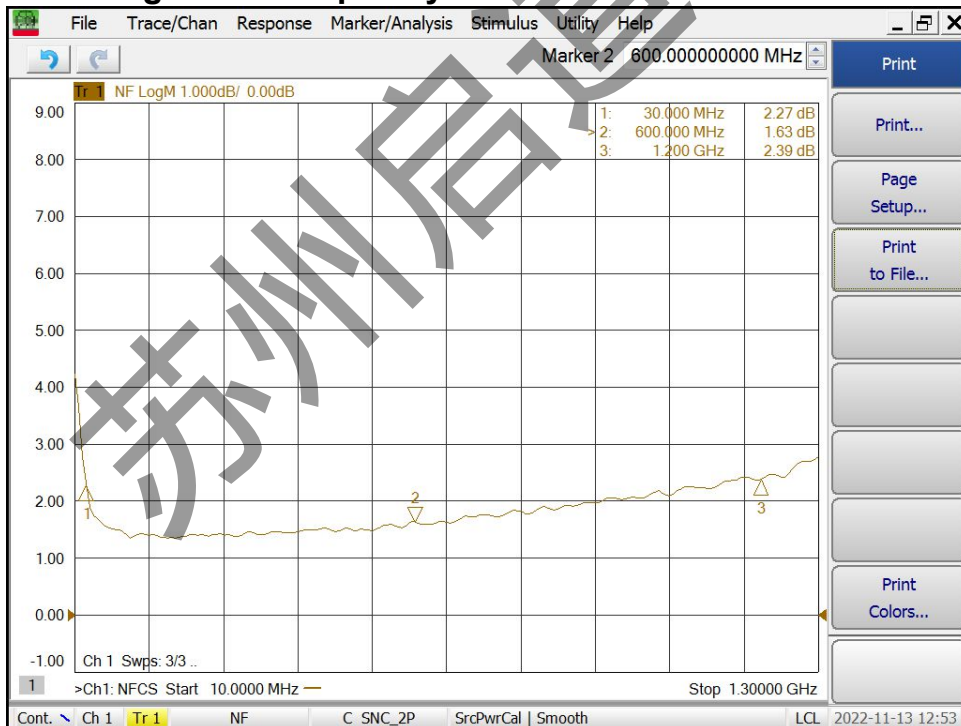
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Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency



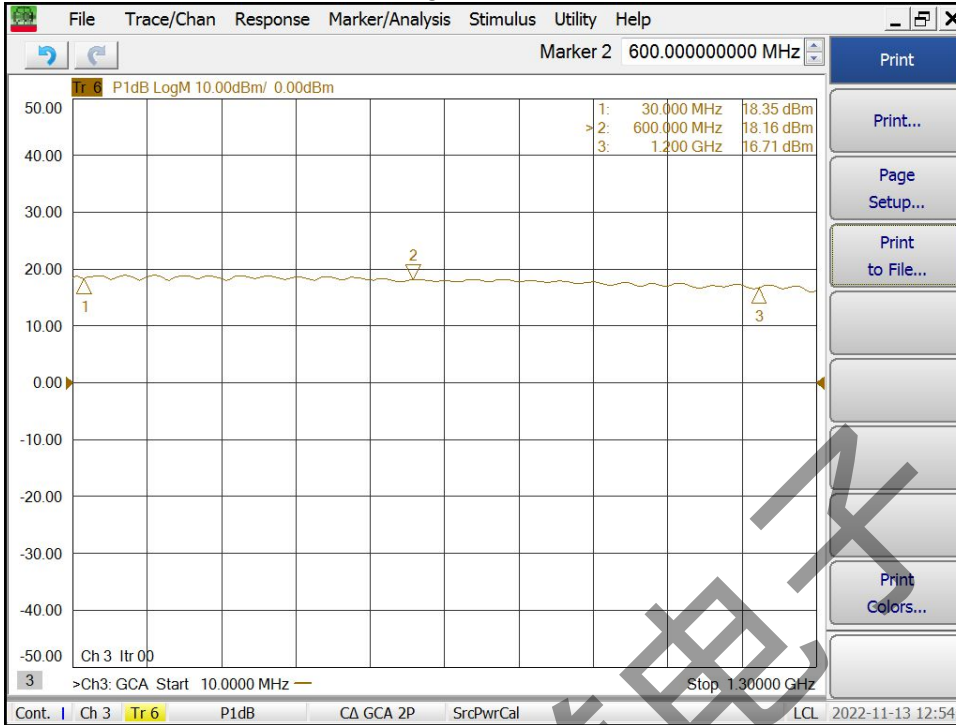
Noise Figure vs Frequency



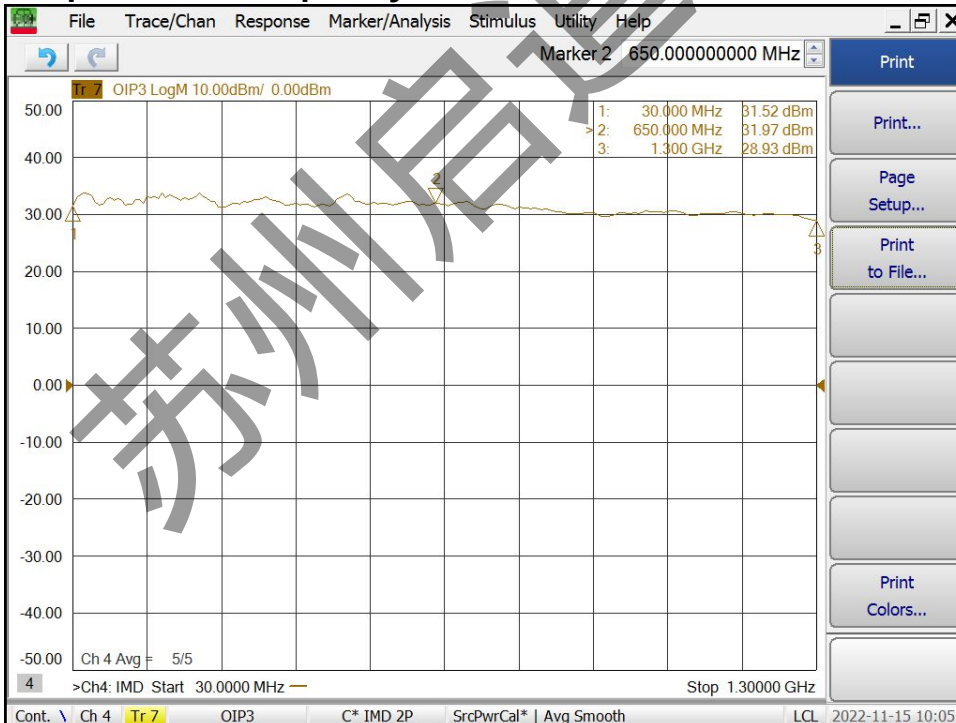
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Output P1dB vs Frequency



Output IP3 vs Frequency



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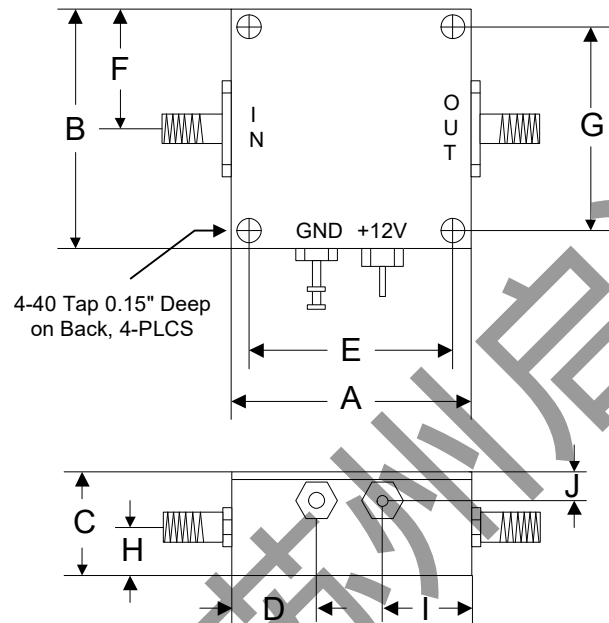
Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+15dBm
DC Supply Voltage	+25V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

ESD Sensitive Material



Outline



	A	B	C	D	E	F	G	H	I	J
Inch	1.250	1.250	0.563	0.450	1.000	0.625	1.000	0.250	0.500	0.187
mm	31.75	31.75	14.29	11.43	25.40	15.88	25.40	6.35	12.70	4.76