

LNA Series

10 – 1300MHz Low Noise Amplifier

Features

- Frequency Range: 10 - 1300MHz
- Gain: 33dB
- P_{1dB}: +20dBm
- IP3: +34dBm
- Noise Figure: 1.5dB
- DC Power: 12V/165mA
- Internal Voltage Regulated
- Reverse DC Protected
- SMA Connector

Picture



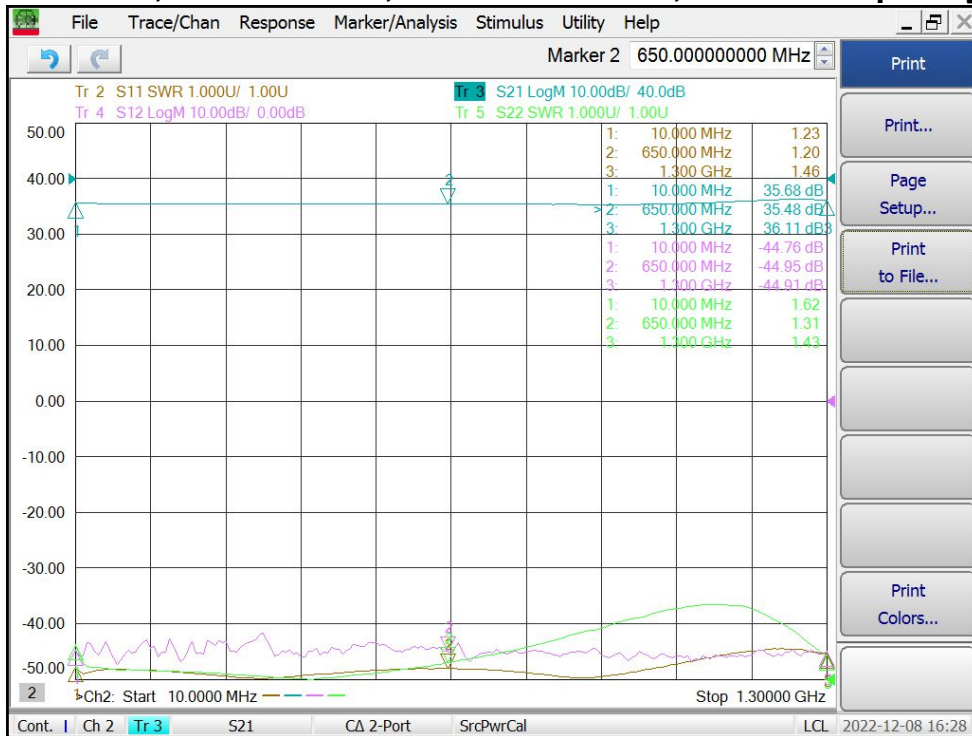
Description

LNA-1330 is a flat response Low Noise Amplifier operates in frequency range from 10MHz to 1300MHz.

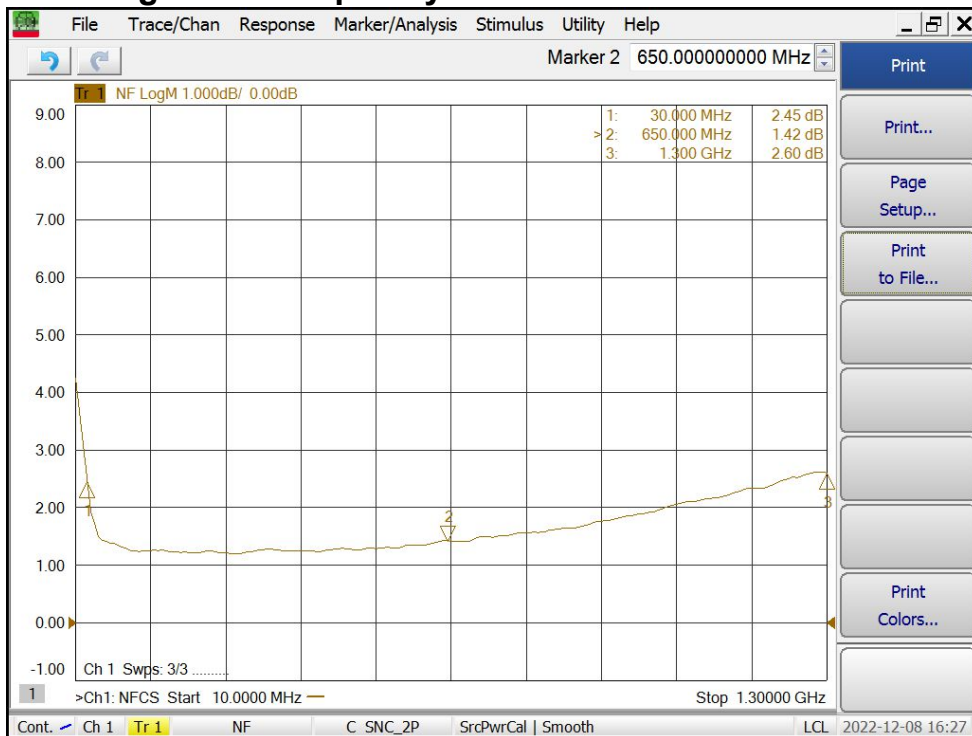
Electrical Specifications @ +25 °C, Z_{in} = Z_{out} = 50 Ω, DC Voltage = +12V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	10		1300
Gain S ₂₁ f = 10MHz	dB	33.0	35.0	
f = 650MHz	dB	33.0	35.0	
f = 1300MHz	dB	33.0	35.0	
Gain Flatness	dB		±0.5	±1.0
P _{1dB} f = 650MHz	dBm	+18	+20	
IP3 f = 650MHz	dBm	+32	+34	
Noise Figure f = 650MHz	dB		1.5	2.0
Reverse Isolation S ₁₂ f = 650MHz	dB	-38	-42	
Input VSWR S ₁₁ f = 650MHz			1.3:1	1.8:1
Output VSWR S ₂₂ f = 650MHz			1.3:1	1.8:1
DC Power Supply	V	11	12	15
Supply Current	mA		165	180

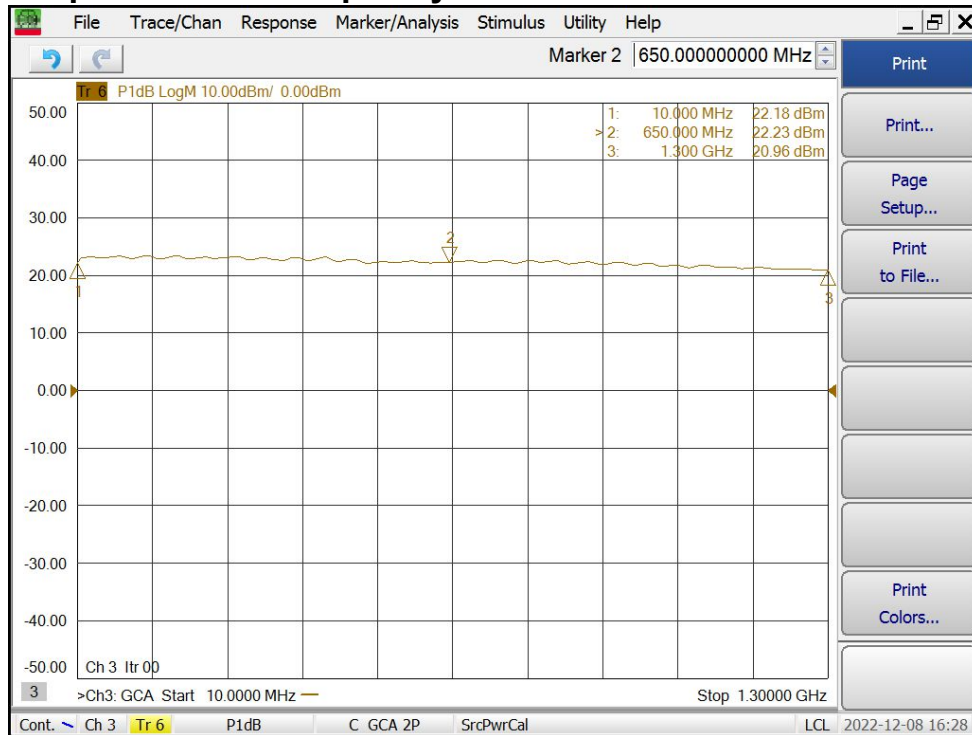
Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency



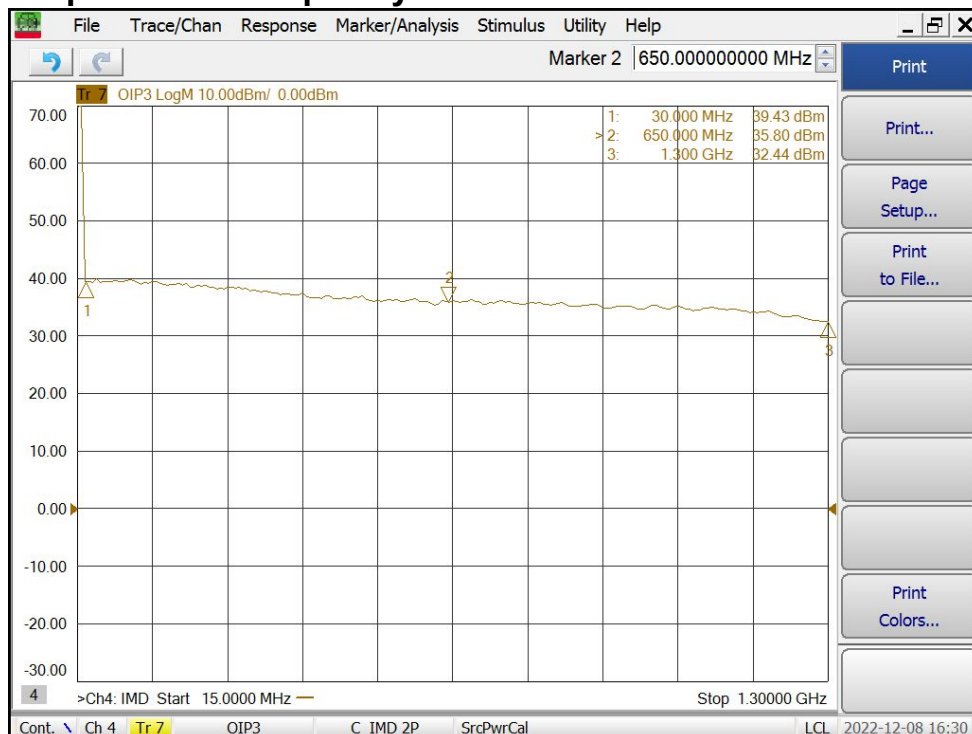
Noise Figure vs Frequency



Output P1dB vs Frequency



Output IP3 vs Frequency



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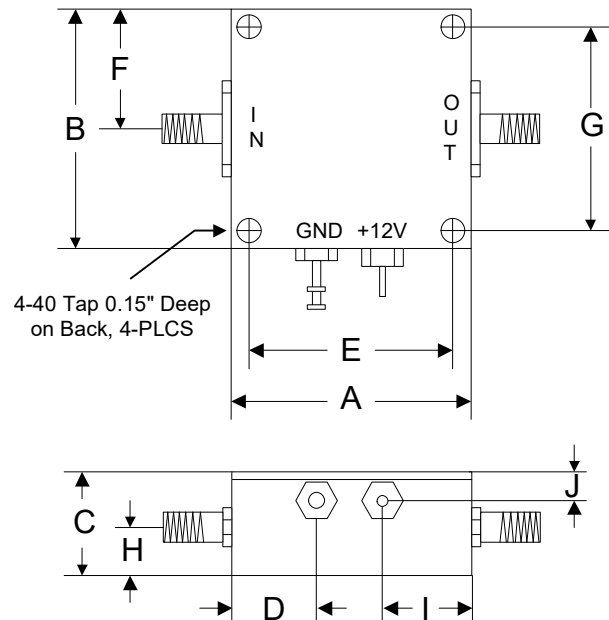
Absolute Maximum Ratings

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