

## LNA Series

## 10 – 1300MHz Low Noise Amplifier

### Features

- Frequency Range: 10 - 1300MHz
- Gain: 33dB
- P<sub>1dB</sub>: +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.

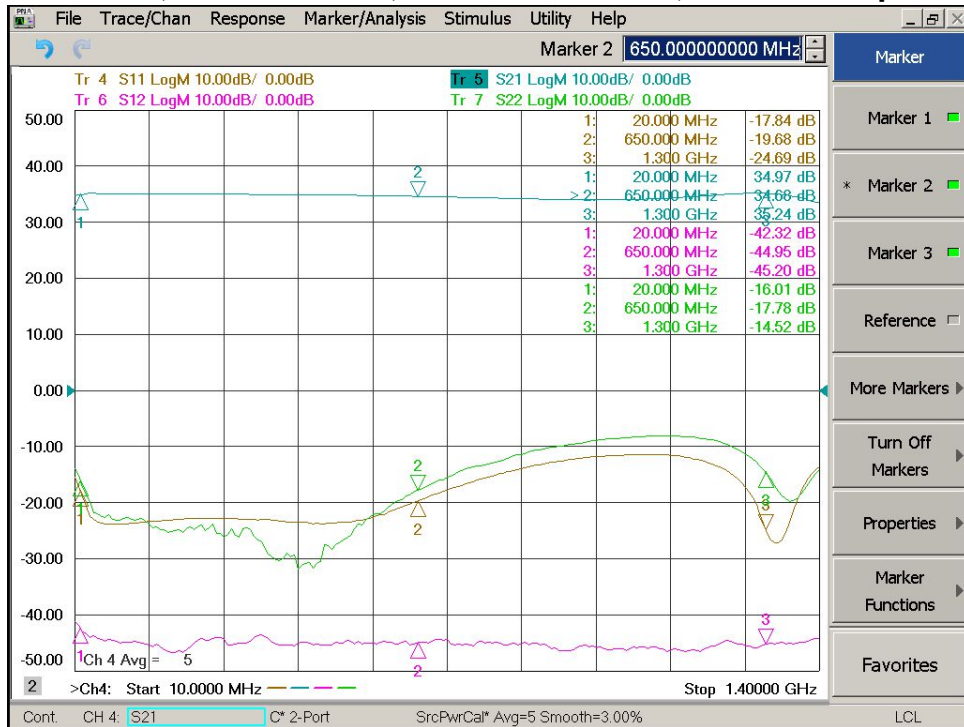
### Electrical Specifications @ +25 °C, Z<sub>in</sub> = Z<sub>out</sub> = 50 Ω, DC Voltage = +12V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	10		1300
Gain S <sub>21</sub> f = 10MHz	dB	33.0	35.0	
f = 650MHz	dB	33.0	34.5	
f = 1300MHz	dB	33.0	35.0	
Gain Flatness	dB		±0.5	±1.0
P <sub>1dB</sub> f = 650MHz	dBm	+18	+20	
IP3 f = 650MHz	dBm	+32	+34	
Noise Figure f = 650MHz	dB		1.5	2.0
Reverse Isolation S <sub>12</sub> f = 650MHz	dB	-38	-42	
Input VSWR S <sub>11</sub> f = 650MHz			1.3:1	1.8:1
Output VSWR S <sub>22</sub> f = 650MHz			1.3:1	1.8:1
DC Power Supply	V	11	12	15
Supply Current	mA		165	180

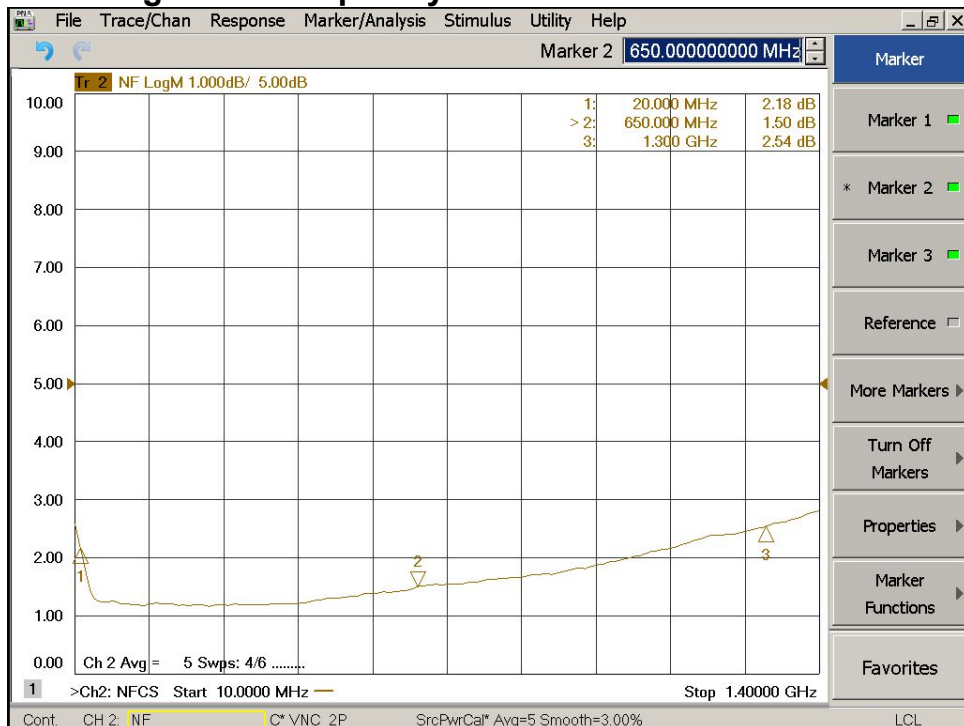
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**Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency**



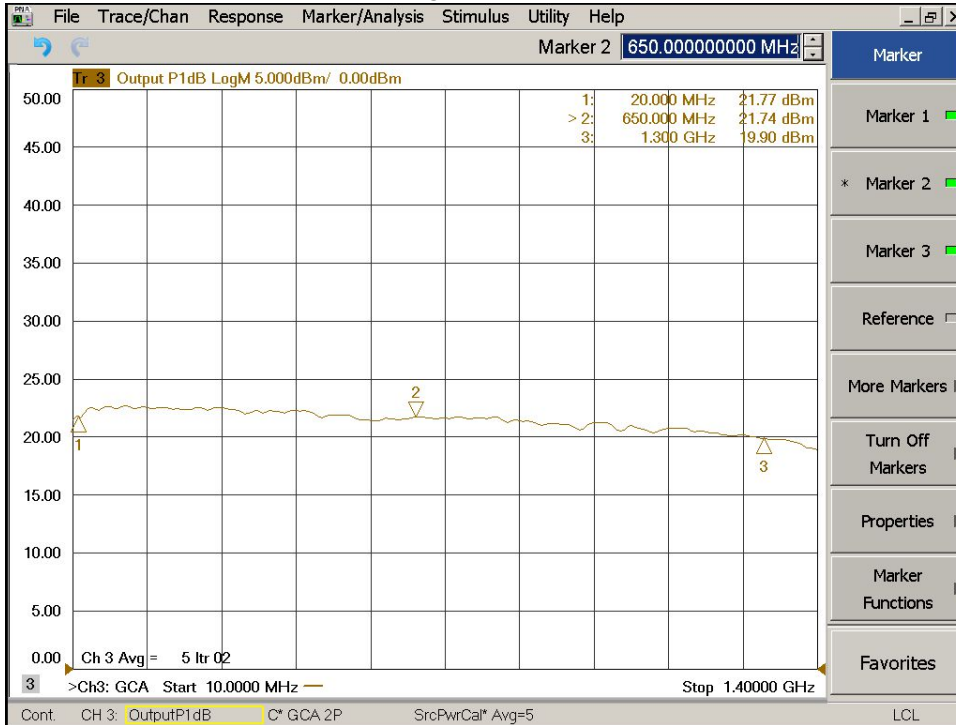
**Noise Figure vs Frequency**



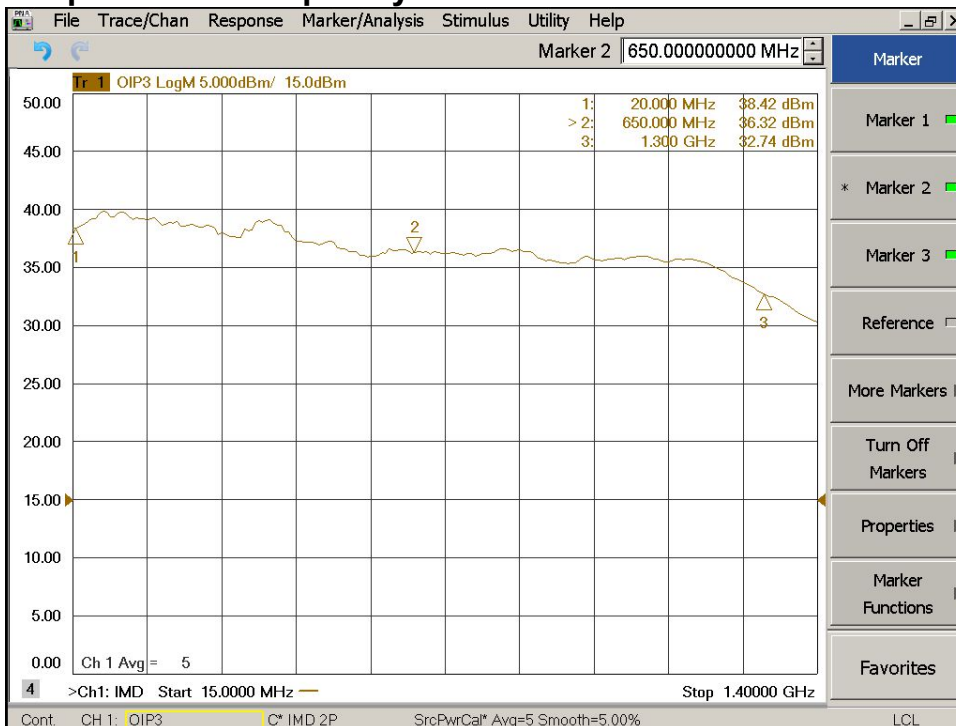
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**Output P1dB vs Frequency**



**Output IP3 vs Frequency**



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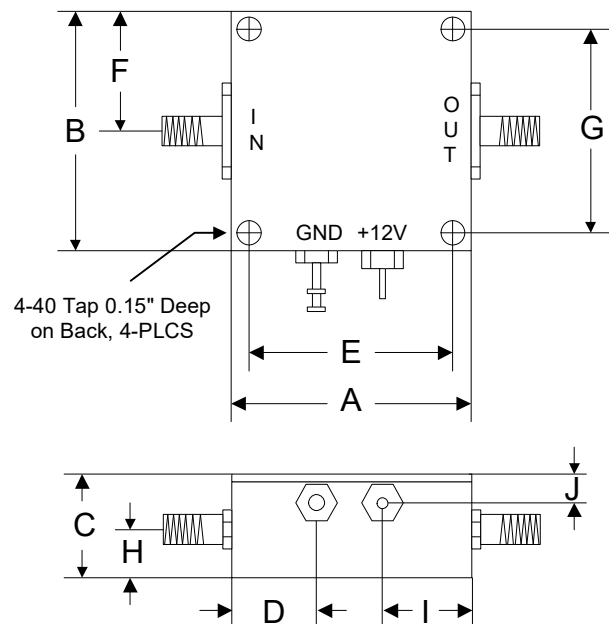
### Absolute Maximum Ratings

Parameter	Absolute Maximum
Supply Voltage	+25V
RF Input Power	+15dBm
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
<b>Inch</b>	1.250	1.250	0.563	0.450	1.000	0.625	1.000	0.250	0.500	0.187
<b>mm</b>	31.75	31.75	14.29	11.43	25.40	15.88	25.40	6.35	12.70	4.76