



LNA-650

HIGH GAIN-HIGH LINEARITY LOW NOISE AMPLIFIER 300KHZ-1000MHZ

Features

- Freq. Range: 300kHz-1000MHz
- Gain: 50dB
- P_{1dB}: +22dBm
- IP3: +39dBm
- Noise Figure: 1.6dB
- DC Power: 6V/140mA
- SMA Connector

Performance measured @ 700MHz

Description

LNA-650 is a 50dB gain wideband high dynamic range Low Noise Amplifier that operates with a frequency range from 300kHz to 1000MHz.

Picture



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

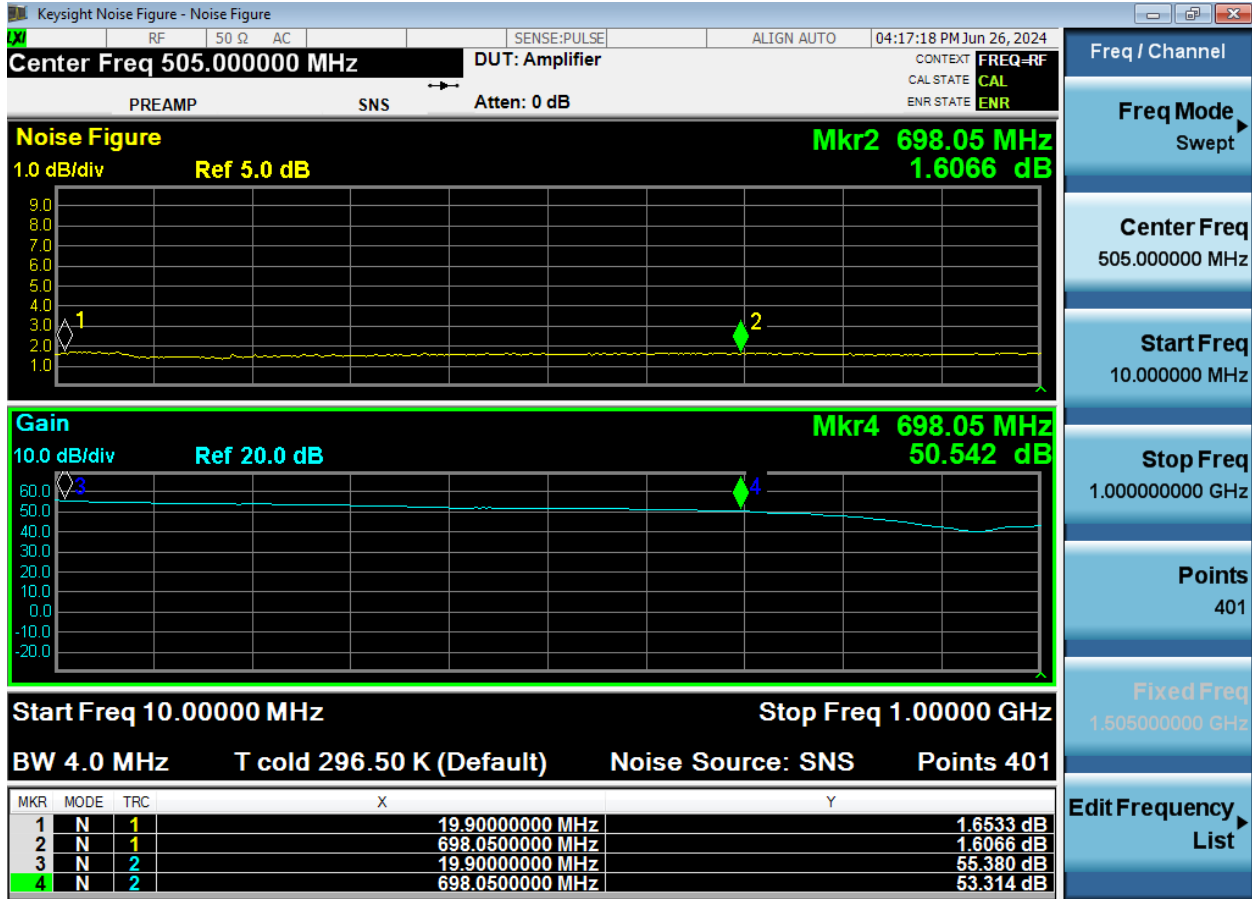
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	0.3		1000
Gain f = 20MHz	dB	53	55	
f = 300MHz	dB	51	53	
f = 1000MHz	dB	48	50	
P _{1dB} f=700MHz	dBm		+22	
IP3 f=700MHz	dBm		+39	
Noise Figure f=700MHz	dB		1.6	< 3
Reverse Isolation	dB	-50	-58	
VSWR Input VSWR f=700MHz			1.2:1	2.0:1
Output VSWR f=700MHz			1.5:1	1.7:1
DC Power Supply	V		6	12
Supply Current	mA		140	175



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Noise Figure, Gain vs Frequency



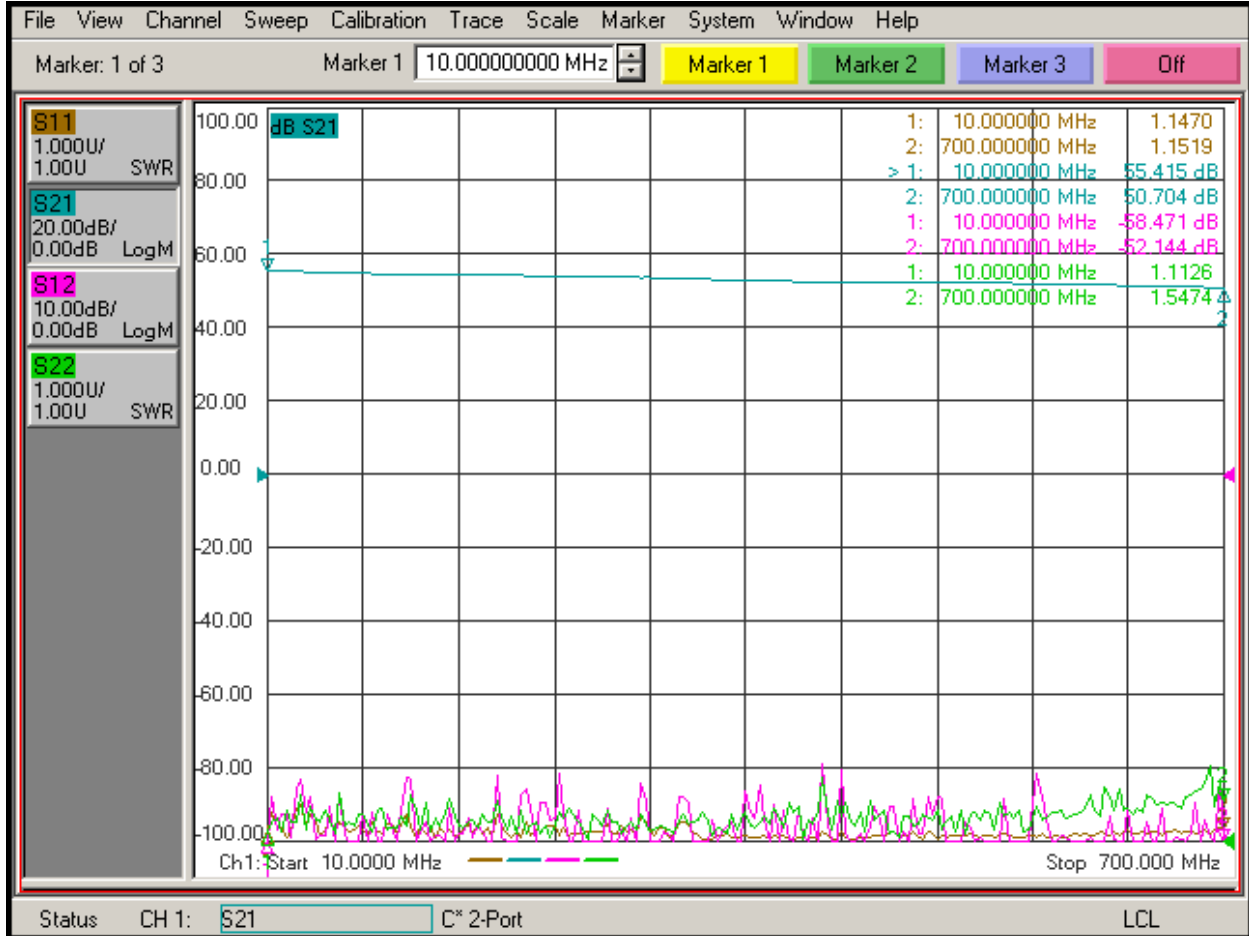


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Gain S21, Return Loss, S11, S22 vs Frequency





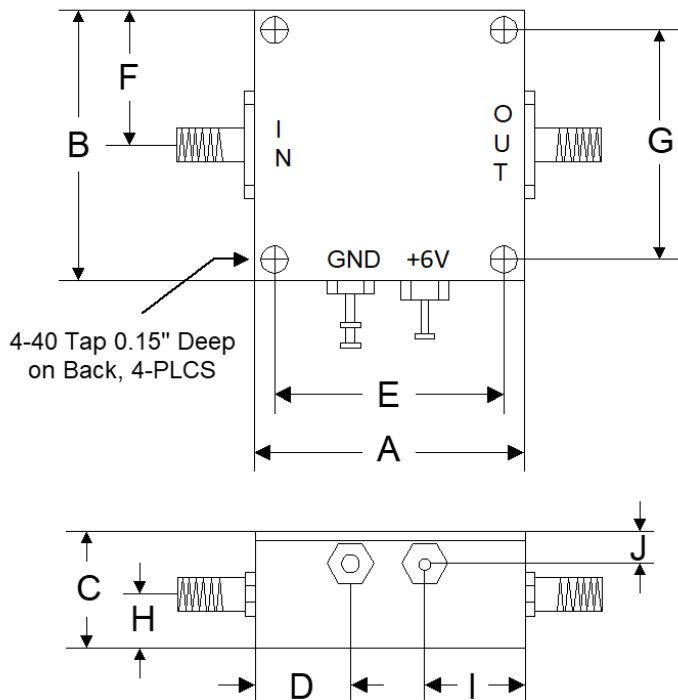
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	-10dBm
Supply Voltage	+18V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

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