

LNA Series

50 – 450MHz Low Noise Amplifier

Features

- Frequency Range: 50 - 450MHz
- Gain: 34dB
- P_{1dB}: +18.5dBm
- IP3: +34dBm
- Noise Figure: 1.4dB
- DC Power: 9-18V/100mA
- Internal Voltage Regulated
- Reverse DC Protection
- SMA Connector

Picture



Performance measured @ 225MHz

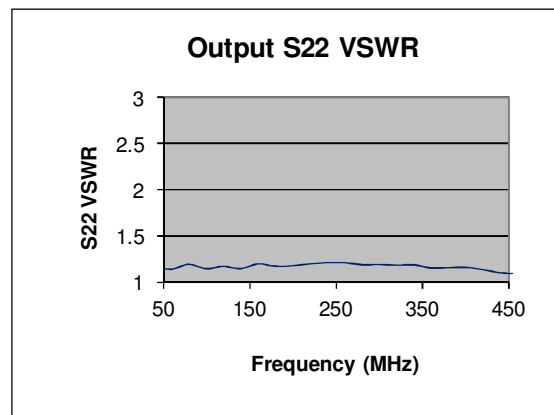
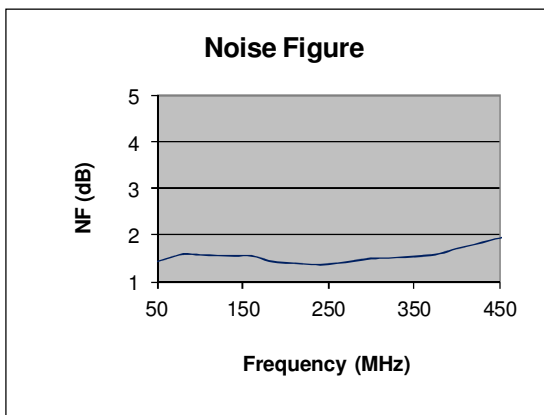
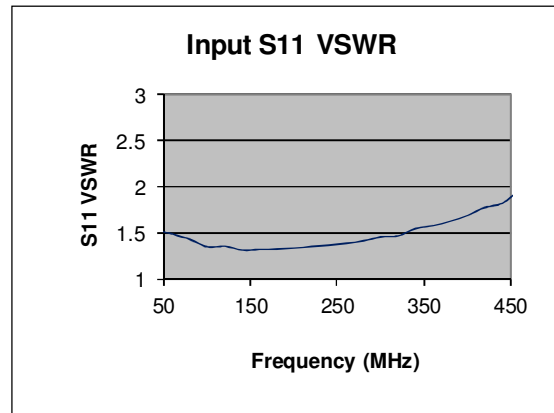
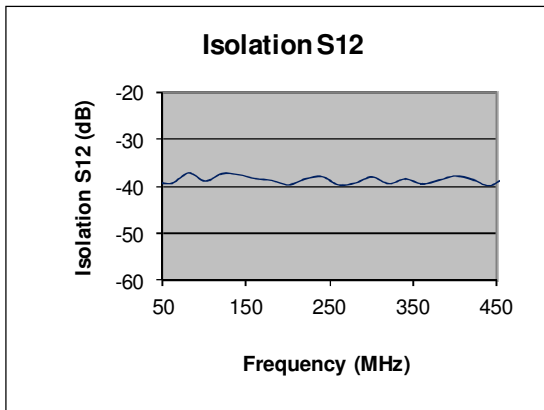
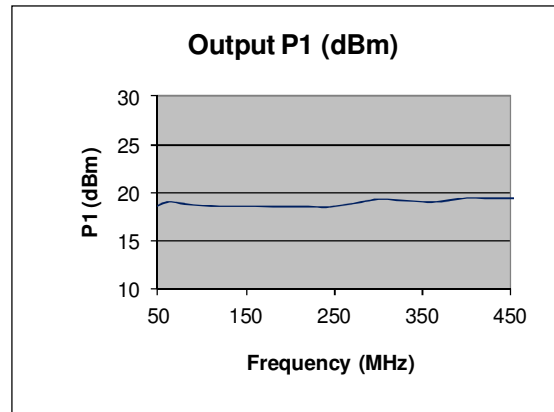
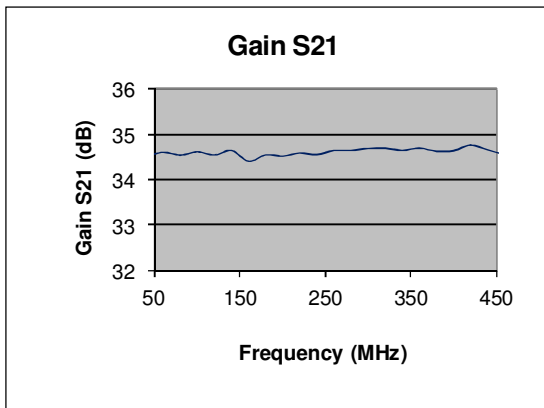
Description

LNA-450 is a flat response Low Noise Amplifier operates in frequency range from 50MHz to 450MHz.

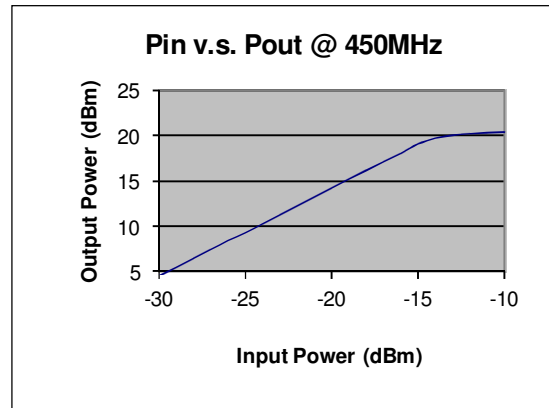
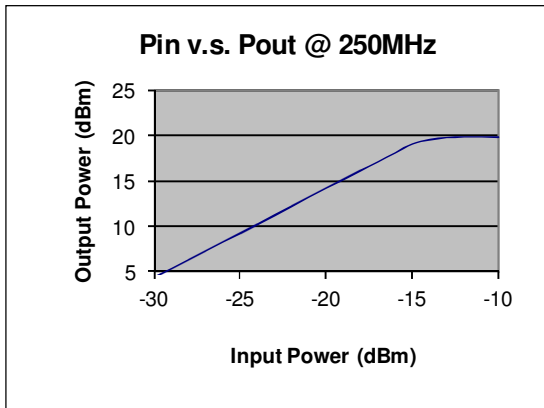
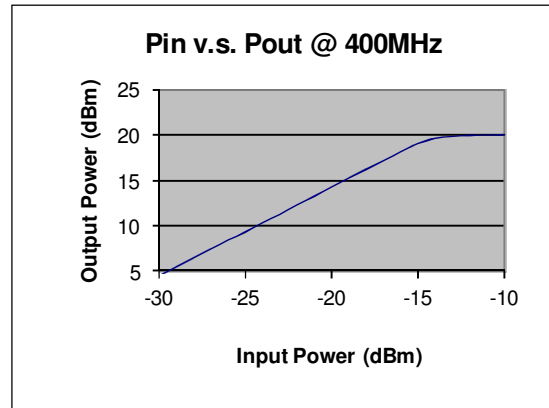
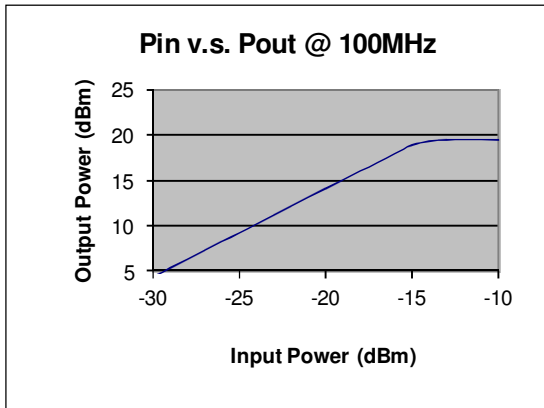
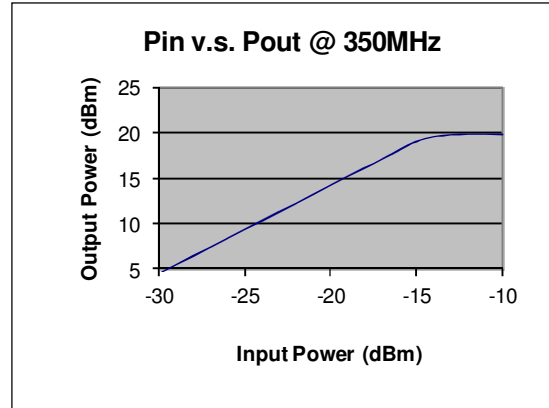
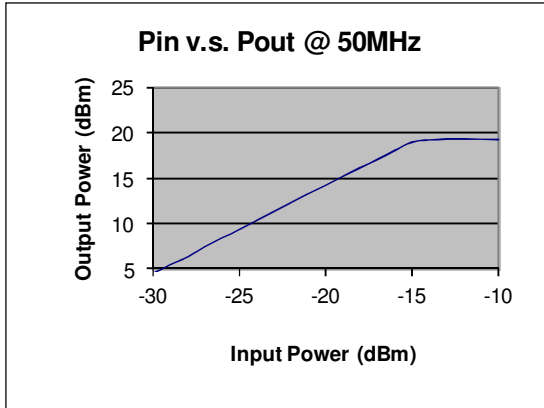
Electrical Specifications @ +25 °C, Z_{in} = Z_{out} = 50 Ω, V_{cc} = 12V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	50		450
Gain				
f = 50MHz	dB		34.5	
f = 100MHz	dB		34.6	
f = 250MHz	dB	33	34.6	
f = 400MHz	dB		34.6	
f = 450MHz	dB		34.6	
Gain Flatness	dB		± 0.1	± 0.3
P _{1dB}	dBm	+17	+18.5	
IP3	dBm	+33	+34.0	
Noise Figure	dB		1.4	1.8
Reverse Isolation	dB		-38	-35
VSWR				
Input VSWR			1.4:1	1.5:1
Output VSWR			1.2:1	1.3:1
DC Power Supply	V	9	12 to 15	18
Supply Current	mA		100	120

Typical Performance @ +25 °C



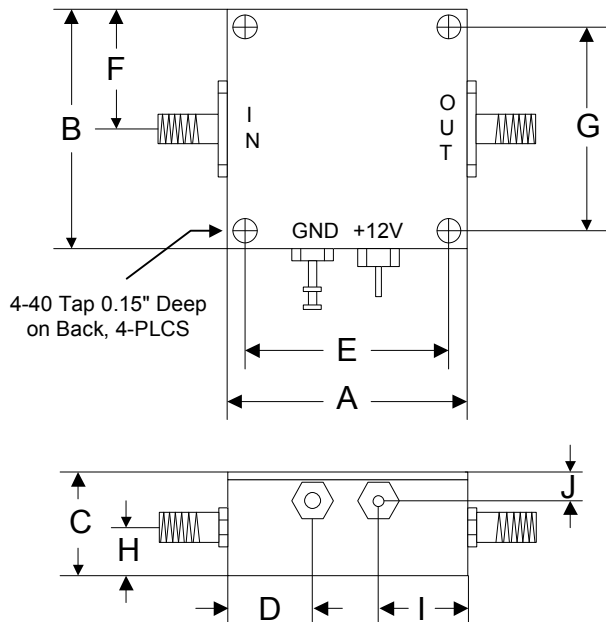
Typical Performance @ +25 °C



Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+15dBm
Supply Voltage	+25V
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