

LNA Series

10KHz – 500MHz Low Noise Amplifier

Features

- Frequency: 10KHz - 500MHz
- Gain: 45dB
- P_{1dB}: +10dBm
- IP3: +20dBm
- Noise Figure: 1.9dB
- DC Power: 15V/75mA
- SMA Connector

Picture



Performance measured @ 250MHz

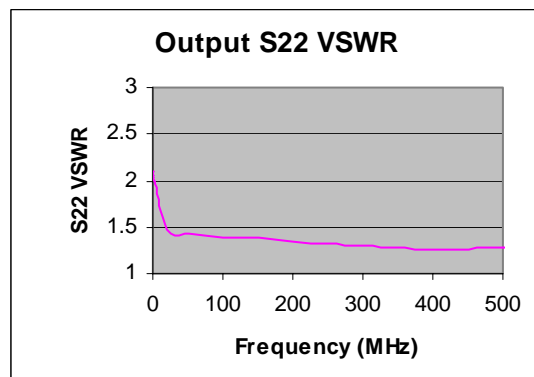
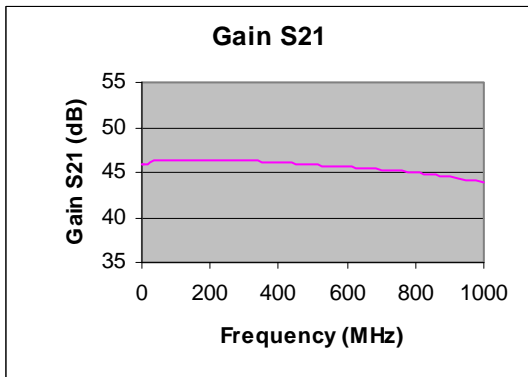
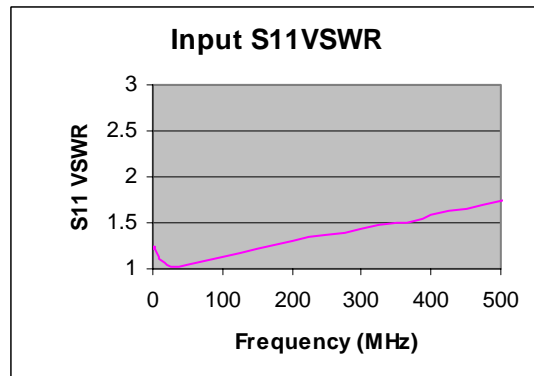
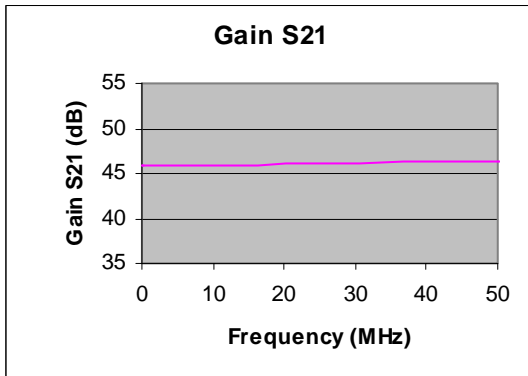
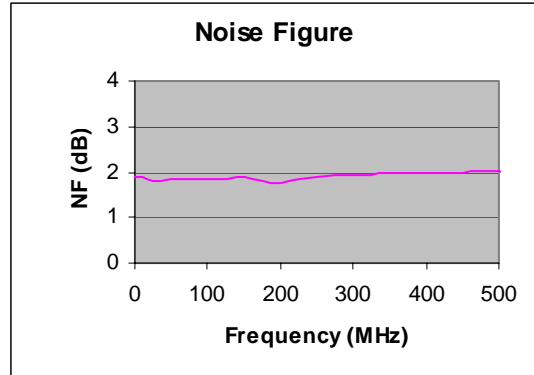
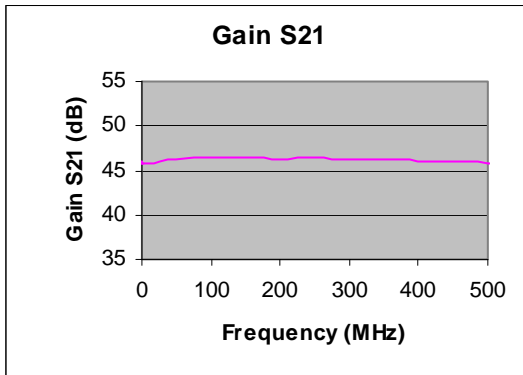
Description

LNA-545 is a wideband 45dB Gain Low Noise Amplifier operates with frequency range from 10KHz to 500MHz.

Electrical Specifications @ +25 °C, Z_{in} = Z_{out} = 50 Ω, V_{cc} = +15V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	0.01		500
Gain f = 10KHz	dB	45	45.8	
f = 250MHz	dB	45	46.0	
f = 500MHz	dB	45	45.8	
Gain Flatness	dB			± 0.5
P _{1dB} f = 10KHz	dBm		+11	
f = 250MHz	dBm		+10	
f = 500MHz	dBm		+10	
IP3 f= 250MHz	dBm		+20	
Reserve Isolation f=500MHz	dB		-55	
Noise Figure f = 10KHz	dB		1.8	
f = 250MHz	dB		1.9	
f = 500MHz	dB		2.0	
VSWR Input VSWR			1.4:1	
Output VSWR			1.3:1	
DC Power Supply	V		15	
Supply Current	mA		75	

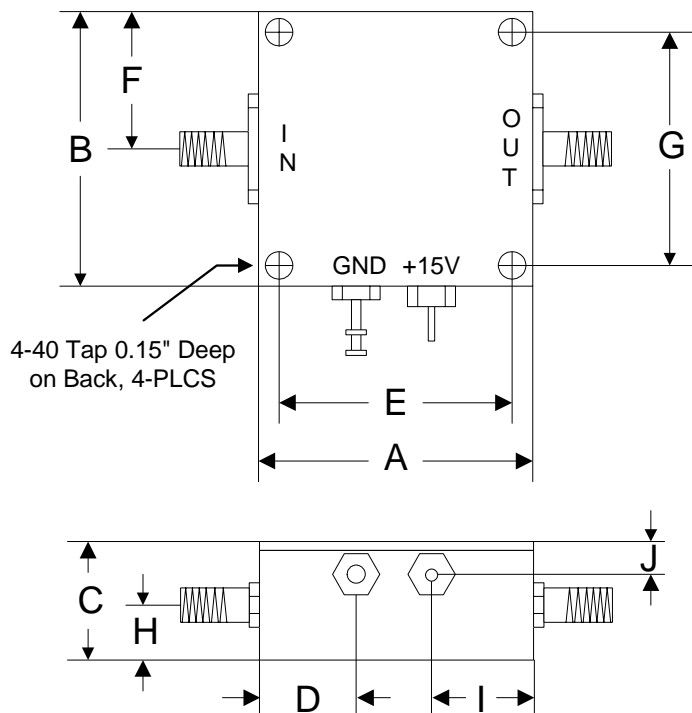
Typical Performance @ +25 °C



Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+13dBm
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