

## LPA Series

## 100KHz – 10GHz RF Amplifier

### Features

- Frequency: 100KHz -10GHz
- Gain: 27dB
- P<sub>1dB</sub>: +15dBm
- IP3: +28dBm
- Noise Figure: 5dB
- DC Power: 12V
- SMA Connector

Performance measured @ 5GHz

### Description

LPA-10-20 is an ultra wideband RF Amplifier operates with frequency range from 100KHz to 10GHz.

### Picture



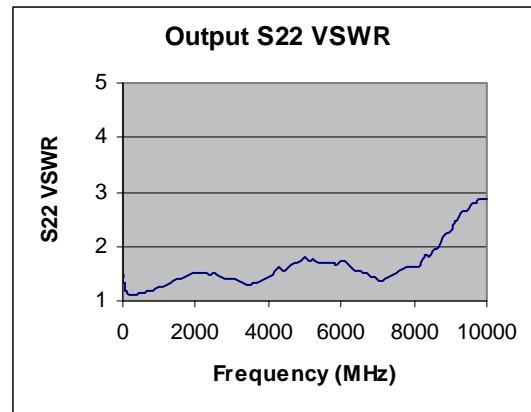
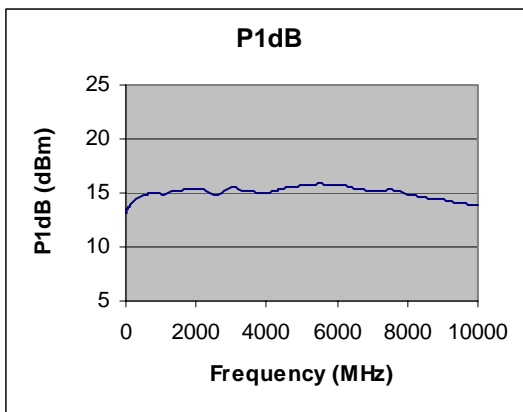
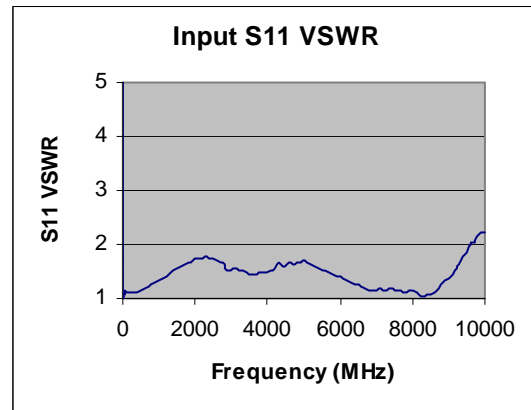
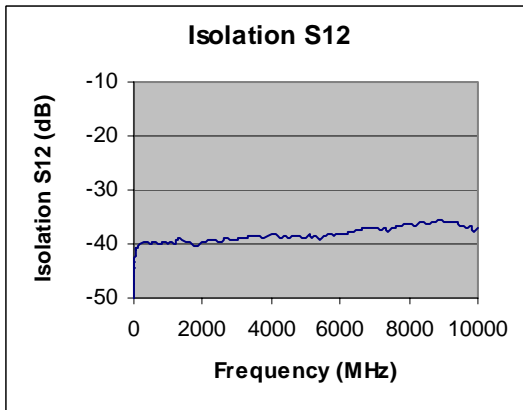
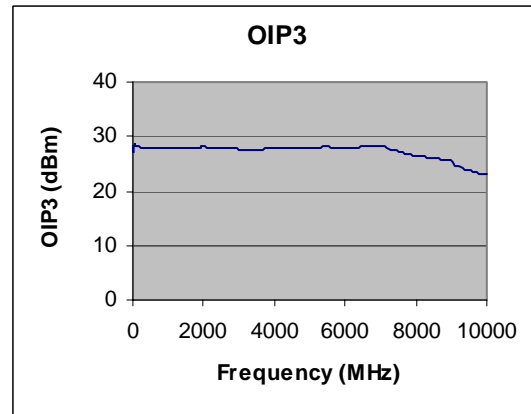
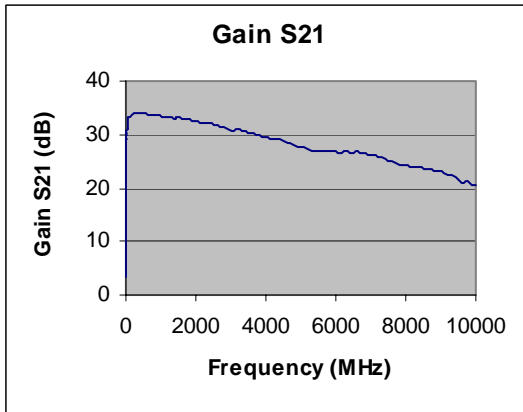
### Electrical Specifications @ +25 °C, Z<sub>S</sub> = Z<sub>L</sub> = 50 Ohms

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	0.0001		10
Gain	f = 100KHz		29.0	
	f = 10MHz		30.0	
	f = 100MHz		33.0	
	f = 1.0GHz		33.0	
	f = 3.5GHz		30.0	
	f = 5.0GHz		27.0	
	f = 8.0GHz		24.0	
	f = 10.0Ghz		20.0	
P <sub>1dB</sub>	f = 100KHz		+13.2	
	f = 10MHz		+13.4	
	f = 100MHz		+13.8	
	f = 1.0GHz		+14.8	
	f = 3.5GHz		+15.1	
	f = 5.0GHz		+15.7	
	f = 8.0GHz		+14.8	
	f = 10.0GHz		+13.0	

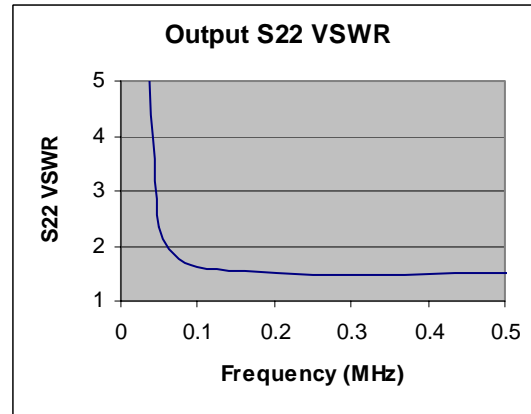
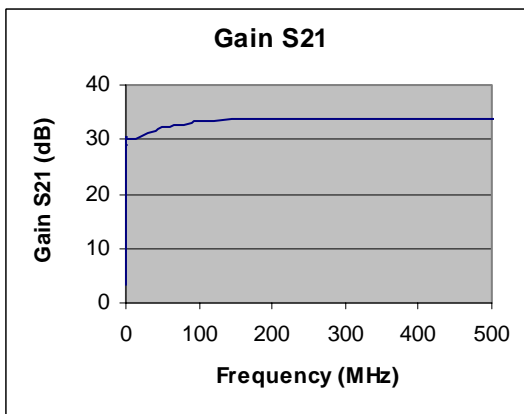
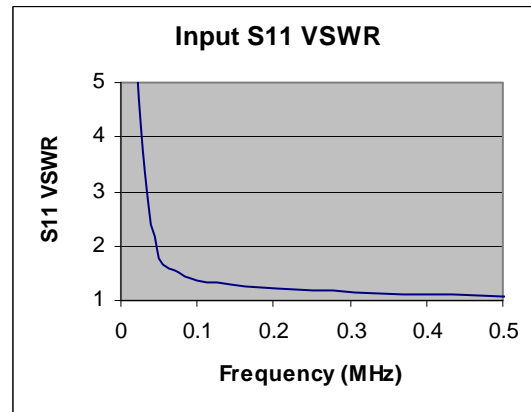
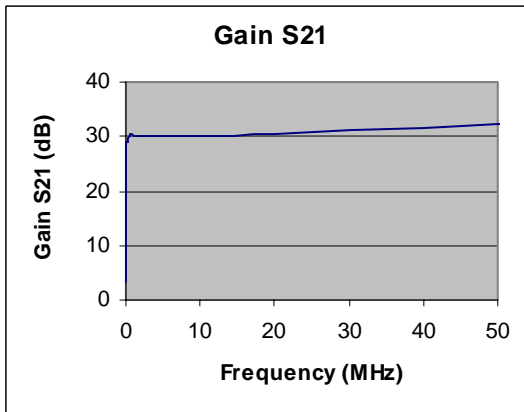
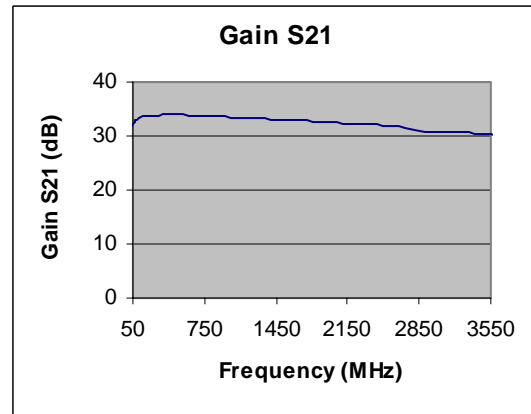
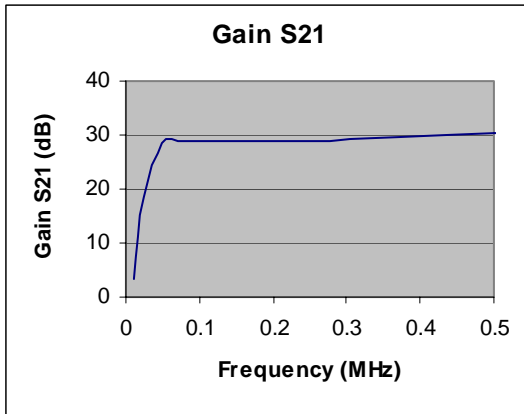
**LPA Series****100KHz – 10GHz RF Amplifier**

Parameter	Unit	Minimum	Typical	Maximum
IP3 f = 100KHz	dBm		+27.0	
f = 10MHz	dBm		+28.2	
f = 100MHz	dBm		+28.1	
f = 1.0GHz	dBm		+28.0	
f = 3.5GHz	dBm		+27.4	
f = 5.0GHz	dBm		+28.0	
f = 8.0GHz	dBm		+26.4	
f = 10.0GHz	dBm		+23.0	
Noise Figure f = 5.0GHz	dB		5.0	
VSWR f = 5.0GHz				
Input VSWR			1.7:1	
Output VSWR			1.8:1	
DC Power Supply	V	10	12	18
Supply Current	mA		110	
Operating Temperature	°C	-40		+85
Size	inch	1.250"(L) x 1.250"(W) x 0.563"(H)		
Weight	Oz.	1.6		

### Typical Performance @ +25 °C



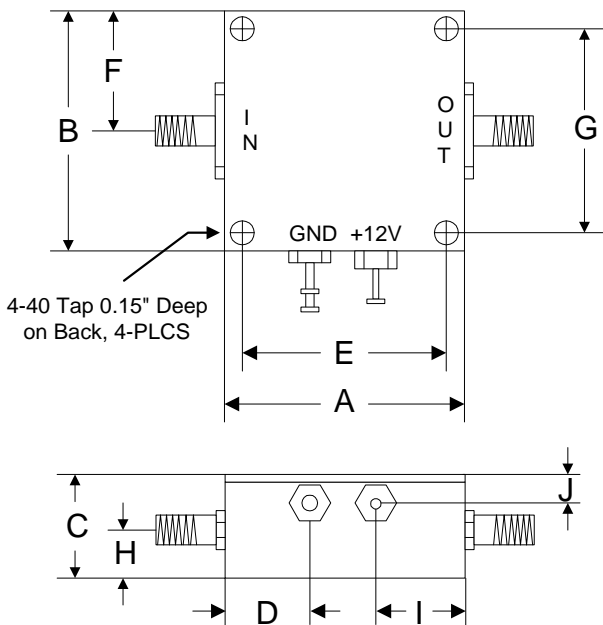
### Typical Performance @ +25 °C



### 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 +100 °C

### 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