

## GPA Series

## 6 – 12GHz RF Amplifier

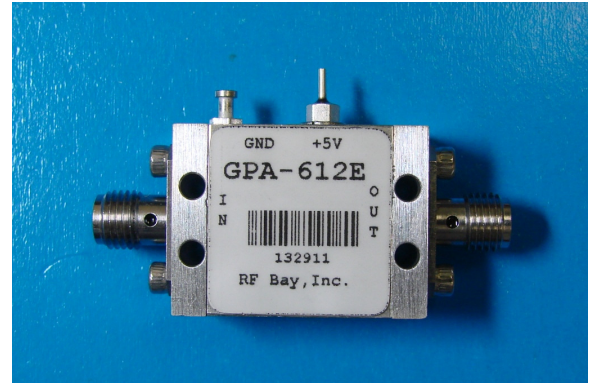
### Features

- Frequency Range: 6-12GHz
- Gain: 13dB
- $P_{1dB}$ : +17dBm
- IP3: +25dBm
- Noise Figure: 4.8dB (typ.)
- DC Power: 5V @ 145mA
- SMA-female connectorized

### Description

GPA-612E is a high performance RF Microwave Driver Amplifier, with standard frequency range of 6GHz to 12GHz.

### Photo



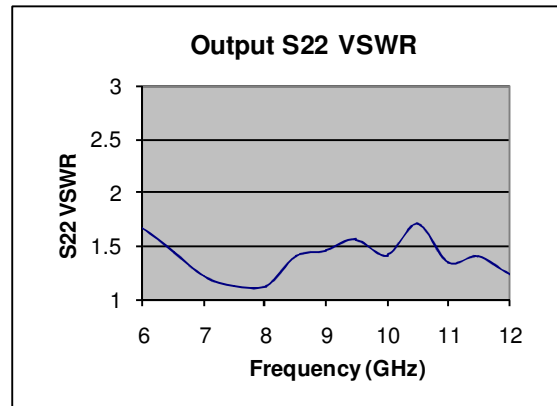
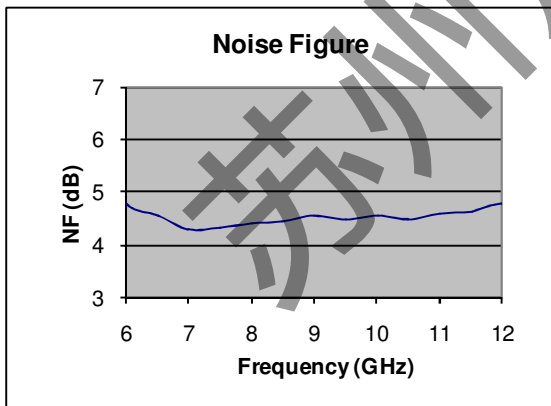
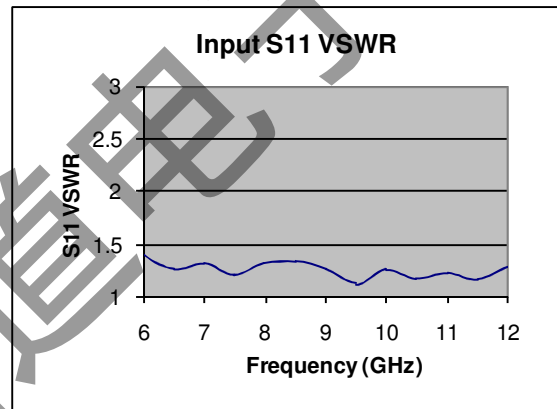
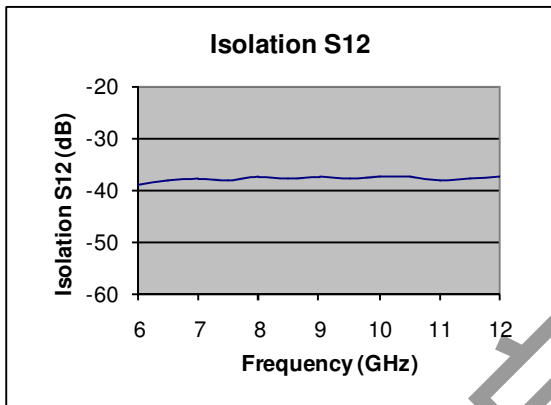
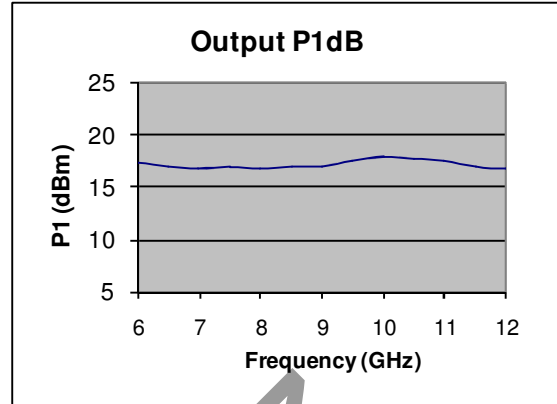
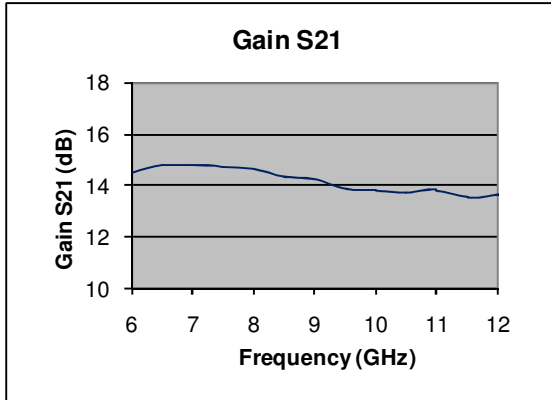
### Electrical Specifications @+25 °C, $Z_{in}=Z_{out}=50\ \Omega$ , $V_{supply} = +5VDC$

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	6		12
Gain (S21) f = 6GHz	dB		14.5	
f = 9GHz	dB	13.0	14.2	
f = 12GHz	dB		13.5	
Gain Flatness	dB		± 0.6	
Output Power $P_{1dB}$	dBm		+17	
Saturated Output Power $P_{Sat}$	dBm		+19	
Output Third Order Intercept IP3	dBm		+25	
Noise Figure @9GHz	dB		4.5	5.5
Reverse Isolation (S12) @9GHz	dB		-37	
VSWR-Input (S11)	ratio:1	1.4 @6GHz	1.3 @9GHz	1.3 @12GHz
VSWR-Output (S22)	(unitless)	1.7 @6GHz	1.5 @9GHz	1.3 @12GHz
DC Power Supply - voltage	V	4.5	5.0	5.5
DC Power Supply - current	mA		145	160
Operating Temperature	°C	-40		+85
Size (RF/DC feedthru's excluded)	Inch	1.00 (L) x 0.75 (W) x 0.45 (H)		
Weight	Oz	0.6 (17 grams)		

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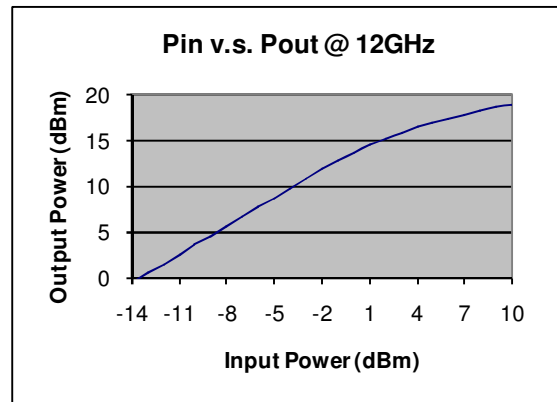
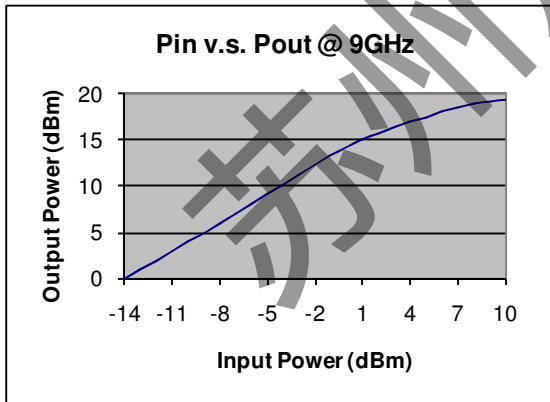
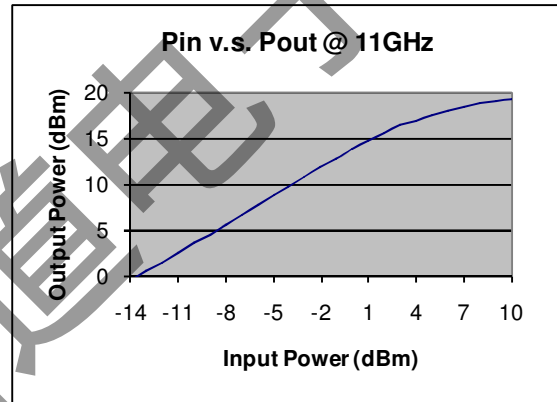
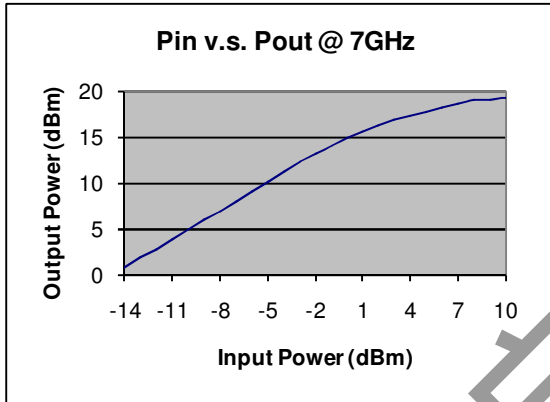
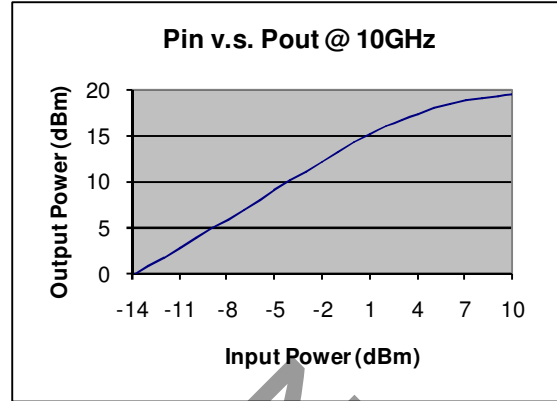
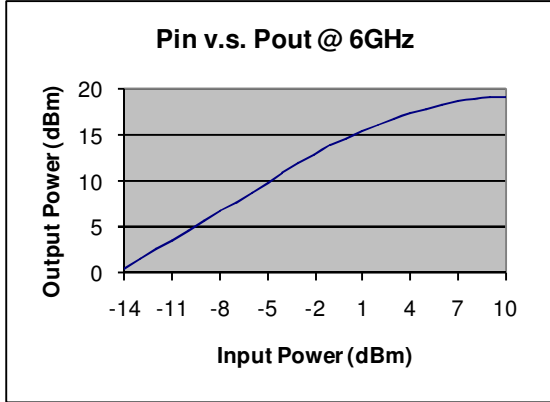
### Typical Performance @+25 °C



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### Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+20dBm
Supply Voltage (Survival)	+16V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

### Outline

