

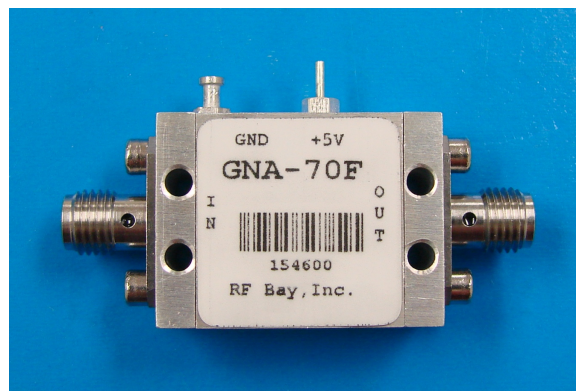
## GNA Series

## 1.5 – 6.0GHz Low Noise Amplifier

### Features

- Frequency Range: 1.5-6.0GHz
- Gain: 25dB
- P<sub>1dB</sub>: +12dBm
- IP3: +25dBm
- Noise Figure: 1.5dB (typ.)
- DC Power: +5V to +15V @ 50mA
- Internally Voltage Regulated
- RF Connector: SMA-Female

### Photo



### Description

GNA-70F is a high performance Microwave Low Noise Amplifier, with standard frequency range of 1.5GHz to 6.0GHz.

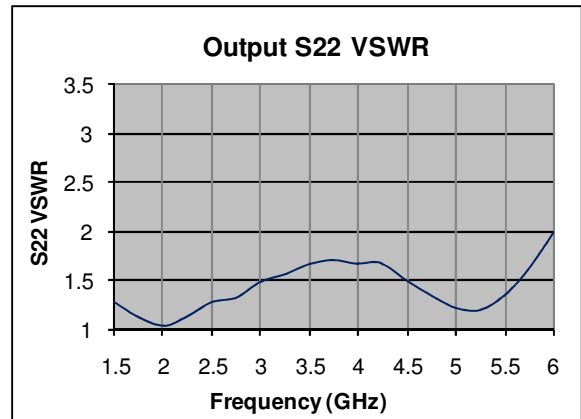
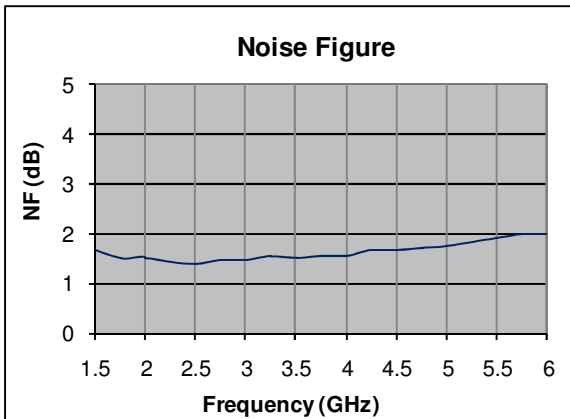
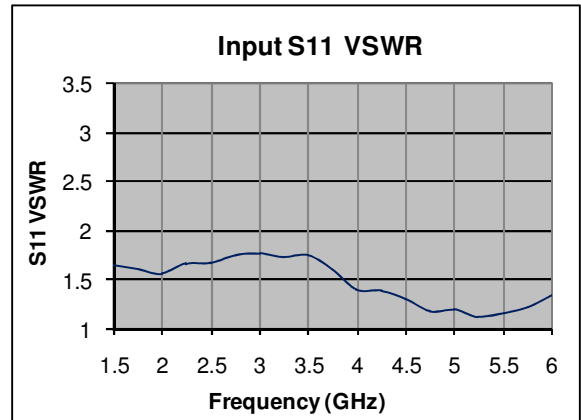
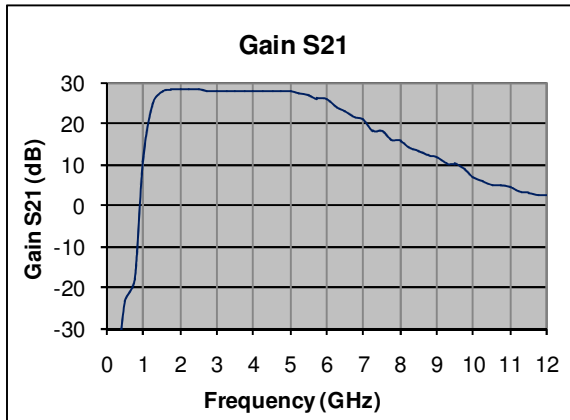
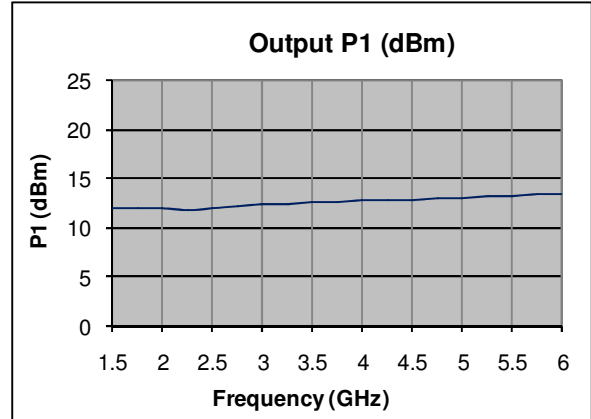
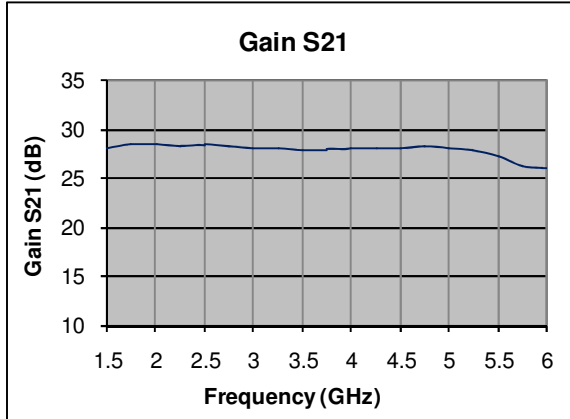
### Electrical Specifications @+25°C, Z<sub>in</sub>=Z<sub>out</sub>=50 Ω, V<sub>supply</sub> = +5VDC

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	1.5		6.0
Gain (S <sub>21</sub> ) f = 1.5GHz	dB		28.0	
f = 3.5GHz	dB		28.0	
f = 6.0GHz	dB		26.0	
Gain Variation Over Temperature	dB/°C		0.014	0.025
Output Power P <sub>1dB</sub>	dBm		+12	
Saturated Output Power P <sub>Sat</sub>	dBm		+14	
Output Third Order Intercept IP3	dBm		+25	
Noise Figure @3.5GHz	dB		1.5	1.9
Reverse Isolation (S <sub>12</sub> ) @3.5GHz	dB		-50	
VSWR-Input (S <sub>11</sub> )	ratio:1	1.7 @1.5GHz	1.8 @3.5GHz	1.4 @6.0GHz
VSWR-Output (S <sub>22</sub> )	(unitless)	1.3 @1.5GHz	1.7 @3.5GHz	2.0 @6.0GHz
DC Power Supply - voltage	V	5		15
DC Power Supply - current	mA		50	75
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)		

## GNA Series

## 1.5 – 6.0GHz Low Noise Amplifier

### Typical Performance @+25 °C



## GNA Series

## 1.5 – 6.0GHz Low Noise Amplifier

### 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

