

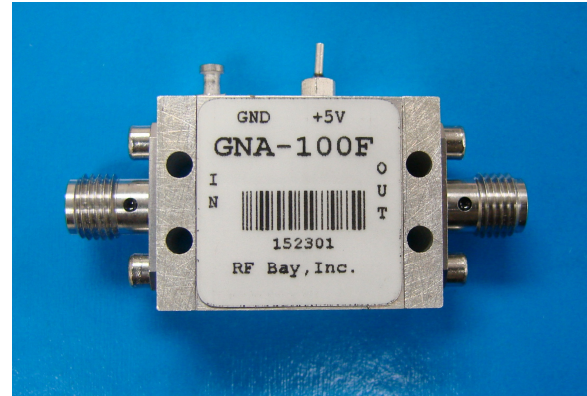
GNA Series

6 – 14GHz Low Noise Amplifier

Features

- Frequency Range: 6-14GHz
- Gain: 17dB
- P_{1dB}: +13dBm
- IP3: +25dBm
- Noise Figure: 2dB
- DC Power: +5V to +12V @ 55mA
- Internally Voltage Regulated
- RF Connector: SMA-F

Photo



Description

GNA-100F is a high performance Microwave Low Noise Amplifier, with standard frequency range of 6GHz to 14GHz.

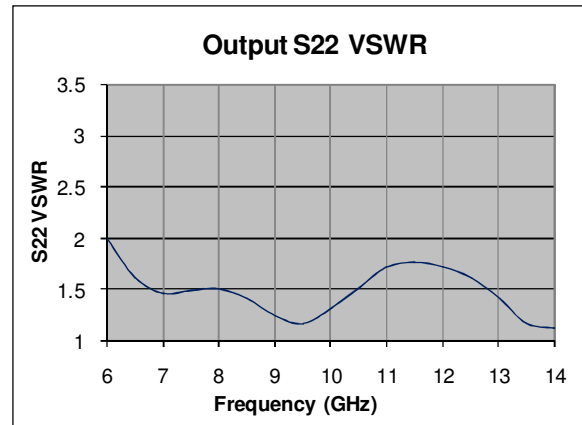
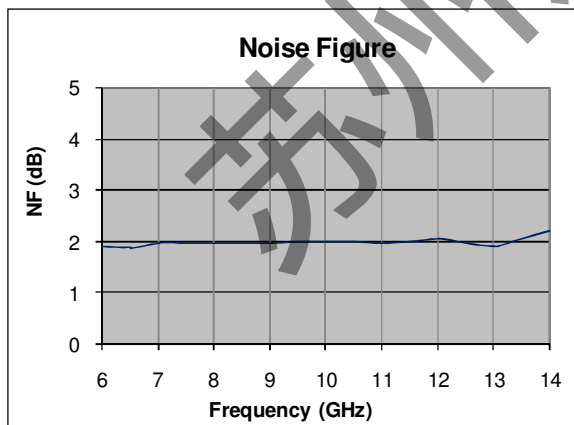
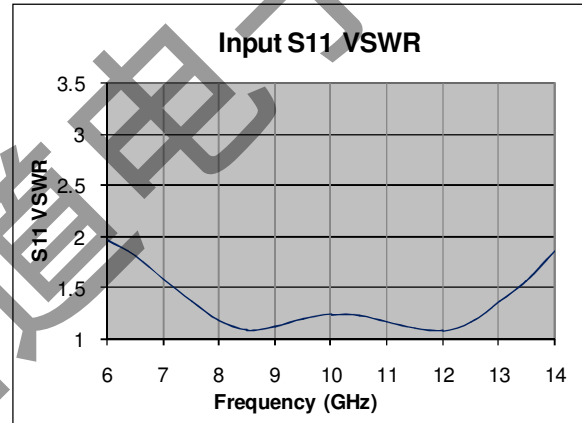
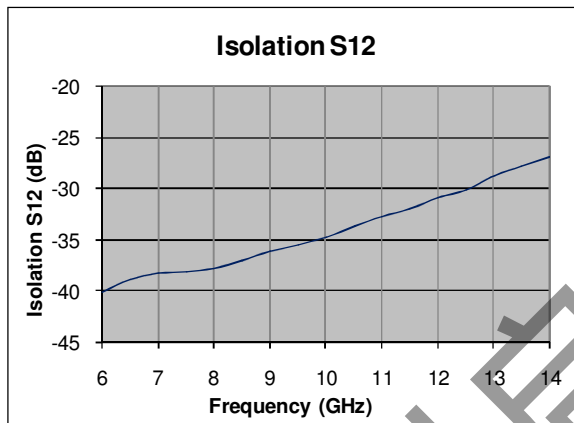
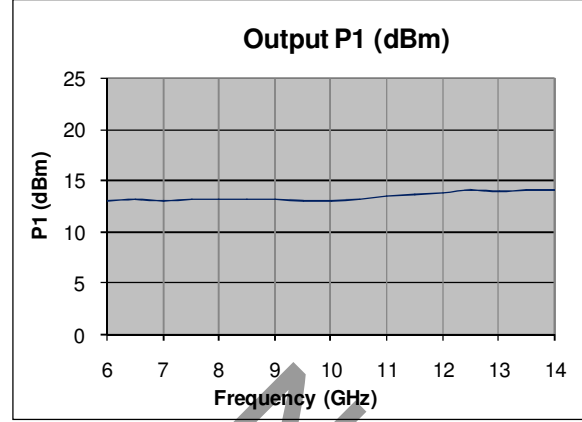
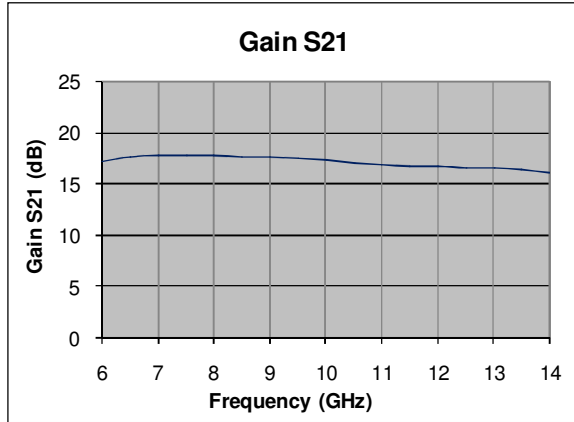
Electrical Specifications @+25 °C, Z_{in}=Z_{out}=50 Ω, V_{supply} = +5VDC

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	6		14
Gain (S ₂₁) f = 6GHz	dB		17	
f = 10GHz	dB		17	
f = 14GHz	dB		16	
Gain Variation Over Temperature	dB/°C		0.02	0.03
Output Power P _{1dB}	dBm	+11.5	+13	
Saturated Output Power P _{Sat}	dBm		+14	
Output Third Order Intercept IP3	dBm		+25	
Noise Figure @10GHz	dB		2.0	2.2
Reverse Isolation (S ₁₂) @10GHz	dB		-34	
VSWR-Input (S ₁₁)	ratio:1	2.0 @6GHz	1.3 @10GHz	1.9 @14GHz
VSWR-Output (S ₂₂)	(unitless)	2.0 @6GHz	1.3 @10GHz	1.2 @14GHz
DC Power Supply - voltage	V	5		12
DC Power Supply - current	mA		55	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)		

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Typical Performance @+25 °C



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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+5dBm
Supply Voltage (Survival)	+16V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

Outline

