

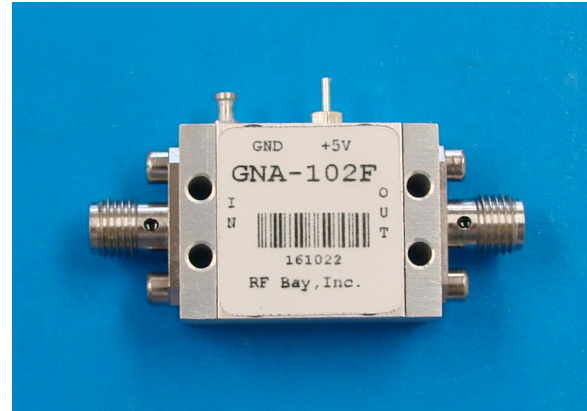
GNA Series

1000-3000MHz Low Noise Amplifier

Features

- Frequency Range:1000-3000MHz
- Gain: 17dB
- P_{1dB}: +14dBm
- IP3: +33dBm
- Noise Figure: 0.55dB
- DC Power: +5V to +15V@115mA
- Internally Voltage Regulated
- RF Connector: SMA-Female

Photo



Description

GNA-102F is a high performance Microwave Low Noise Amplifier, with standard frequency range of 1000MHz to 3000MHz.

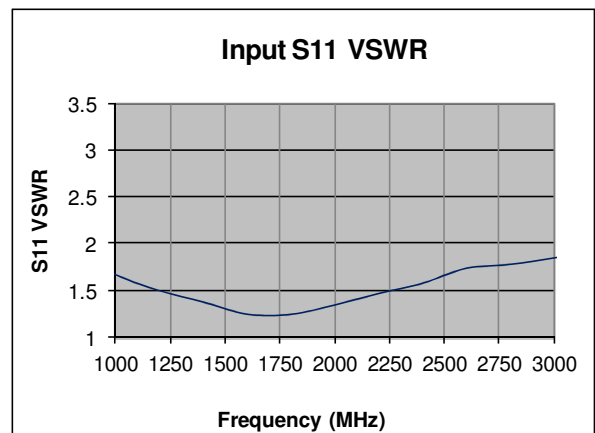
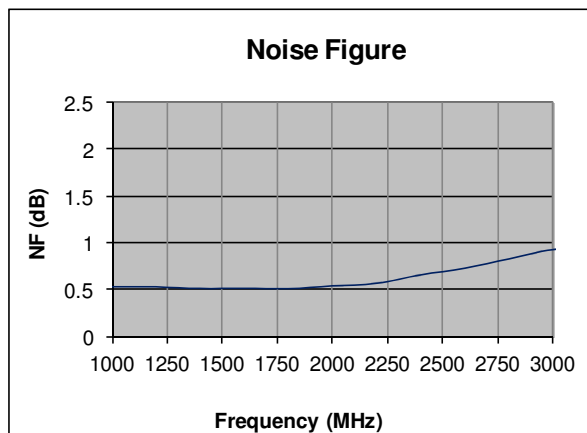
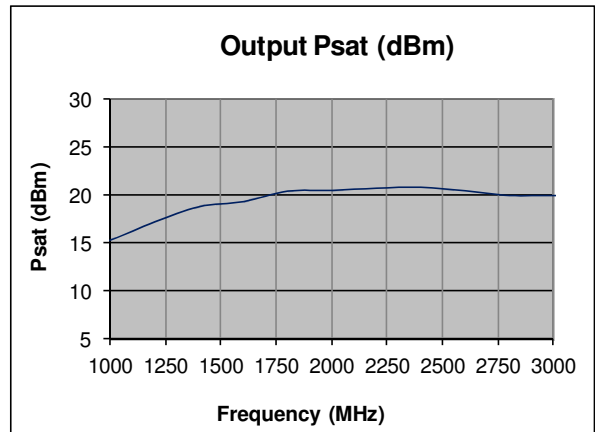
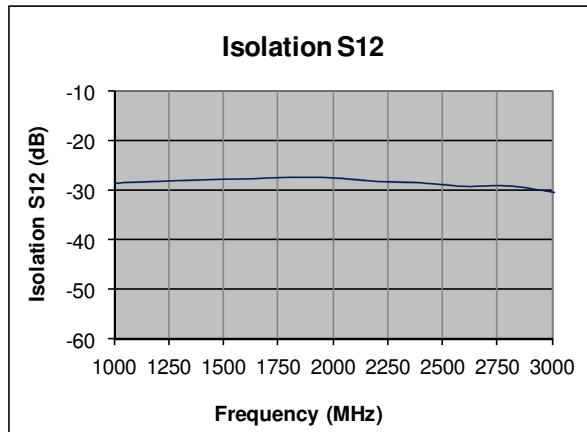
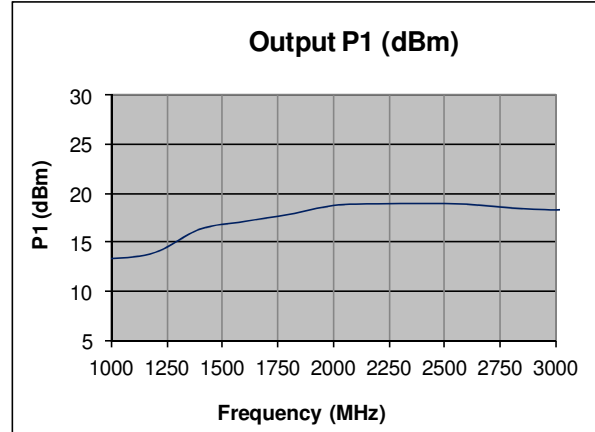
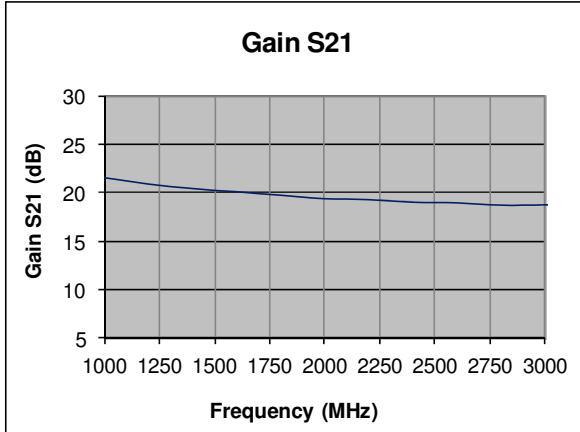
Electrical Specifications @+25°C, Z_{in}=Z_{out}=50 Ω, V_{supply} = +5VDC

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	1000		3000
Gain (S ₂₁) f = 1000MHz	dB		20.5	
f = 2000MHz	dB	17.0	18.5	
f = 3000MHz	dB		19.0	
Gain Variation Over Temperature	dB/°C		0.014	0.025
Output Power P _{1dB}	dBm		+14	
Saturated Output Power P _{Sat}	dBm		+15.5	
Output Third Order Intercept IP3	dBm		+33	
Noise Figure @2000MHz	dB		0.55	0.7
Reverse Isolation(S ₁₂) @2000MHz	dB		-27	
VSWR-Input (S ₁₁)	ratio:1	1.7 @1000MHz	1.3 @2000MHz	1.8 @3000MHz
VSWR-Output (S ₂₂)	(unitless)	1.3 @1000MHz	1.2 @2000MHz	1.9 @3000MHz
DC Power Supply - voltage	V	5		15
DC Power Supply - current	mA		115	
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

1000-3000MHz Low Noise Amplifier

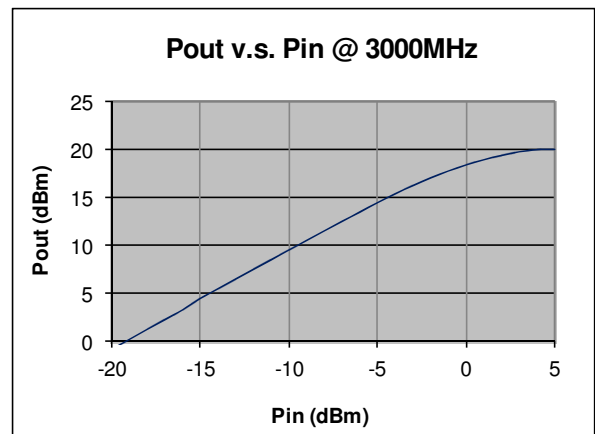
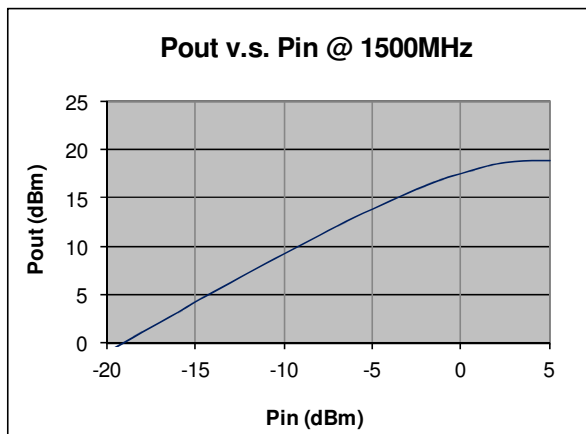
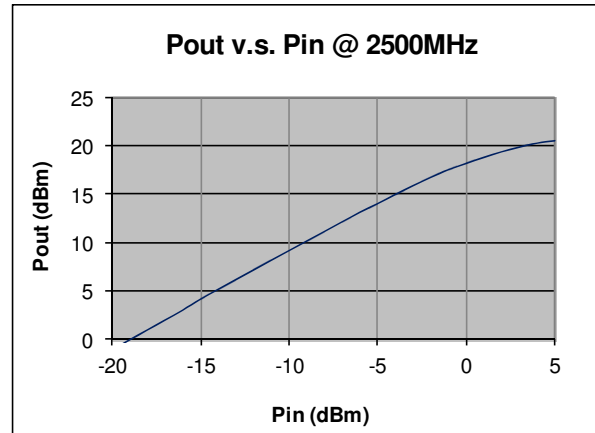
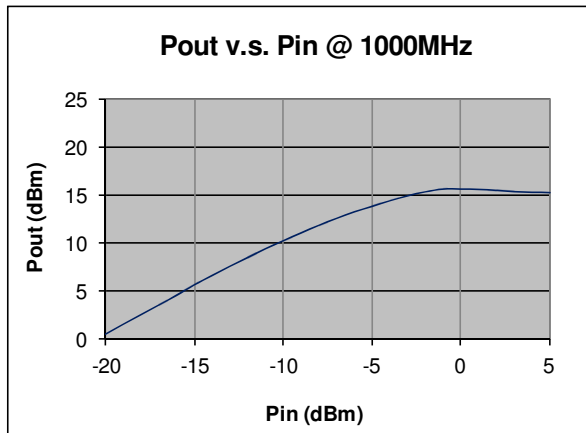
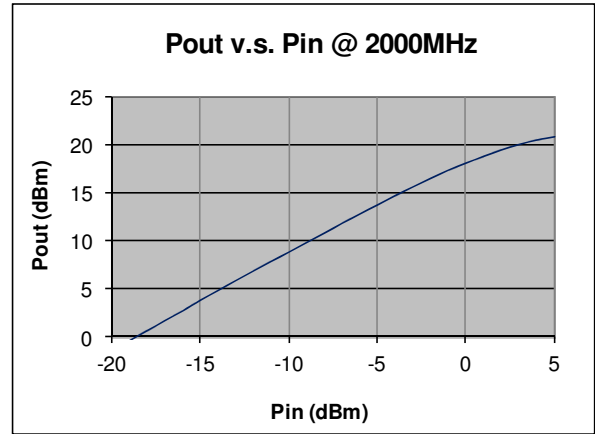
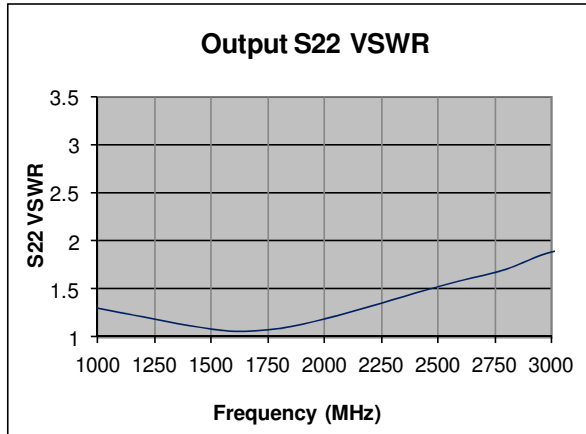
Typical Performance @+25 °C



GNA Series

1000-3000MHz Low Noise Amplifier

Typical Performance @+25 °C



GNA Series

1000-3000MHz Low Noise Amplifier

Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+33dBm
Supply Voltage (Survival)	+16V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

Outline

