

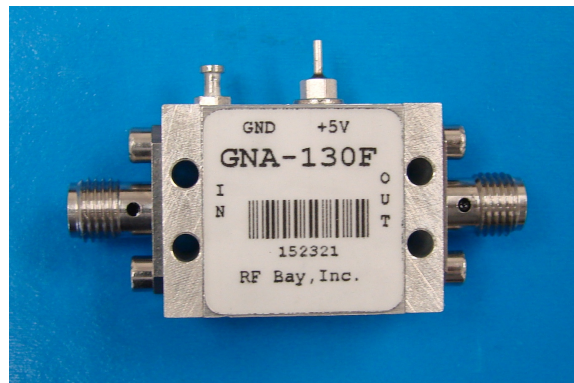
GNA Series

5 – 21GHz Low Noise Amplifier

Features

- Frequency Range: 5-21GHz
- Gain: 19dB
- P_{1dB}: +10dBm
- IP3: +20dBm
- Noise Figure: 2.5dB (typ.)
- DC Power: +5V to +15V @ 65mA
- Internally Voltage Regulated
- RF Connector: SMA-Female

Photo



Description

GNA-130F is a high performance Microwave Low Noise Amplifier, with standard frequency range of 5GHz to 21GHz.

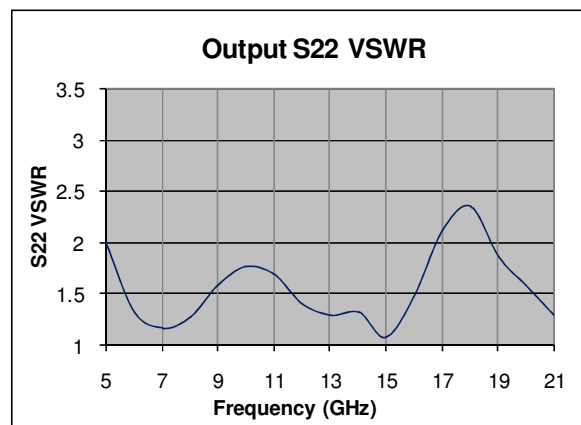
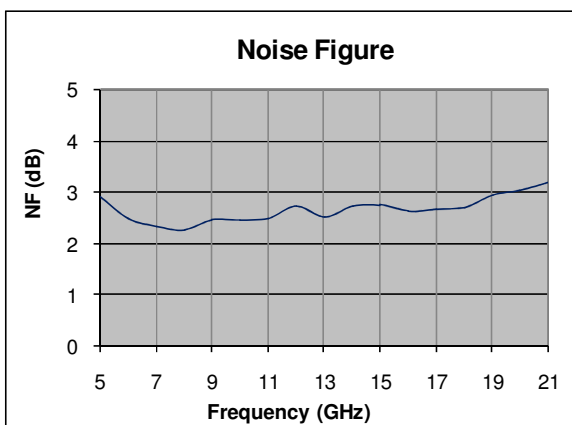
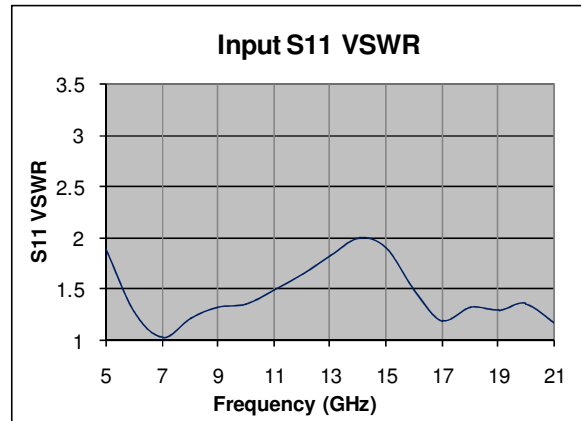
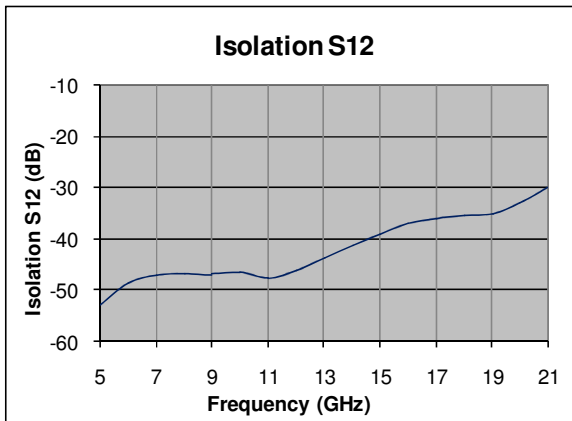
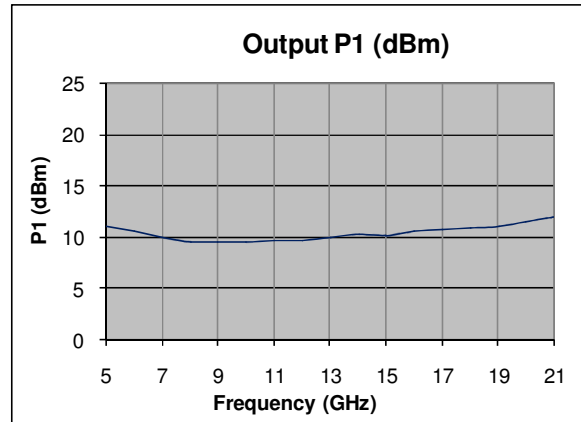
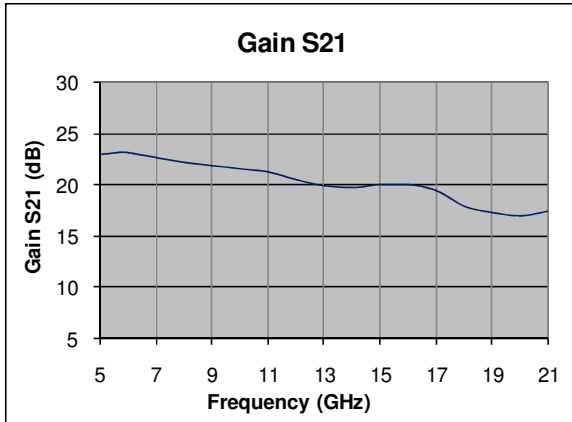
Electrical Specifications @+25 °C, Z_{in}=Z_{out}=50 Ω, V_{supply} = +5VDC

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	5		21
Gain (S ₂₁) f = 5GHz	dB		22.0	
f = 13GHz	dB		19.0	
f = 21GHz	dB		17.0	
Gain Variation Over Temperature	dB/°C		0.025	0.035
Output Power P _{1dB}	dBm	+8	+10	
Saturated Output Power P _{Sat}	dBm		+13.5	
Output Third Order Intercept IP3	dBm		+20	
Noise Figure @13GHz	dB		2.5	3.0
Reverse Isolation (S ₁₂) @13GHz	dB		-43	
VSWR-Input (S ₁₁)	ratio:1	1.9 @5GHz	1.8 @13GHz	1.2 @21GHz
VSWR-Output (S ₂₂)	(unitless)	2.0 @5GHz	1.3 @13GHz	1.3 @21GHz
DC Power Supply - voltage	V	5		15
DC Power Supply - current	mA		65	85
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	0dBm
Supply Voltage (Survival)	+16V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

Outline

