

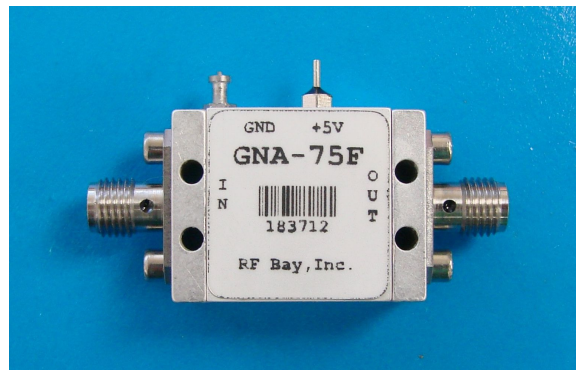
GNA Series

2 – 6GHz Low Noise Amplifier

Features

- Frequency Range: 2-6GHz
- Gain: 28dB @ 4GHz
- P_{1dB}: +18dBm
- IP3: +30dBm
- Noise Figure: 0.8dB (typ.)
- DC Power: 5V @ 65mA
- RF Connector: SMA-female

Photo



Description

GNA-75F is a high performance Microwave Low Noise (& Driver) Amplifier, with standard frequency range of 2GHz to 6GHz.

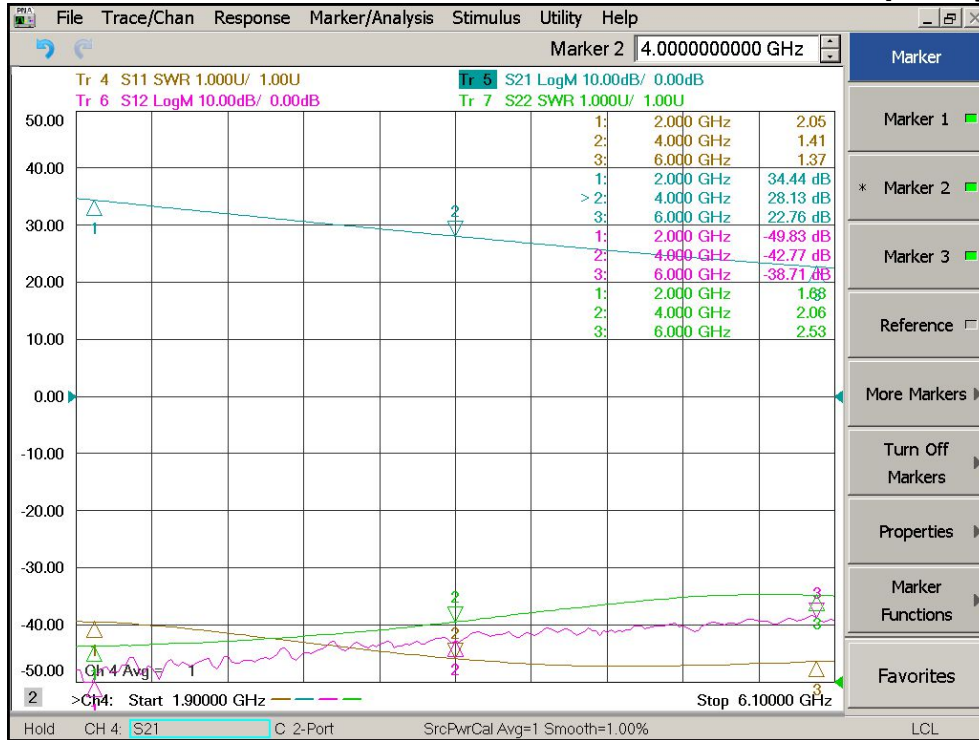
Electrical Specifications @+25 °C, Z_{in}=Z_{out}=50 Ω, DC Voltage = +5VDC

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	2		6
Gain S ₂₁	f = 2GHz	32.0	34.0	
	f = 4GHz	26.0	28.0	
	f = 6GHz	20.0	22.0	
Gain Flatness	dB		± 5.0	± 6.5
Gain Variation Over Temperature	dB/°C		0.02	0.03
Output Power P _{1dB}	f = 4GHz	+16	+18	
Output Third Order Intercept IP3	f = 4GHz	+28	+30	
Noise Figure	f = 4GHz		0.8	1.0
Reverse Isolation S ₁₂	f = 4GHz	-35	-40	
Input VSWR S ₁₁	f = 4GHz		1.5:1	2.0:1
Output VSWR S ₂₂	f = 4GHz		2.0:1	2.5:1
DC Power Supply - voltage	V	4.5	5.0	15
DC Power Supply - current	mA		65	75

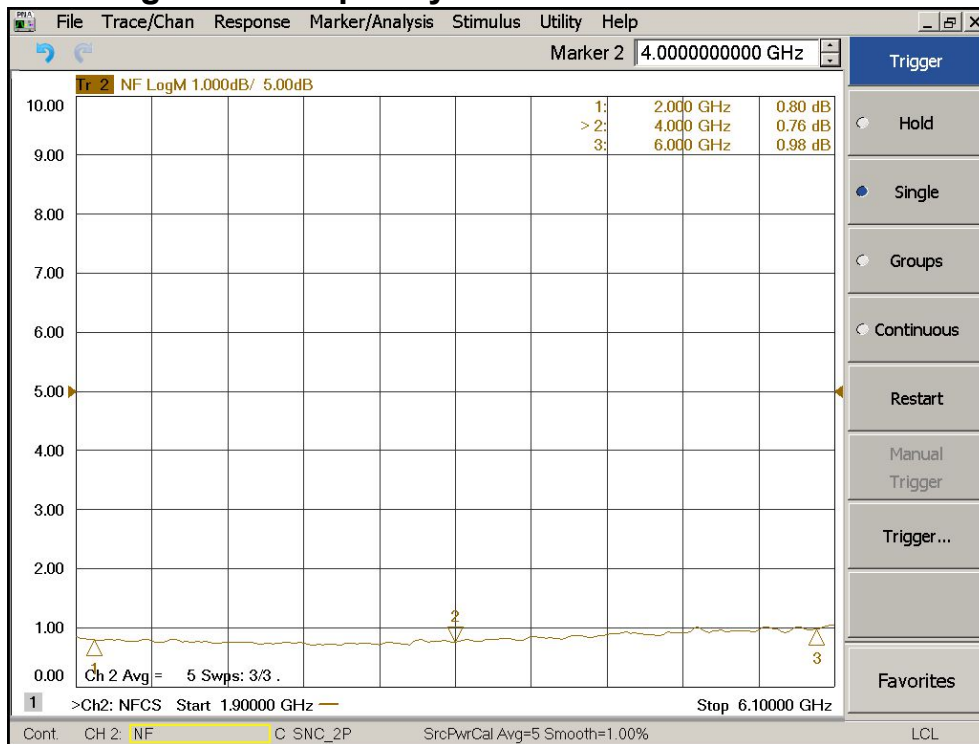
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Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency



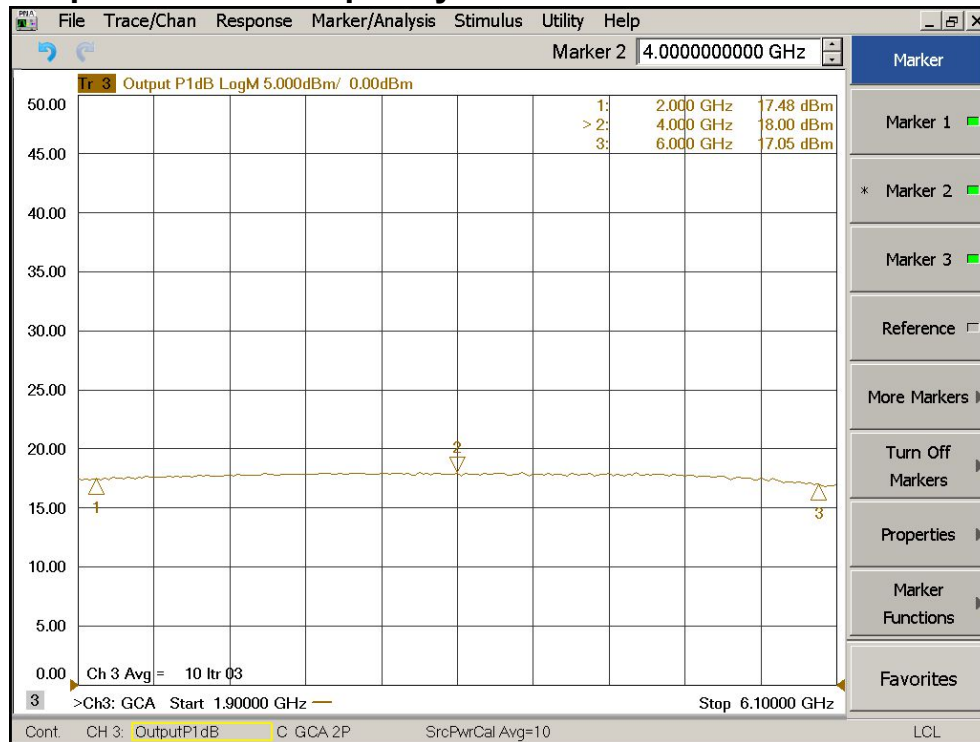
Noise Figure vs Frequency



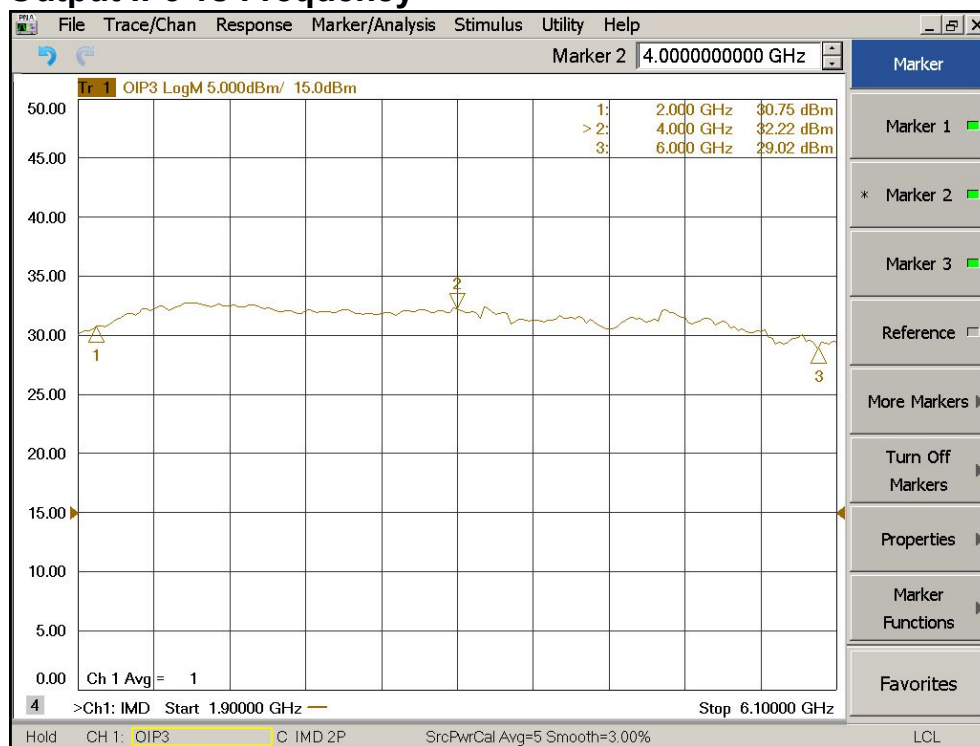
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Output P1dB vs Frequency



Output IP3 vs Frequency



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2 – 6GHz Low Noise Amplifier

Absolute Maximum Ratings

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

ESD Sensitive Material



Outline

