

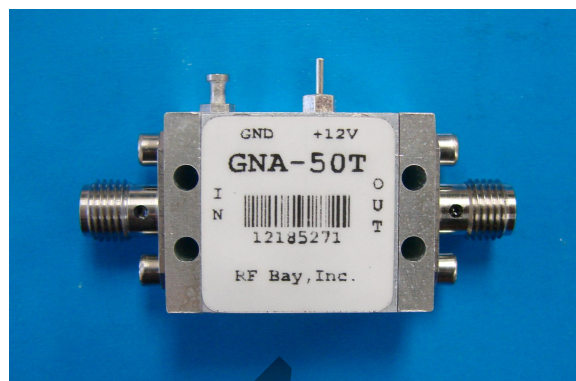
GNA Series

1000-6000MHz Low Noise Amplifier

Features

- Frequency Range: 1000-6000MHz
- Gain: 17dB
- P_{1dB} : +18.5dBm
- IP3: +34.5dBm
- Noise Figure: 1.0dB
- DC Power: +9V to +15V @ 65mA
- Internally Voltage Regulated
- Reverse Voltage Protected
- RF Connector: SMA-Female

Photo



Description

GNA-50T is a high performance Microwave Low Noise Amplifier, with standard frequency range of 1000MHz to 6000MHz.

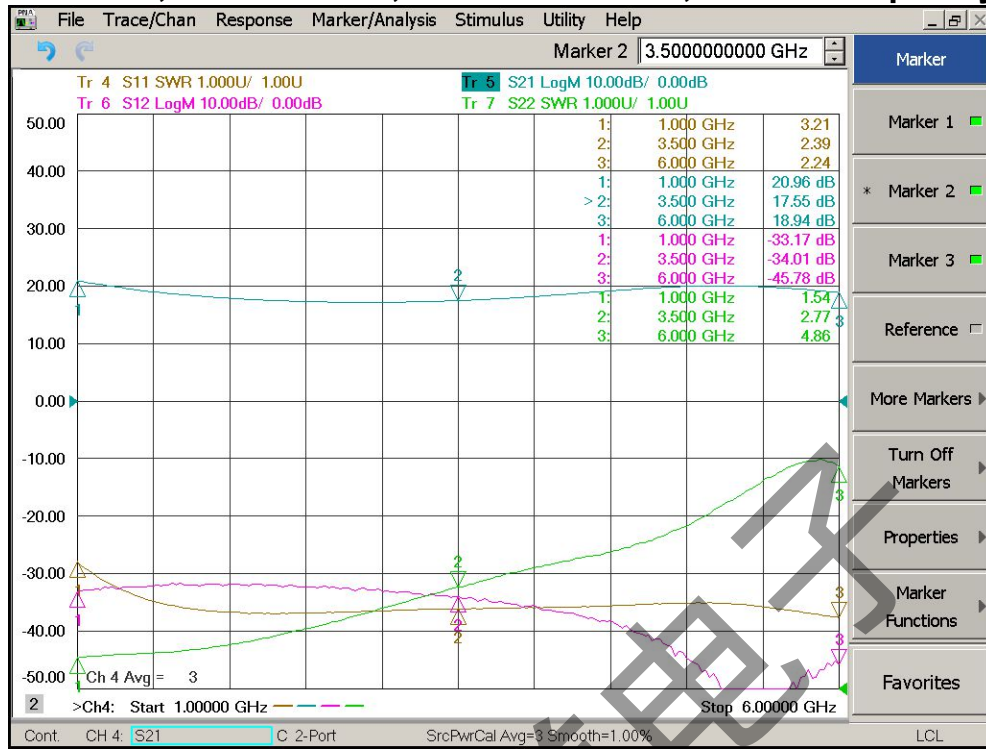
Electrical Specifications @+25°C, $Z_{in}=Z_{out}=50\ \Omega$, DC Supply = +12VDC

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	1000		6000
Gain S21	f = 1000MHz	21.0	22.5	
	f = 3500MHz	16.0	17.5	
	f = 6000MHz	17.0	18.5	
Gain Flatness	dB		±2.0	±3.0
Gain Variation Over Temperature	dB/°C		0.014	0.025
Output Power P_{1dB}	f = 3500MHz	+17	+18.5	
Saturated Output Power P_{Sat}	f = 3500MHz	+18	+19.5	
Output Third Order Intercept IP3	f = 3500MHz	+32	+34.5	
Noise Figure	f = 3500MHz		1.0	1.2
Reverse Isolation S12	f = 3500MHz	-30	-34	
Input VSWR S11	f = 3500MHz		2.5:1	3.0:1
Output VSWR S22	f = 3500MHz		2.8:1	3.3:1
DC Power Supply - voltage	V	9	12	15
DC Power Supply - current	mA		65	80

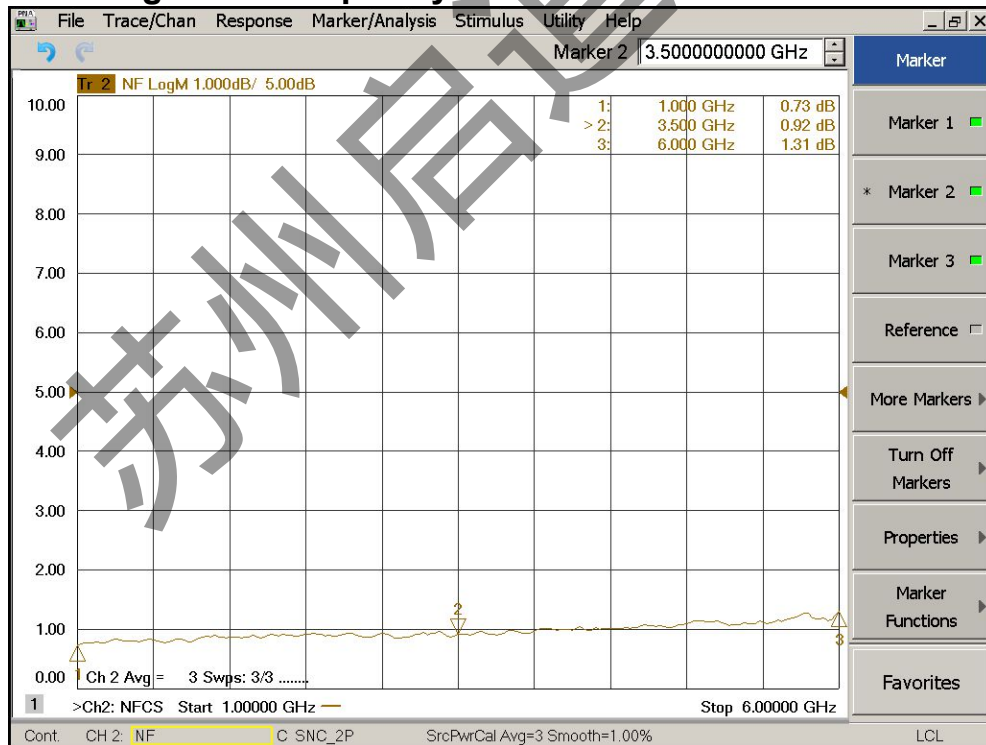
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Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency



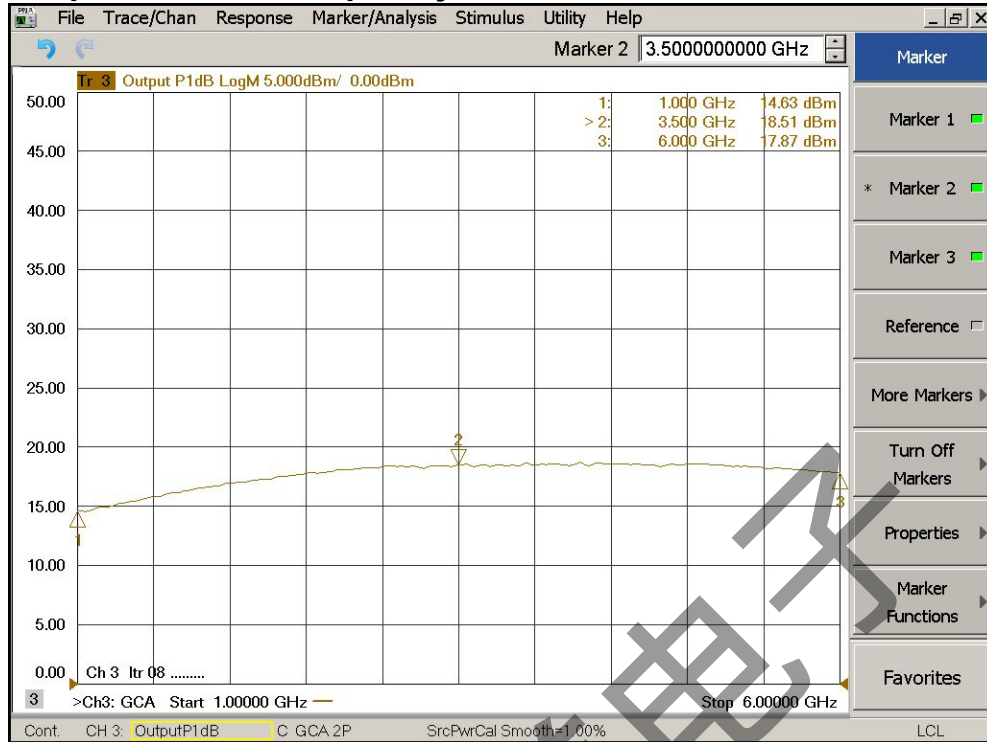
Noise Figure vs Frequency



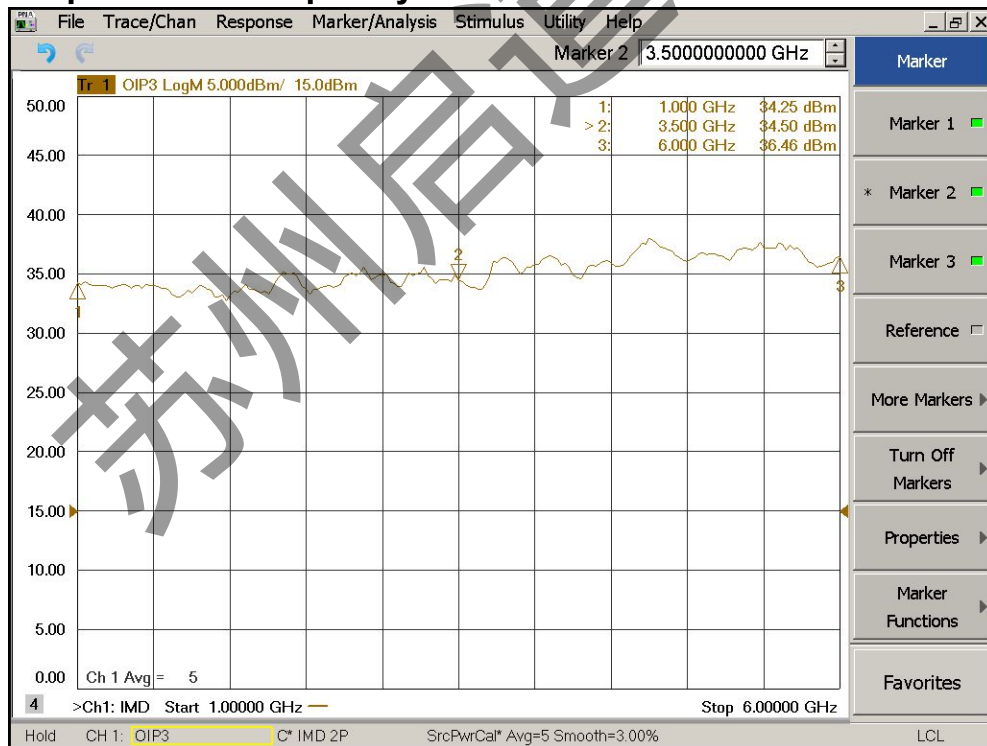
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Output P1dB vs Frequency



Output IP3 vs Frequency



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Absolute Maximum Ratings

Parameter	Absolute Maximum
Supply Voltage	+16V
RF Input Power	+30dBm
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

ESD Sensitive Material



Outline

