

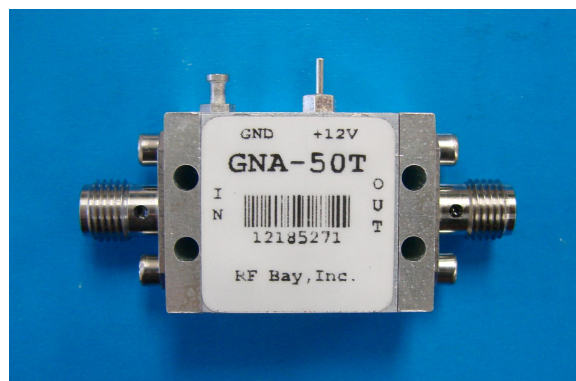
## GNA Series

## 1000-6000MHz Low Noise Amplifier

### Features

- Frequency Range: 1000-6000MHz
- Gain: 17dB
- P<sub>1dB</sub>: +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



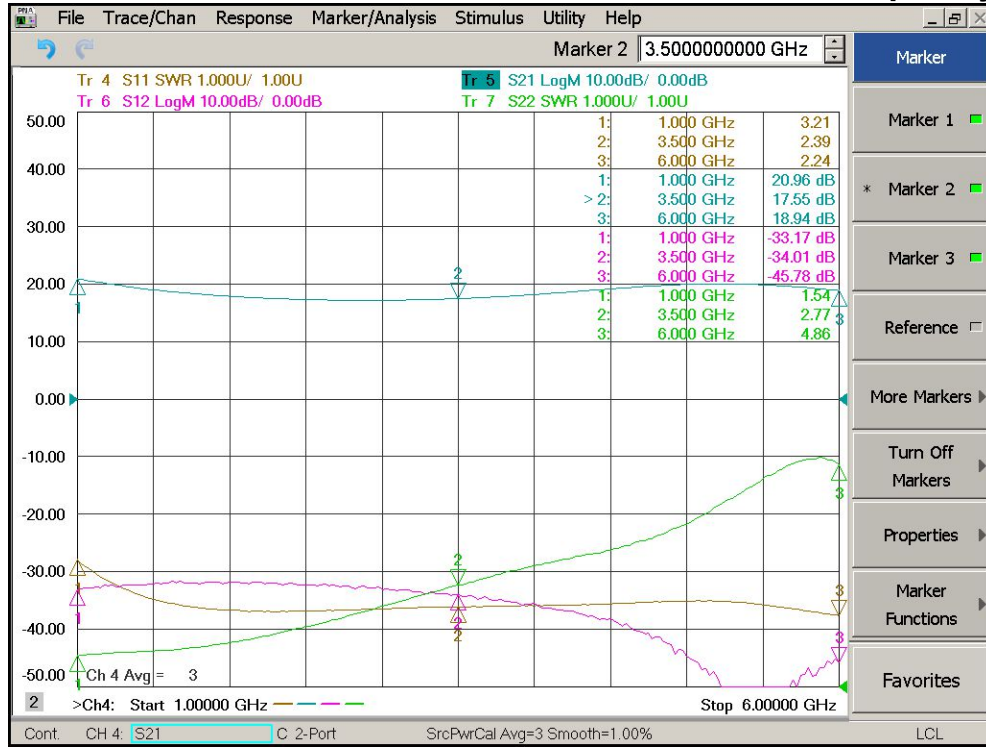
### Description

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

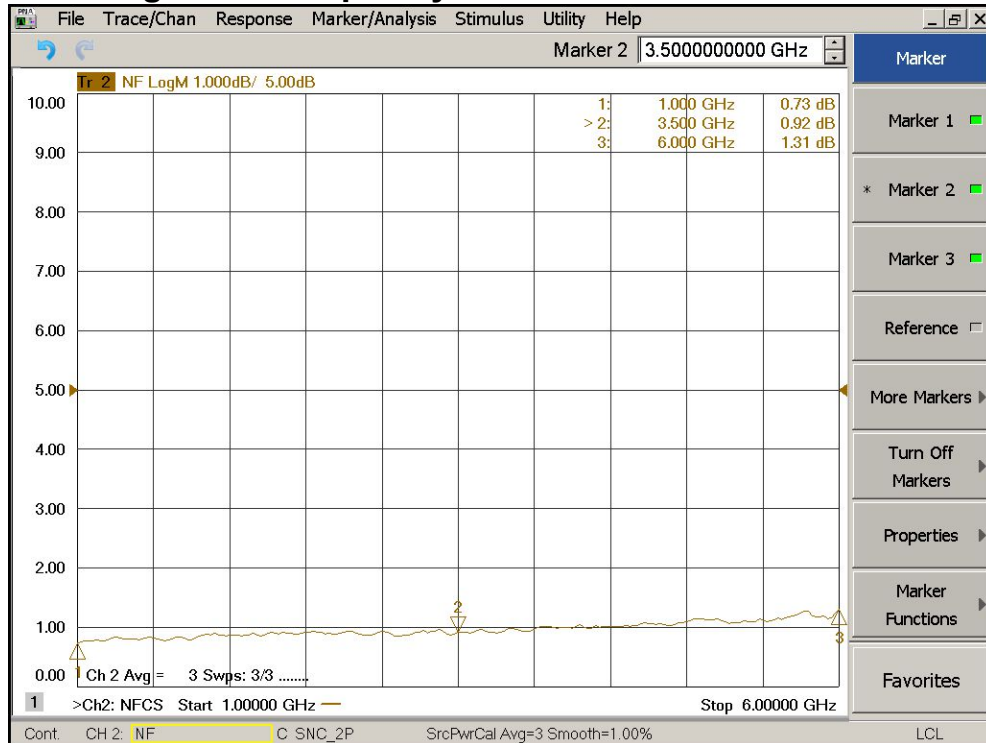
### Electrical Specifications @+25°C, Z<sub>in</sub>=Z<sub>out</sub>=50 Ω, DC Supply = +12VDC

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	1000		6000
Gain S <sub>21</sub> f = 1000MHz	dB	21.0	22.5	
f = 3500MHz	dB	16.0	17.5	
f = 6000MHz	dB	17.0	18.5	
Gain Flatness	dB		±2.0	±3.0
Gain Variation Over Temperature	dB/°C		0.014	0.025
Output Power P <sub>1dB</sub> f = 3500MHz	dBm	+17	+18.5	
Saturated Output Power P <sub>Sat</sub> f = 3500MHz	dBm	+18	+19.5	
Output Third Order Intercept IP3 f = 3500MHz	dBm	+32	+34.5	
Noise Figure f = 3500MHz	dB		1.0	1.2
Reverse Isolation S <sub>12</sub> f = 3500MHz	dB	-30	-34	
Input VSWR S <sub>11</sub> f = 3500MHz			2.5:1	3.0:1
Output VSWR S <sub>22</sub> f = 3500MHz			2.8:1	3.3:1
DC Power Supply - voltage	V	9	12	15
DC Power Supply - current	mA		65	80

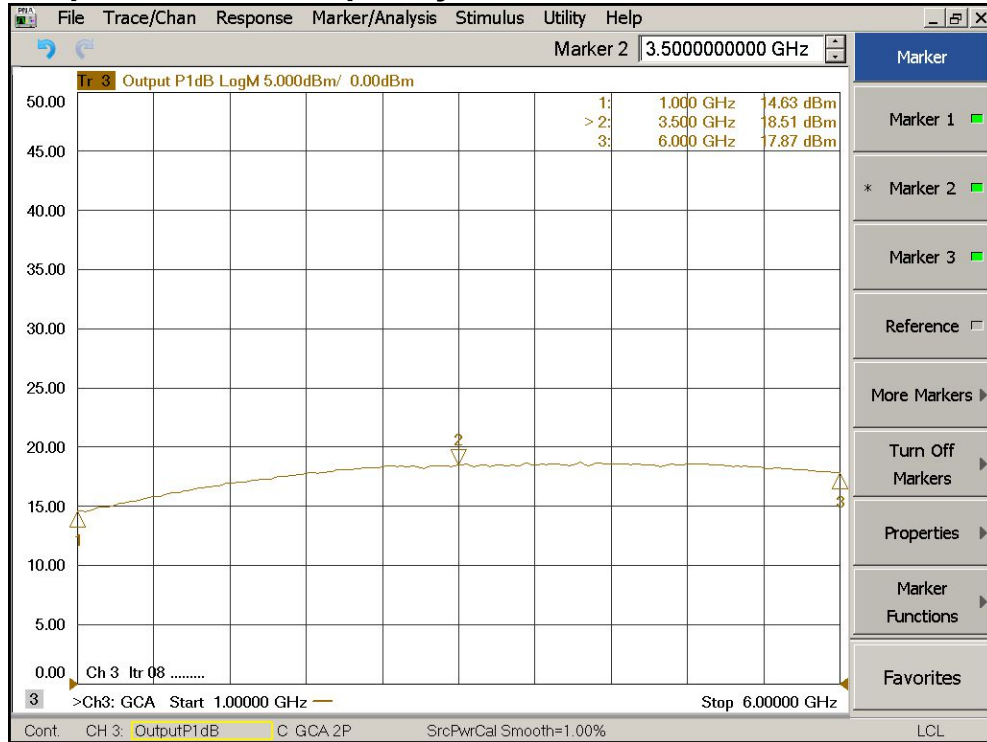
**Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency**



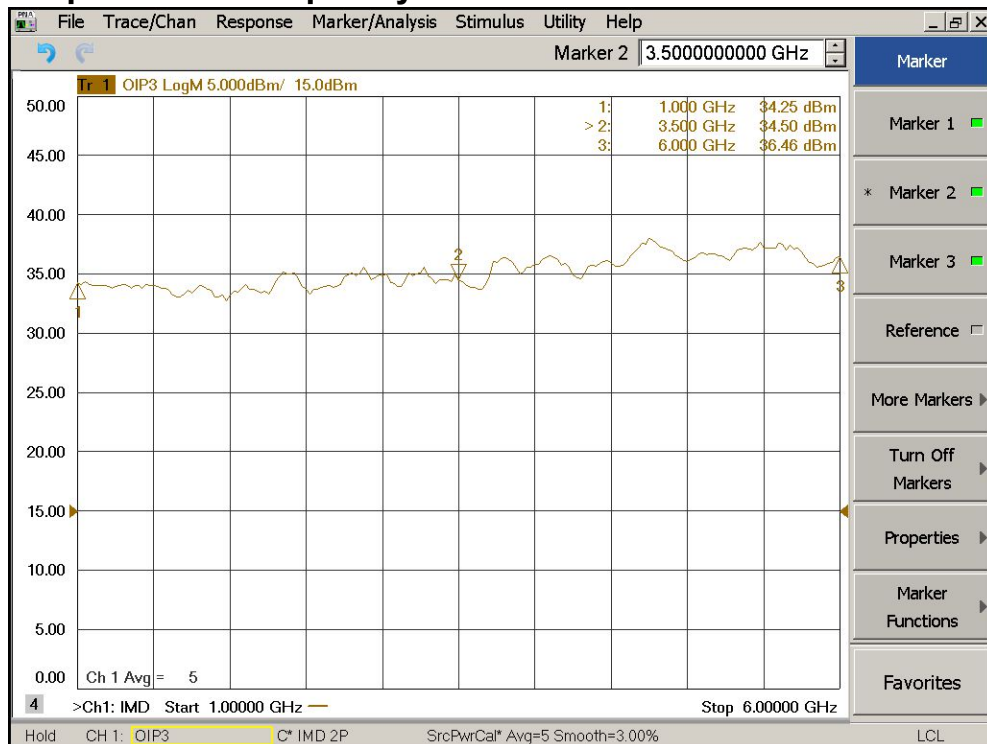
**Noise Figure vs Frequency**



### Output P1dB vs Frequency



### Output IP3 vs Frequency



## GNA Series

## 1000-6000MHz Low Noise Amplifier

### 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

