RF BAY
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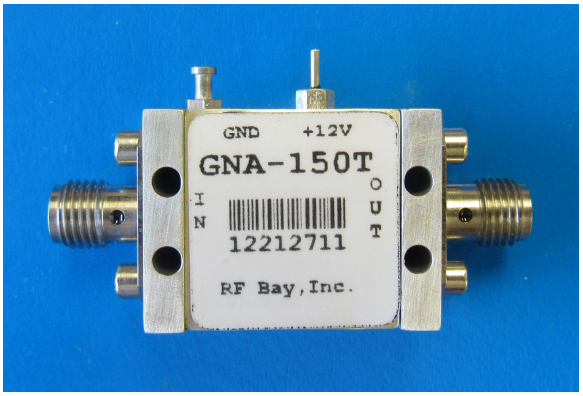
GNA-150T

GNA Series — 5000-6000MHz Low Noise Amplifier

Features

- Frequency Range:5000-6000MHz
- Gain: 18dB
- P_{1dB}: +15dBm
- IP3: +32dBm
- Noise Figure: 1.1dB
- DC Power: +9V to +15V @ 60mA
- Internally Voltage Regulated
- Reverse Voltage Protected
- RF Connector: SMA-Female

Photo



Description

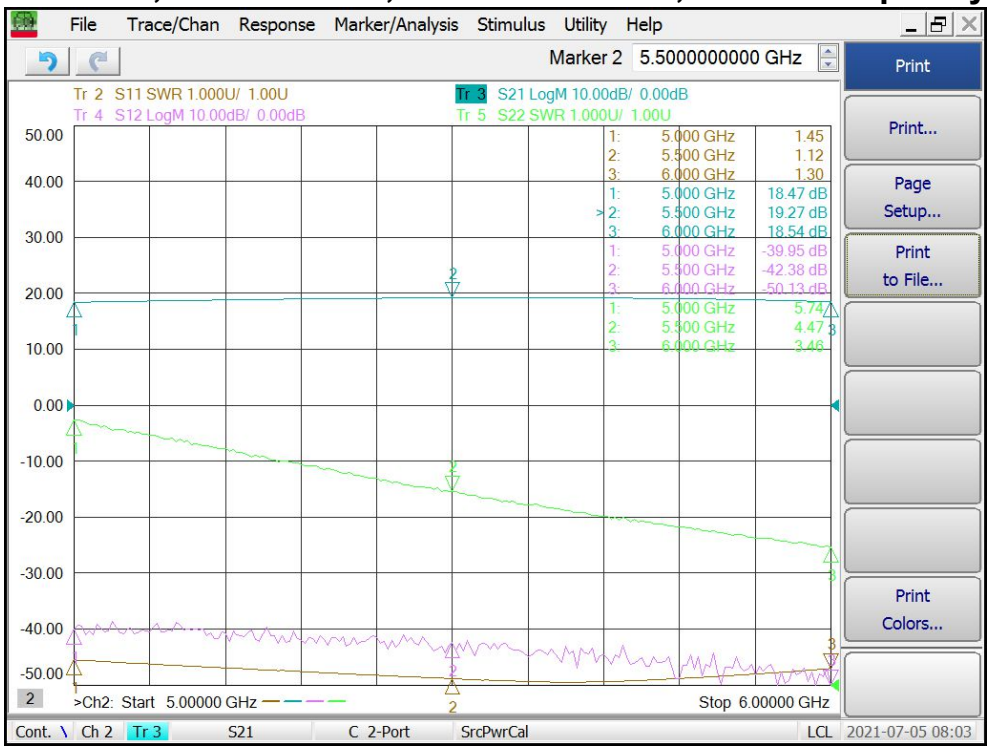
GNA-150T is a high performance Microwave Low Noise Amplifier, with standard frequency range of 5000MHz to 6000MHz.

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

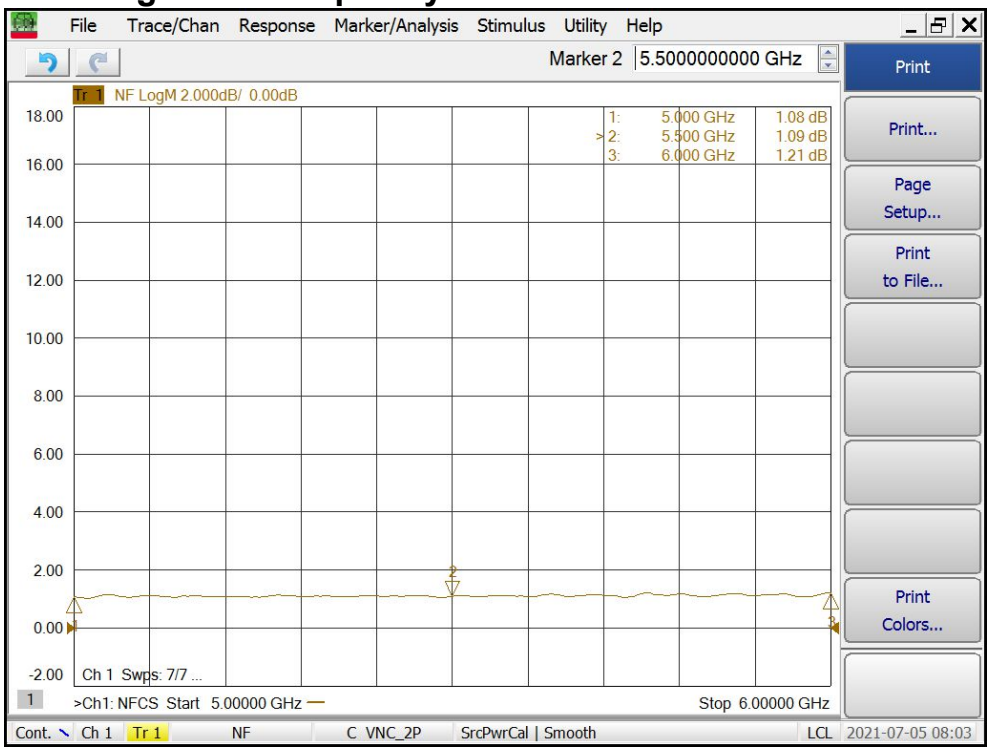
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	5000		6000
Gain S21 f = 5000MHz	dB	17.0	18.0	
f = 5500MHz	dB	17.0	18.0	
f = 6000MHz	dB	17.0	18.0	
Gain Flatness	dB		±0.5	±1.0
Gain Variation Over Temperature	dB/°C		0.014	0.025
Output Power P_{1dB} f = 5500MHz	dBm	+14	+15	
Output Third Order Intercept IP3 f = 5500MHz	dBm	+30	+32	
Noise Figure f = 5500MHz	dB		1.1	1.5
Reverse Isolation S12 f = 5500MHz	dB	-30	-40	
Input VSWR S11 f = 5500MHz			1.2:1	1.5:1
Output VSWR S22 f = 5500MHz			4.5:1	5.0:1
DC Power Supply - voltage	V	9	12	15
DC Power Supply - current	mA		60	75

GNA Series — 5 – 6GHz Low Noise Amplifier

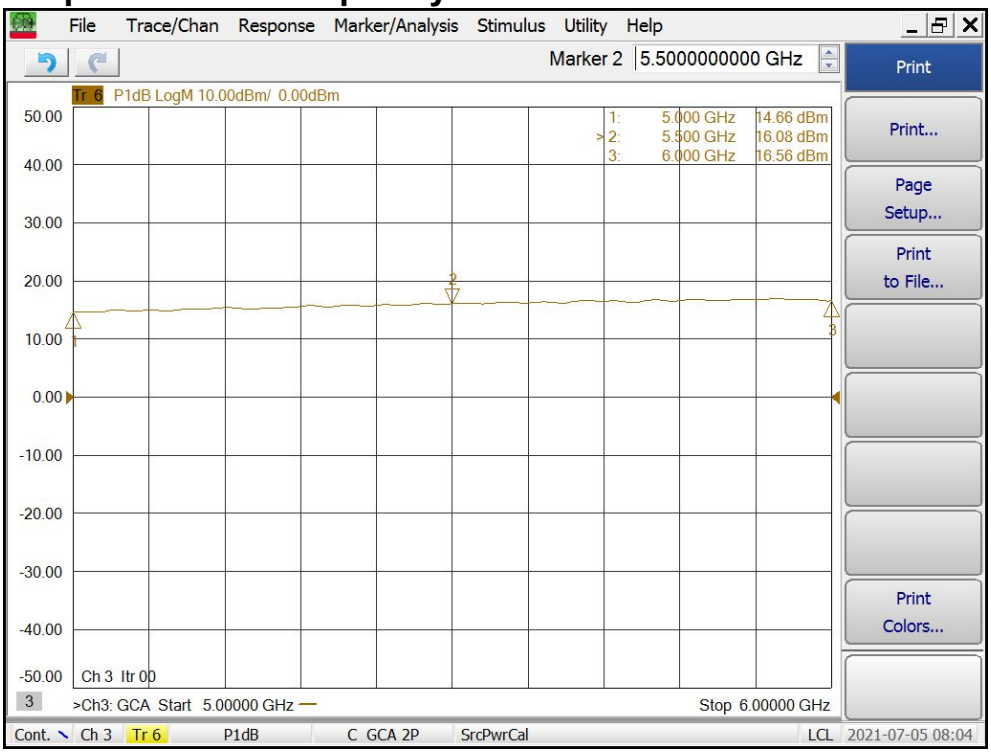
Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency



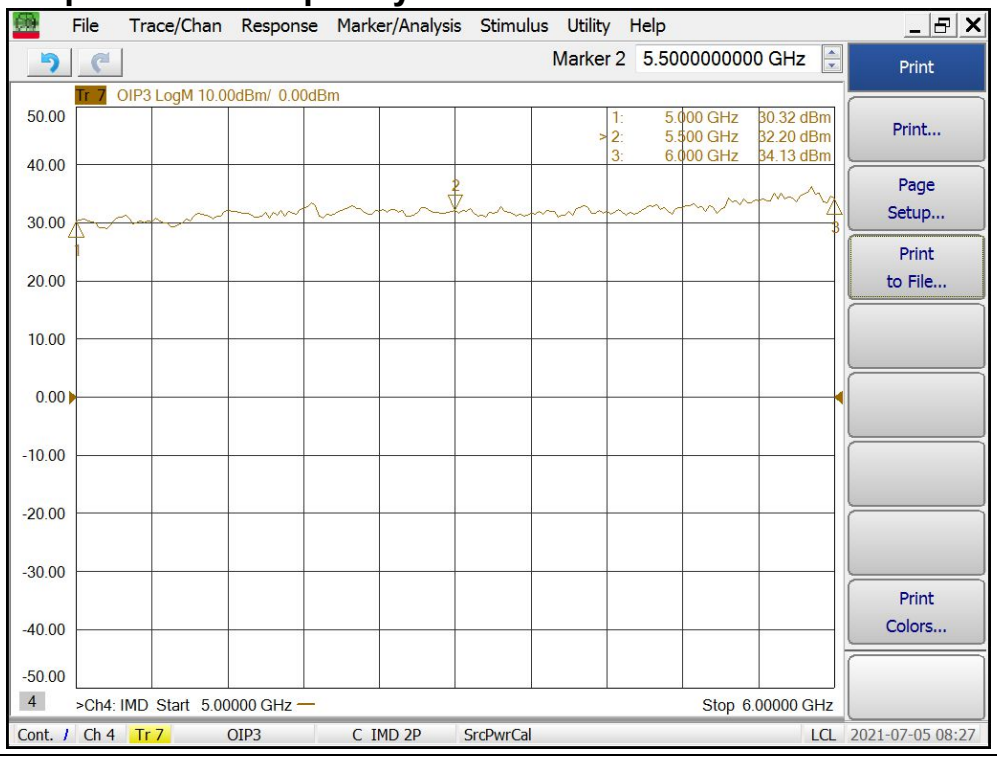
Noise Figure vs Frequency



Output P1dB vs Frequency



Output IP3 vs Frequency



GNA Series

5 – 6GHz Low Noise Amplifier

Absolute Maximum Ratings

Parameter	Absolute Maximum
Supply Voltage (Survival)	+16V
RF Input Power	+22dBm
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

ESD Sensitive Material

RoHS (EU)/2015/863 COMPLIANT

CE

Outline