

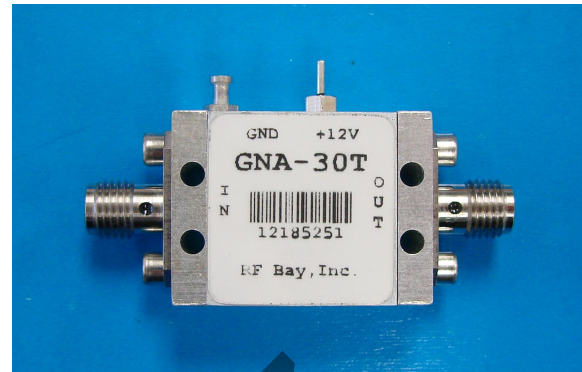
GNA Series

700-3500MHz Low Noise Amplifier

Features

- Frequency Range: 700-3500MHz
- Gain: 19dB
- P_{1dB} : +19.5dBm
- IP3: +35dBm
- Noise Figure: 0.7dB
- DC Power: +9V to +15V @ 75mA
- Internally Voltage Regulated
- Reverse Voltage Protected
- RF Connector: SMA-Female

Photo



Description

GNA-30T is a high performance Microwave Low Noise Amplifier, with standard frequency range of 700MHz to 3500MHz.

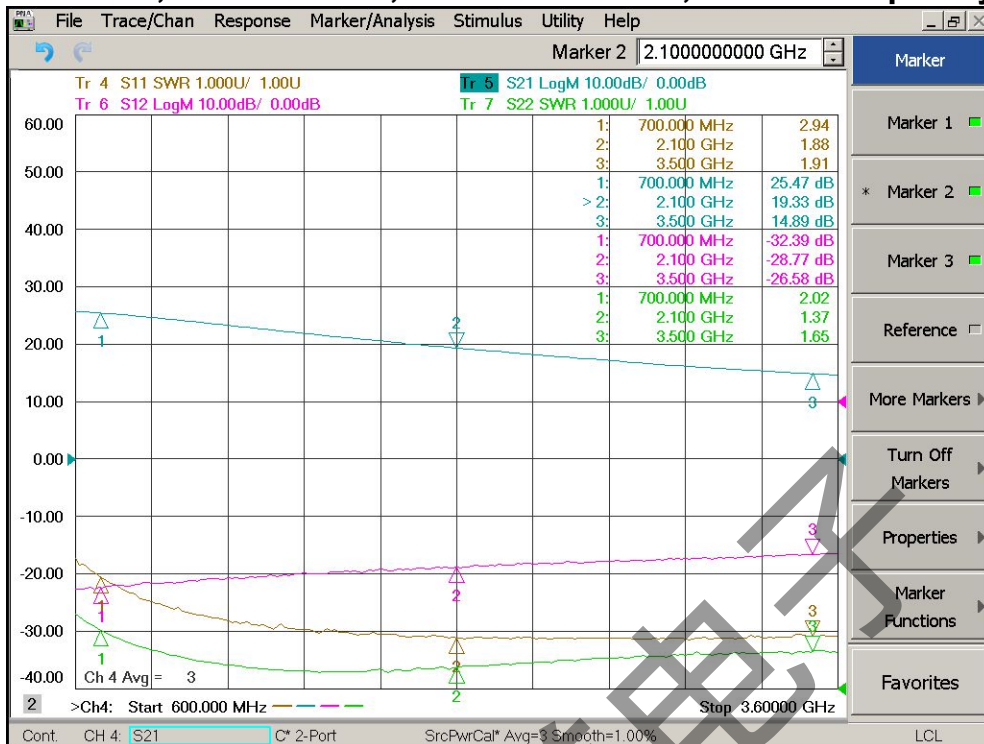
Electrical Specifications @+25°C, $Z_{in}=Z_{out}=50\ \Omega$, DC Supply = +12VDC

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	700		3500
Gain S21				
f = 700MHz	dB	24.0	25.5	
f = 2100MHz	dB	17.5	19.0	
f = 3500MHz	dB	13.0	14.5	
Gain Flatness	dB		±5.5	±6.5
Gain Variation Over Temperature	dB/°C		0.014	0.025
Output Power P_{1dB}	dBm	+18	+19.5	
f = 2100MHz				
Saturated Output Power P_{Sat}	dBm	+19	+21	
f = 2100MHz				
Output Third Order Intercept IP3	dBm	+32	+35	
f = 2100MHz				
Noise Figure	dB		0.7	0.9
f = 2100MHz				
Reverse Isolation S12	dB	-25	-28	
f = 2100MHz				
Input VSWR S11			2.0:1	2.5:1
f = 2100MHz				
Output VSWR S22			1.5:1	2.0:1
f = 2100MHz				
DC Power Supply - voltage	V	9	12	15
DC Power Supply - current	mA		75	95

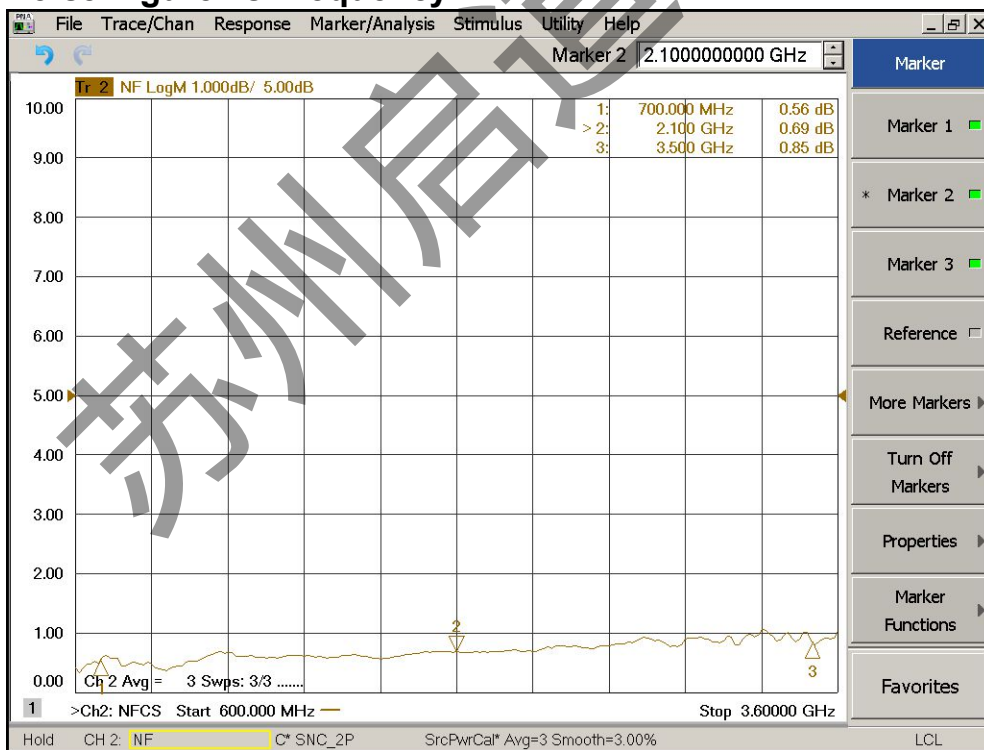
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Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency



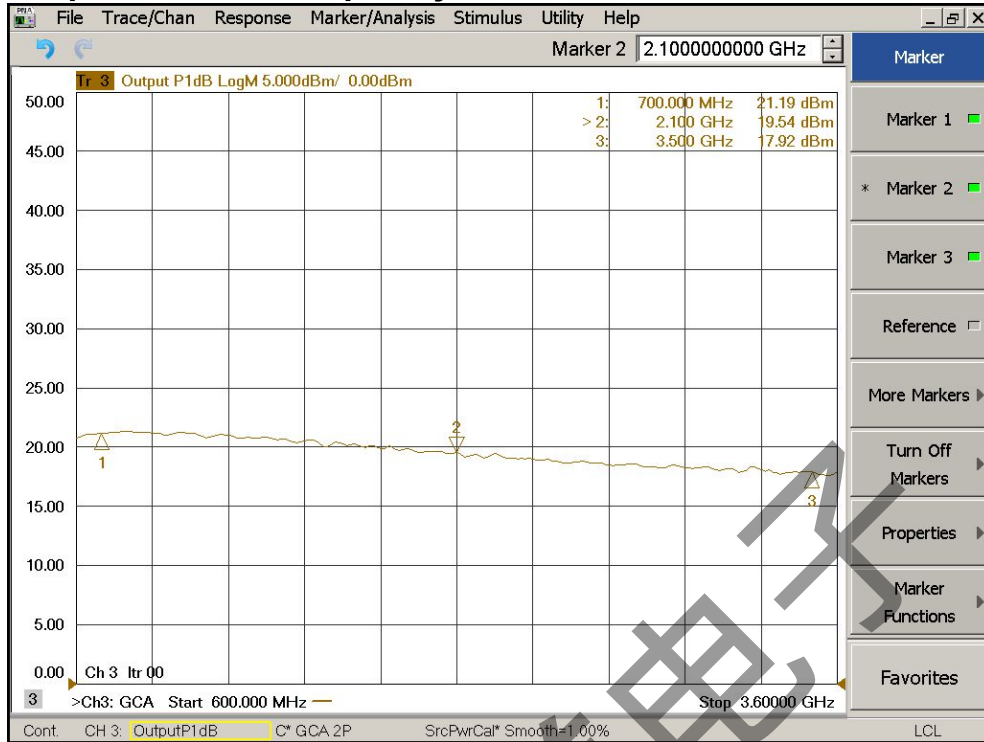
Noise Figure vs Frequency



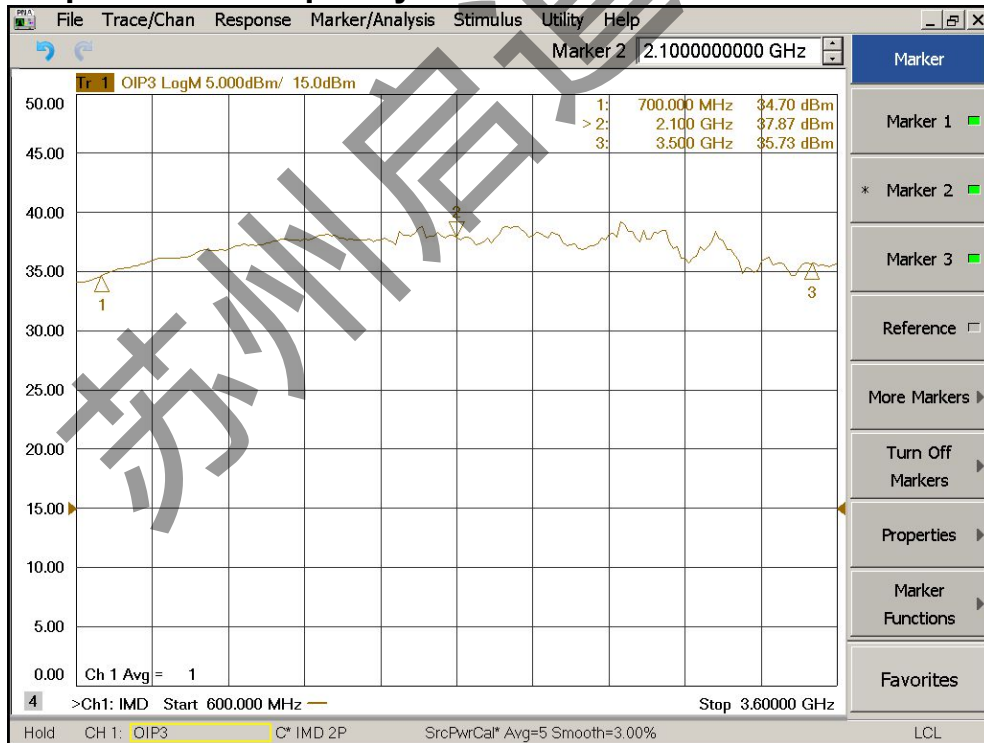
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Output P1dB vs Frequency



Output IP3 vs Frequency



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Absolute Maximum Ratings

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

ESD Sensitive Material



Outline

