

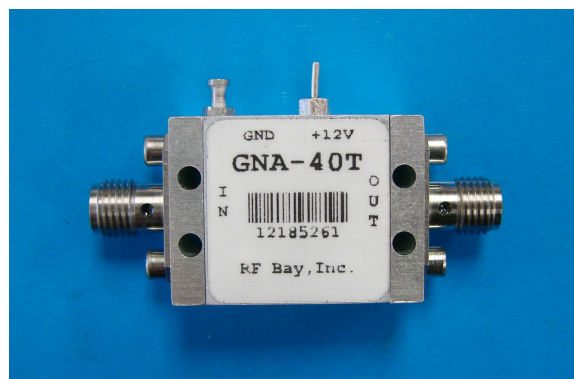
GNA Series

600-4200MHz Low Noise Amplifier

Features

- Frequency Range: 600-4200MHz
- Gain: 21dB
- P_{1dB}: +16dBm
- IP3: +32dBm
- Noise Figure: 0.7dB
- DC Power: +9V to +15V @ 50mA
- Internally Voltage Regulated
- Reverse Voltage Protected
- RF Connector: SMA-Female

Photo



Description

GNA-40T is a high performance Microwave Low Noise Amplifier, with standard frequency range of 600MHz to 4200MHz.

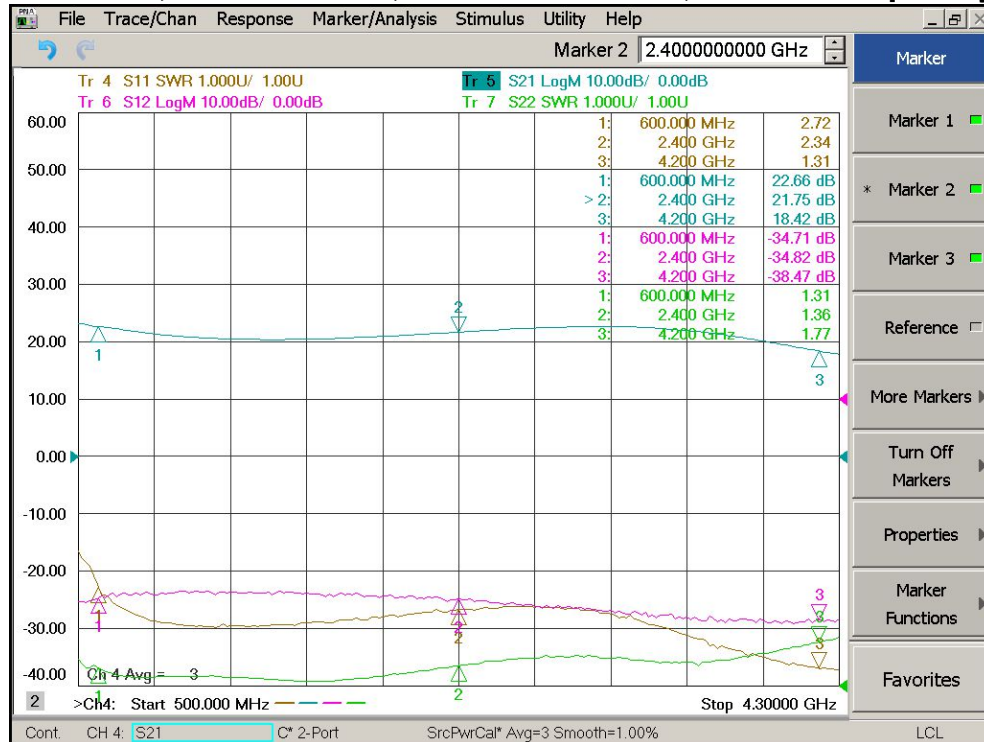
Electrical Specifications @+25°C, Z_{in}=Z_{out}=50 Ω, DC Supply = +12VDC

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	600		4200
Gain S ₂₁ f = 600MHz	dB	21.0	22.5	
f = 2400MHz	dB	20.0	21.5	
f = 4200MHz	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 _{1dB} f = 2400MHz	dBm	+14	+16	
Saturated Output Power P _{Sat} f = 2400MHz	dBm	+15	+17	
Output Third Order Intercept IP3 f = 2400MHz	dBm	+30	+32	
Noise Figure f = 2400MHz	dB		0.7	0.9
Reverse Isolation S ₁₂ f = 2400MHz	dB	-30	-34	
Input VSWR S ₁₁ f = 2400MHz			2.5:1	3.0:1
Output VSWR S ₂₂ f = 2400MHz			1.5:1	2.0:1
DC Power Supply - voltage	V	9	12	15
DC Power Supply - current	mA		50	65

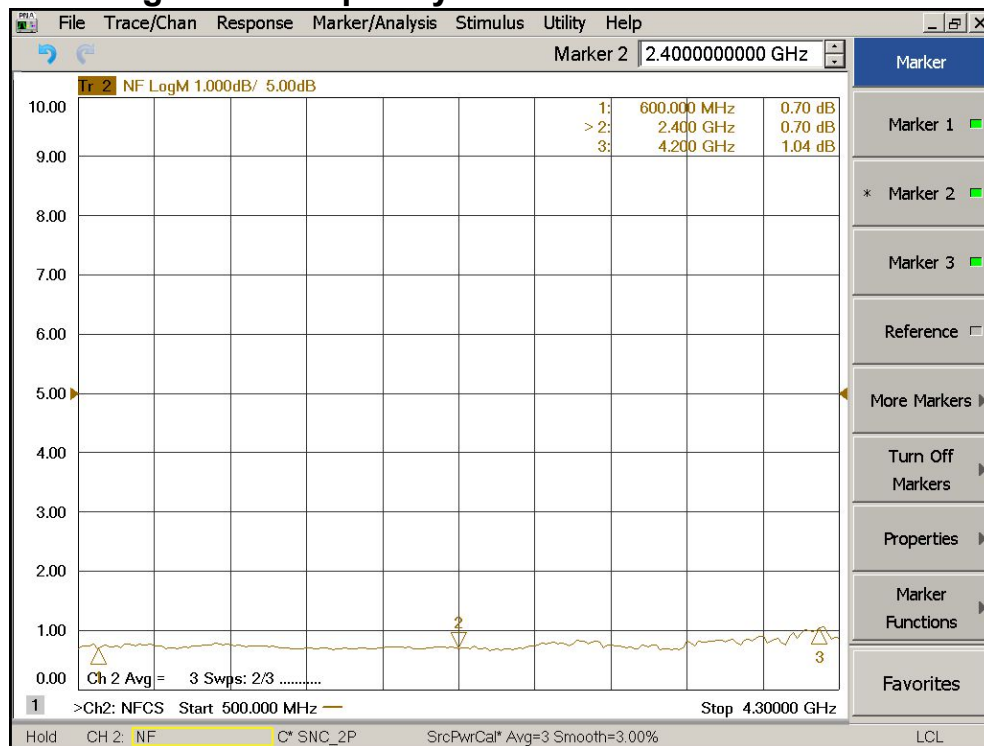
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Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency



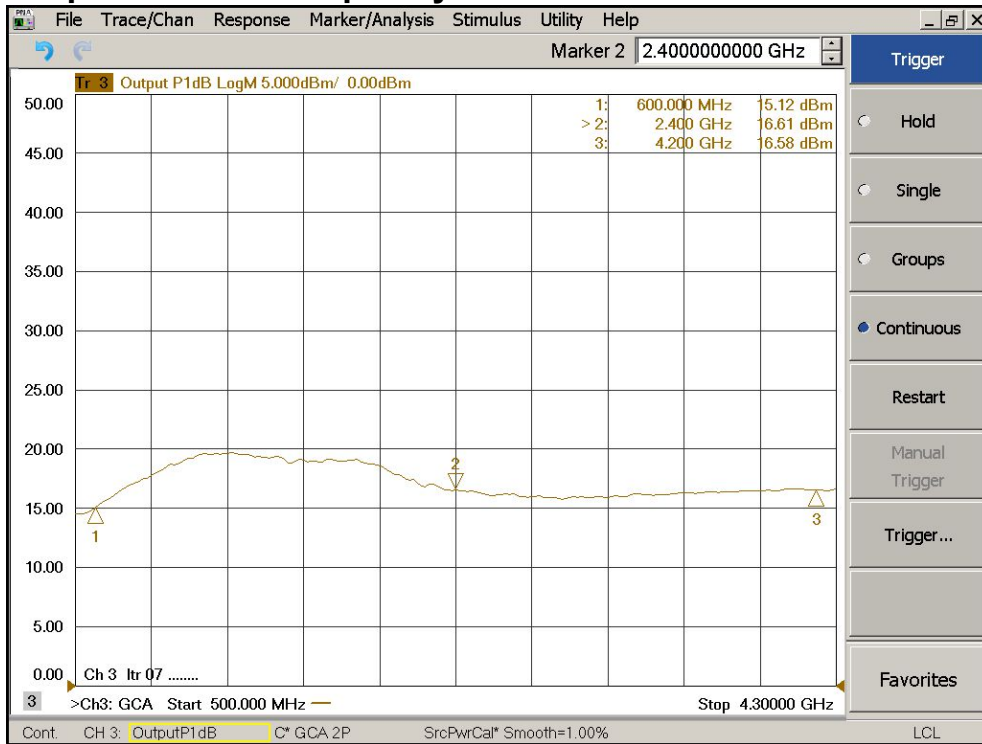
Noise Figure vs Frequency



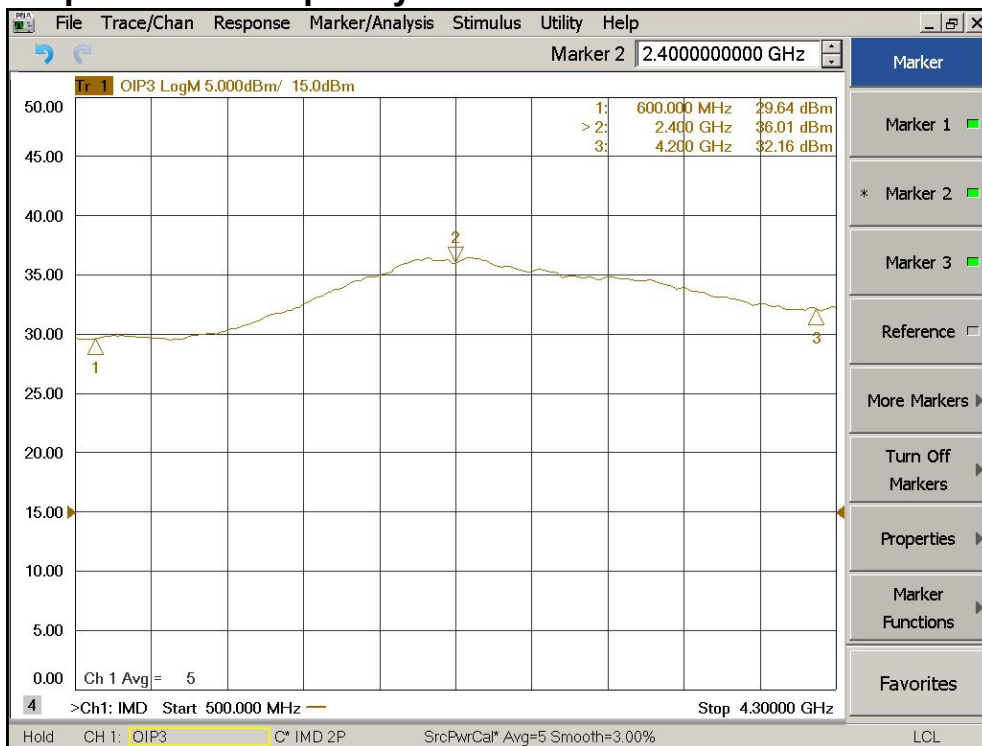
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Output P1dB vs Frequency



Output IP3 vs Frequency



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Absolute Maximum Ratings

Parameter	Absolute Maximum
Supply Voltage	+16V
RF Input Power	+27dBm
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

ESD Sensitive Material



Outline

