

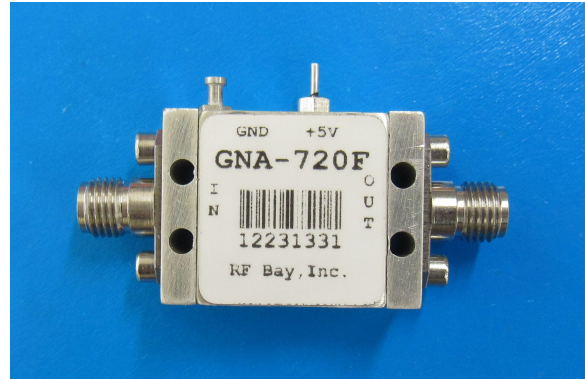
GNA Series

25 – 31GHz Low Noise Amplifier

Features

- Frequency Range: 25-31GHz
- Gain: 24dB
- P_{1dB}: +10dBm
- IP3: +20dBm
- Noise Figure: 2.3dB (typ.)
- DC Power: +5V @ 25mA
- RF Connector: 2.92mm Female

Photo



Description

GNA-720F is a high performance Microwave Low Noise Amplifier, with standard frequency range of 25GHz to 31GHz.

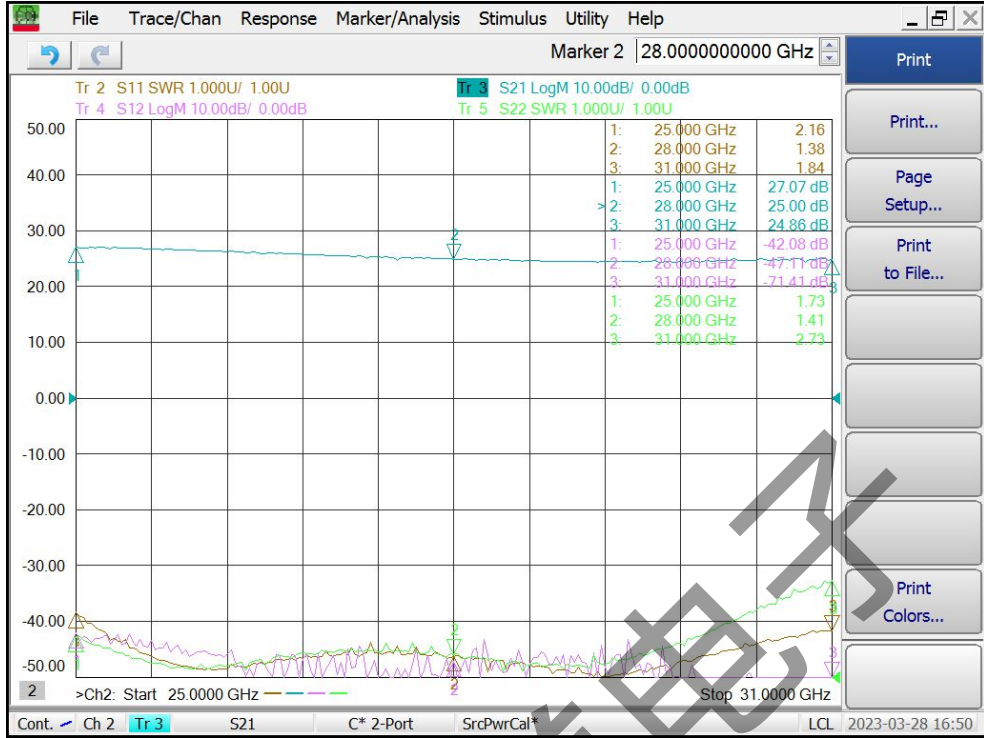
Electrical Specifications @+25°C, Z_{in}=Z_{out}=50 Ω, V_{supply} = +5VDC

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	25		31
Gain (S ₂₁)	f = 25GHz	24.0	26.0	
	f = 28GHz	22.0	24.0	
	f = 31GHz	21.5	23.5	
Gain Flatness	dB		±1.0	±1.5
Output Power P _{1dB} @ 28GHz	dBm	+8	+10	
Output Third Order IP3 @ 28GHz	dBm	+18	+20	
Noise Figure @ 28GHz	dB		2.3	2.8
Reverse Isolation (S ₁₂) @ 28GHz	dB	-40	-45	
VSWR-Input (S ₁₁) @ 28GHz			1.5:1	2.0:1
VSWR-Output (S ₂₂) @ 28GHz			1.5:1	2.0:1
DC Power Supply - Voltage	V	4.5	5	15
DC Power Supply - Current	mA		25	35
RF Input and Output Connector		Type K 2.92mm Female		
Operating Temperature	°C	-40		+85
Size (RF/DC feedthru's excluded)	Inch	1.00 (L) x 0.75 (W) x 0.45 (H)		
Weight	Oz	0.6 (17 grams)		

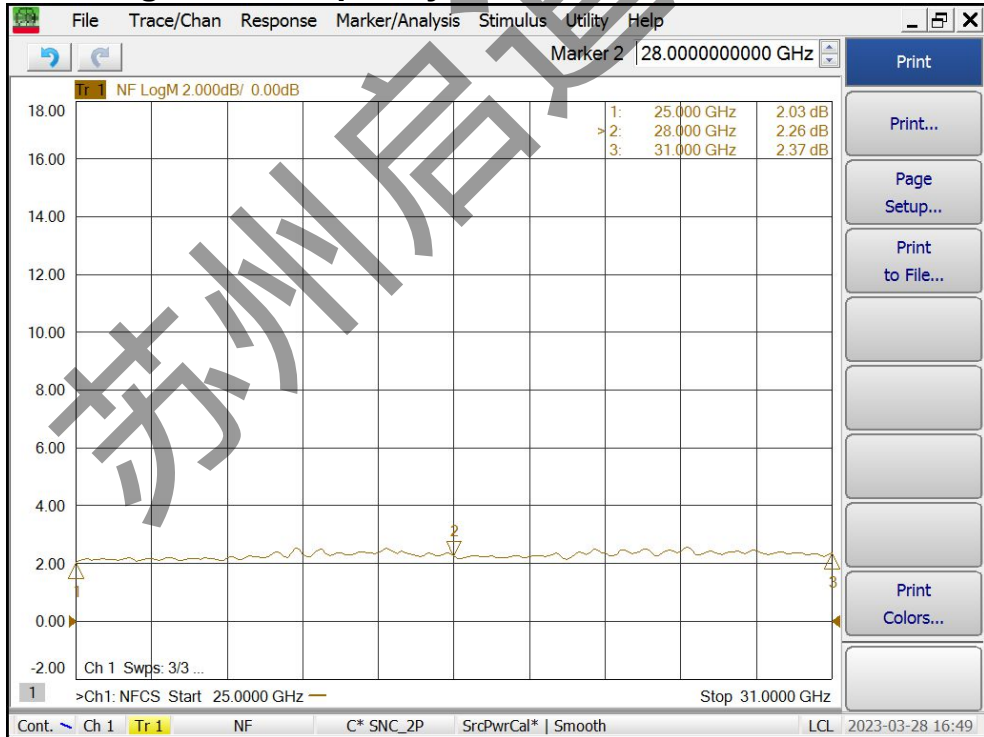
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Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency



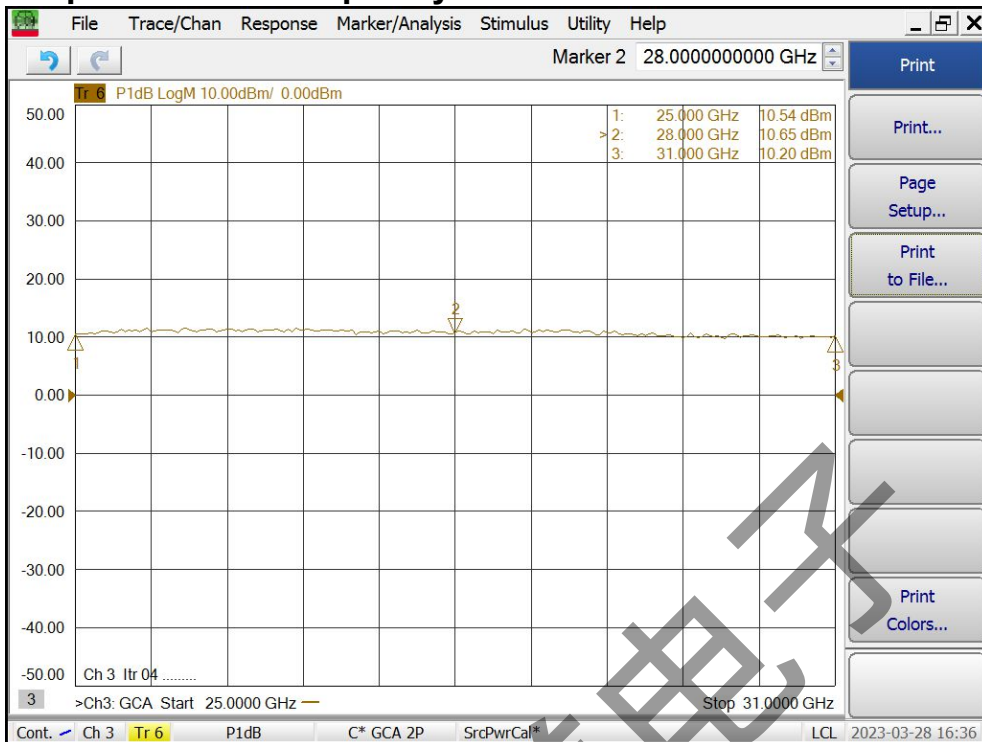
Noise Figure vs Frequency



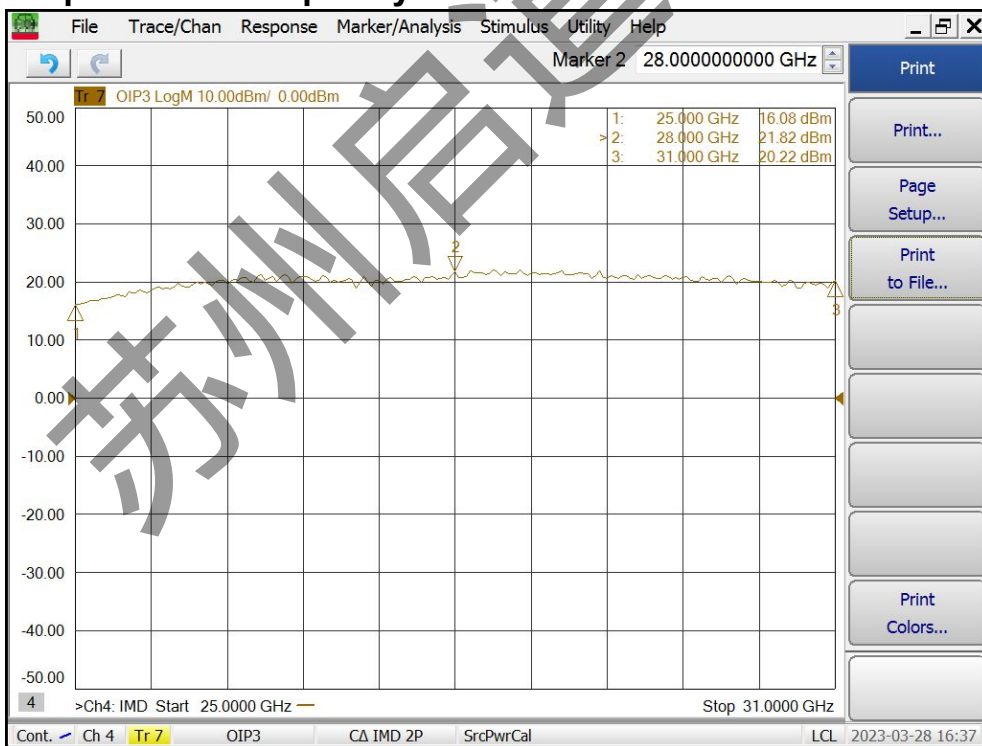
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Output P1dB vs Frequency



Output IP3 vs Frequency



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Absolute Maximum Ratings

Parameter	Absolute Maximum
Supply Voltage (Survival)	+16V
RF Input Power	+20dBm
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

ESD Sensitive Material



Outline

