

VGA Series

20-100MHz Variable Gain Amplifier

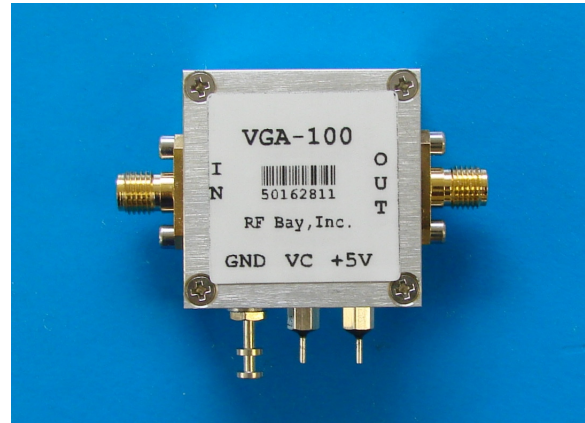
Features

- Frequency Range: 20-100MHz
- Gain Control Range: 55dB
- P_{1dB}: -4dBm
- IM3: 55dBc
- Suitable for CW and QAM/QPSK
- DC Power: 5V/80mA
- Tuning Voltage: 0-2.5V
- SMA Female Connector

Description

VGA-100 is a 20-100MHz Variable Gain Amplifier operates on a single 5V power supply with 55dB gain control range.

Picture



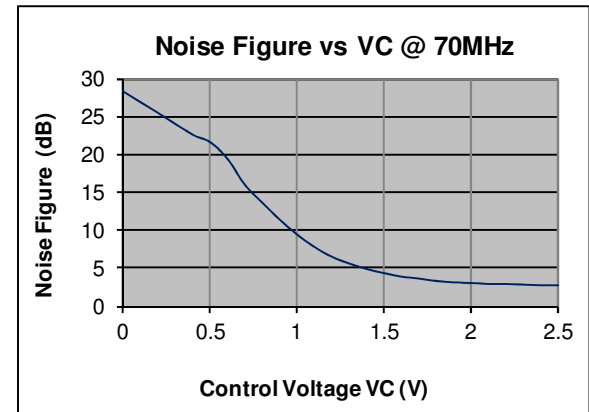
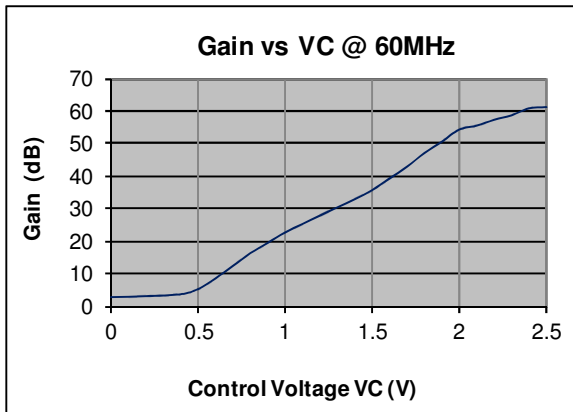
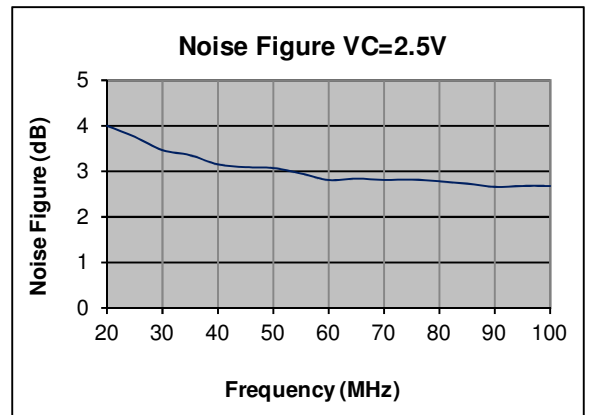
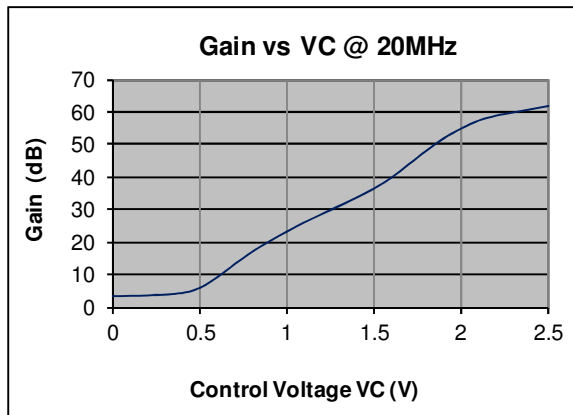
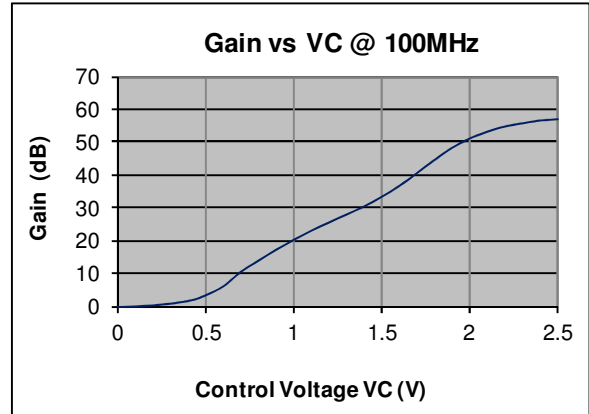
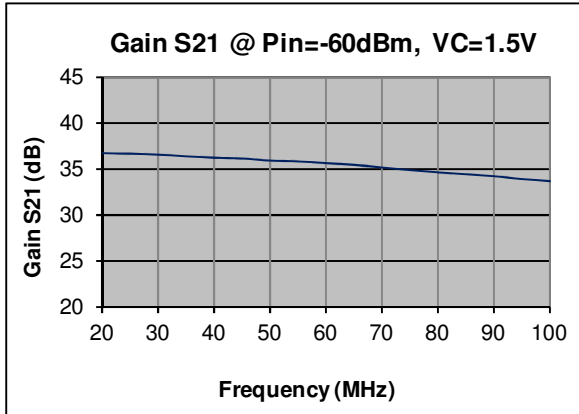
Electrical Specifications @ +25 °C, Z_{in}=Z_{out}= 50 Ω, V_{supply}=+5V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	20		100
Maximum Gain	dB	55		
Minimum Gain	dB	0		
Gain Flatness	dB		±1.5	
Gain Control Range	dB		55	
Output Power P _{1dB}	dBm		-4	
Control Voltage Range	V	0		2.5
Gain Control Slope		Positive		
Reverse Isolation S12	dB		-45	
IM3 @ 70MHz	dBc		55	
Noise Figure, 50 Ohm VC=2.5V	dB		3	
Input Impedance @ 70MHz	Ω		30-j135	
Output Impedance @ 70MHz	Ω		240-j140	
DC Power Supply	V	4.5	5.0	5.5
Supply Current	mA		80	85

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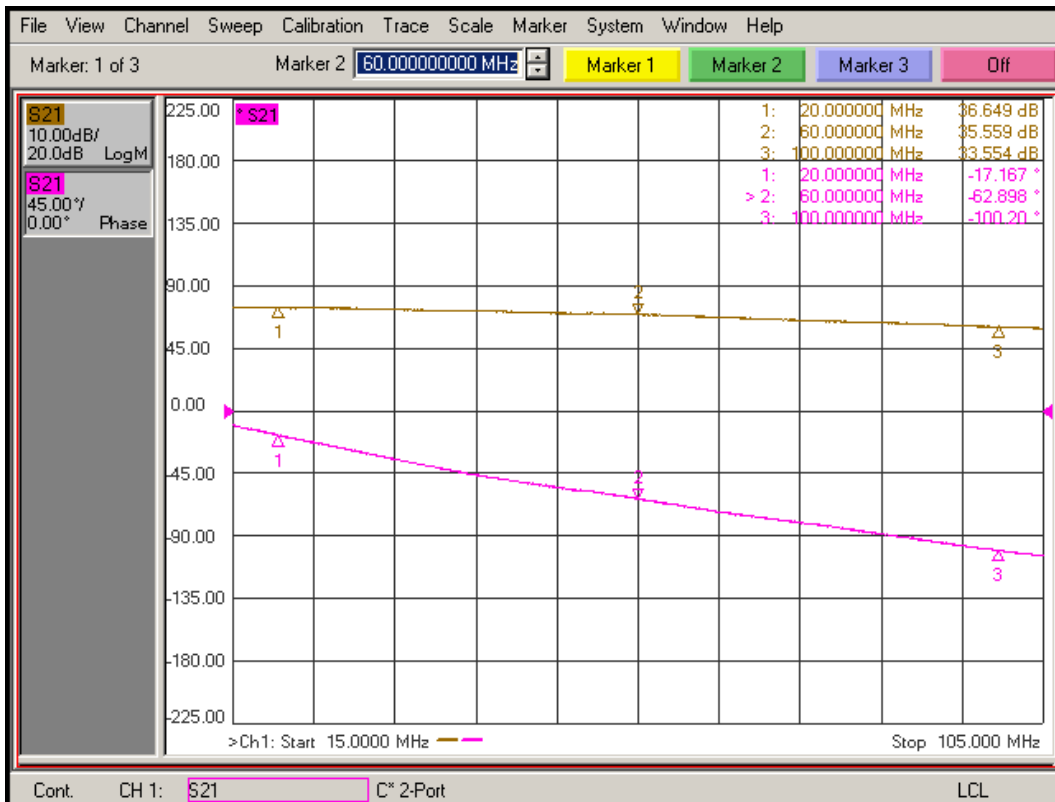
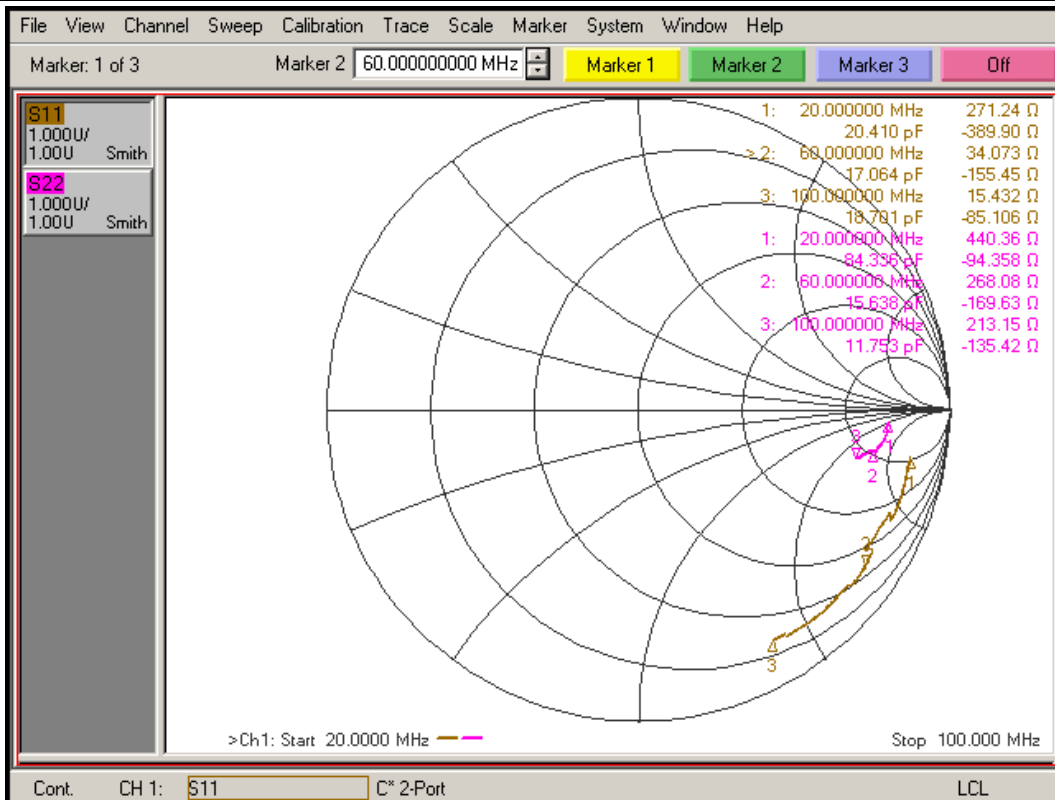
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Typical Performance @ 25°C



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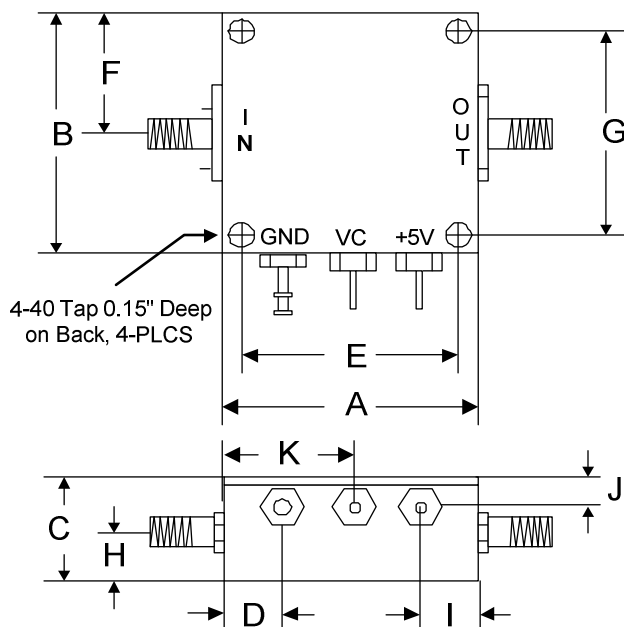
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Absolute Maximum Ratings

Parameter	Absolute Maximum
Supply Voltage	+6V
Control Voltage VC	+3V
RF Input Power	+10dBm
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

Outline



	A	B	C	D	E	F	G	H	I	J	K
Inch	1.250	1.250	0.563	0.450	1.000	0.625	1.000	0.250	0.500	0.187	0.625
mm	31.75	31.75	14.29	11.43	25.40	15.88	25.40	6.35	12.70	4.76	15.88