

LNA Series

1000 – 4000MHz Low Noise Amplifier

Features

- Frequency Range: 1000-4000MHz
- Gain: 35dB
- P_{1dB}: +20dBm
- IP3: +34dBm
- Noise Figure: 1.0dB
- DC Power: 12V/145mA
- Internal Voltage Regulated
- Reverse DC Protection
- SMA Connector

Picture



Description

LNA-3020 is a 35dB Gain 1.0dB Noise Figure Low Noise Amplifier operates in frequency range from 1000-4000MHz.

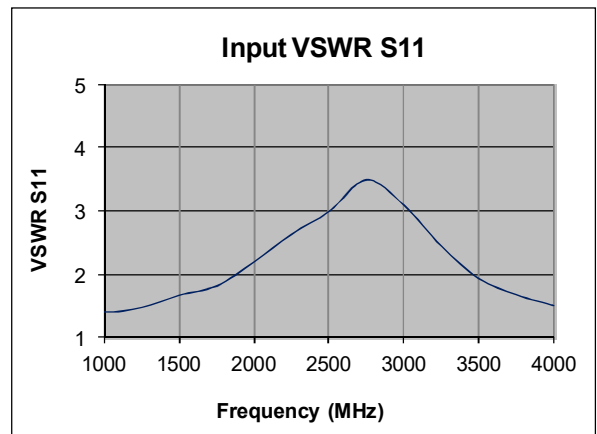
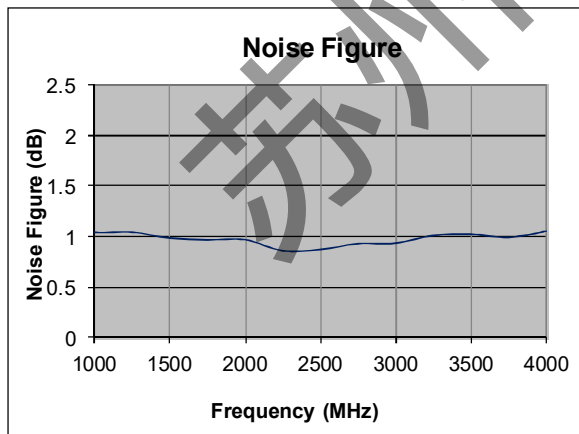
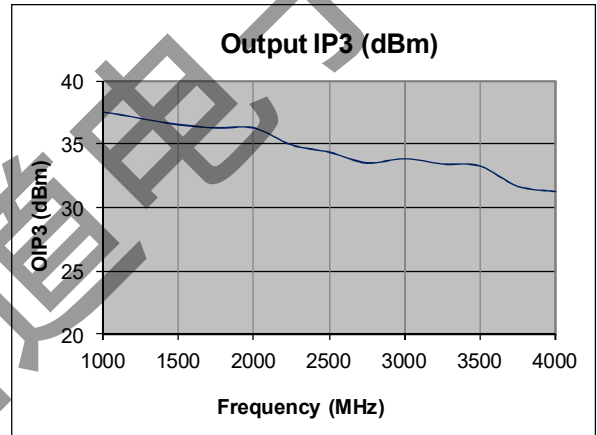
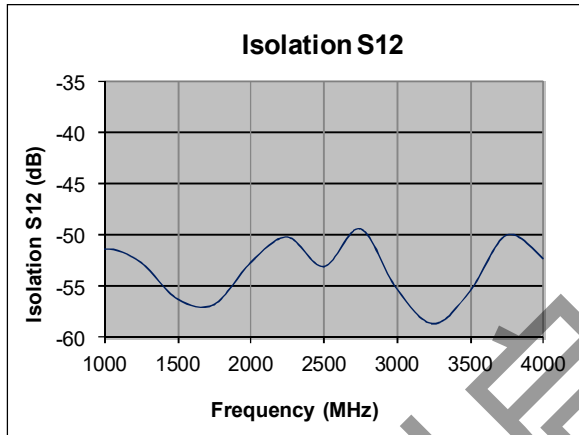
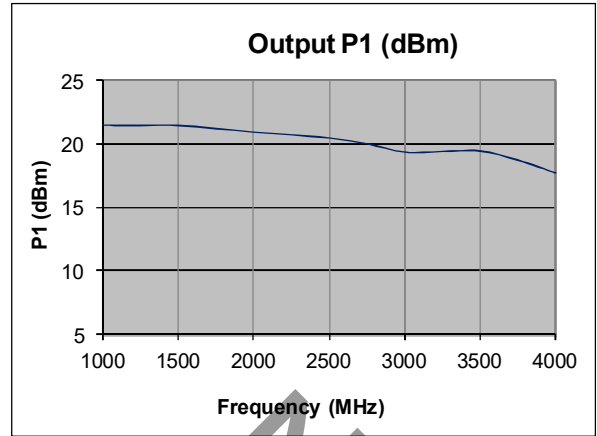
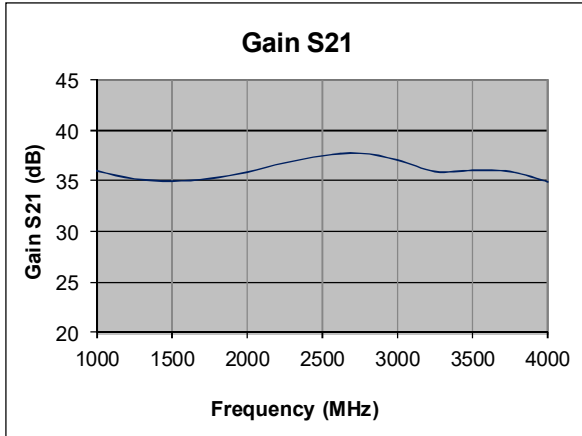
Electrical Specifications @ +25 °C, Z_{in} = Z_{out} = 50 Ω, V_{supply} = 12V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	1000		4000
Gain S ₂₁ f = 1000MHz	dB		36.0	
f = 2000MHz	dB		35.5	
f = 2500MHz	dB		37.0	
f = 3000MHz	dB		37.0	
f = 4000MHz	dB		34.8	
Gain Flatness	dB		± 1.5	
P _{1dB}	dBm		+20	
Output IP3	dBm		+34	
Noise Figure	dB		1.0	1.2
Reverse Isolation S ₁₂	dB		-50	
VSWR Input VSWR S ₁₁			3.0:1	
Output VSWR S ₂₂			1.7:1	
DC Power Supply	V	9	12	15
Supply Current	mA		145	

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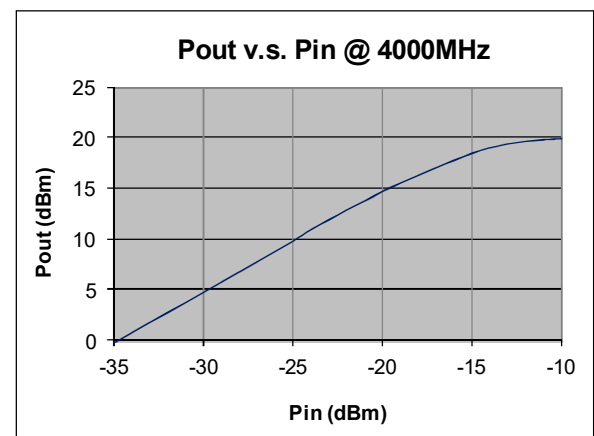
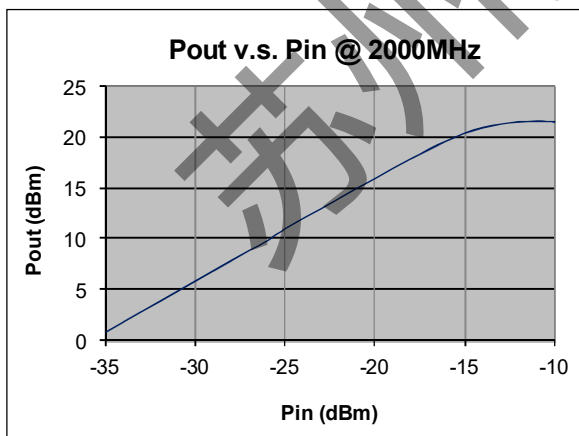
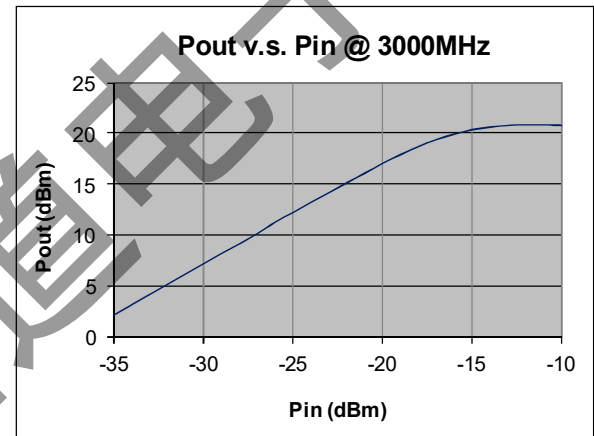
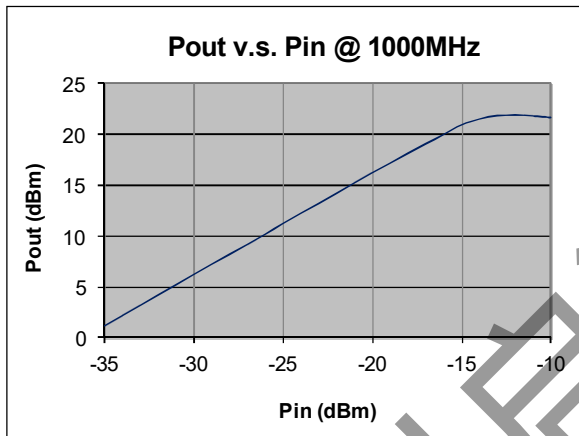
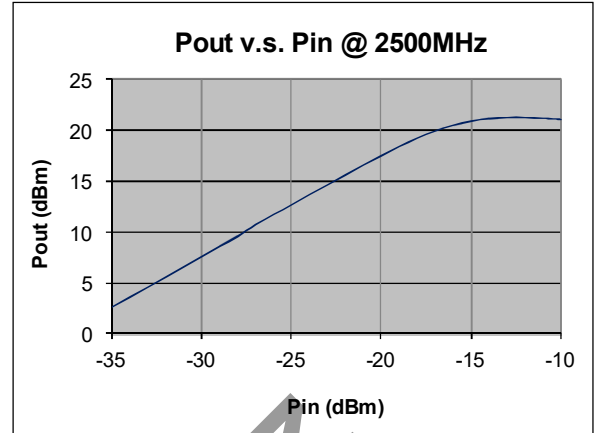
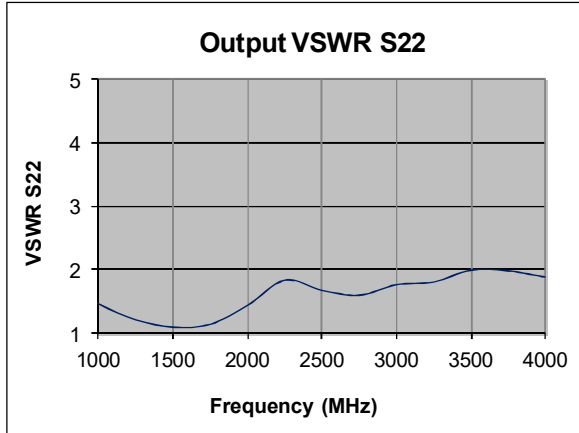
Typical Performance @ +25 °C



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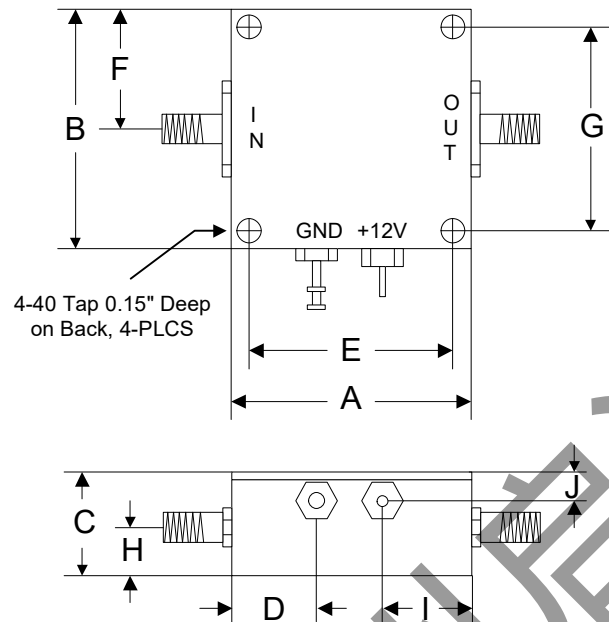
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+33dBm
Supply Voltage	+25V
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
Inch	1.250	1.250	0.563	0.450	1.000	0.625	1.000	0.250	0.500	0.187
mm	31.75	31.75	14.29	11.43	25.40	15.88	25.40	6.35	12.70	4.76

WARNING: MUST USE HEAT SINK IF CASE TEMPERATURE EXCEEDS 50 °C