Device Modeling Report

COMPONENTS:MOSFET: OPERATIONAL AMPLIFIER
PART NUMBER:NJM2060
MANUFACTURER: NEW JAPAN RADIO CO.,LTD

Bee Technologies Inc.

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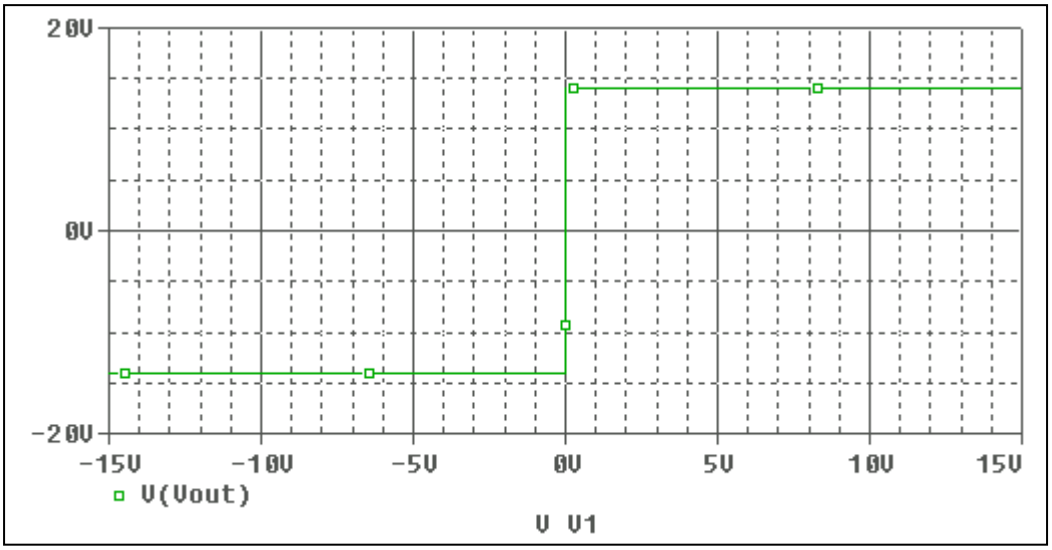
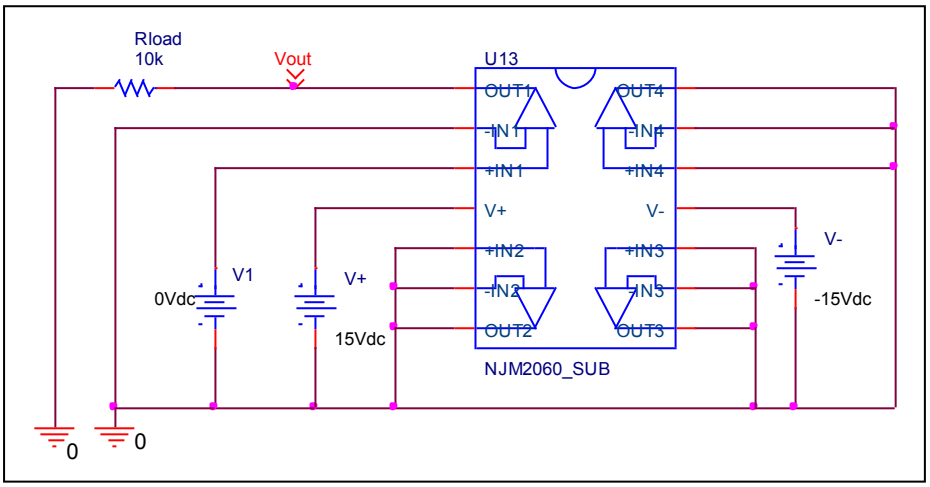
Output Voltage Swing, +Vout and –Vout

Simulation result



These simulation results are compared with ±Vout

Evaluation circuit



Output Voltage Swing	Data sheet	Simulation	%Error
+Vout(V)	+14	13.976	0.171
-Vout(V)	-14	-13.976	0.171

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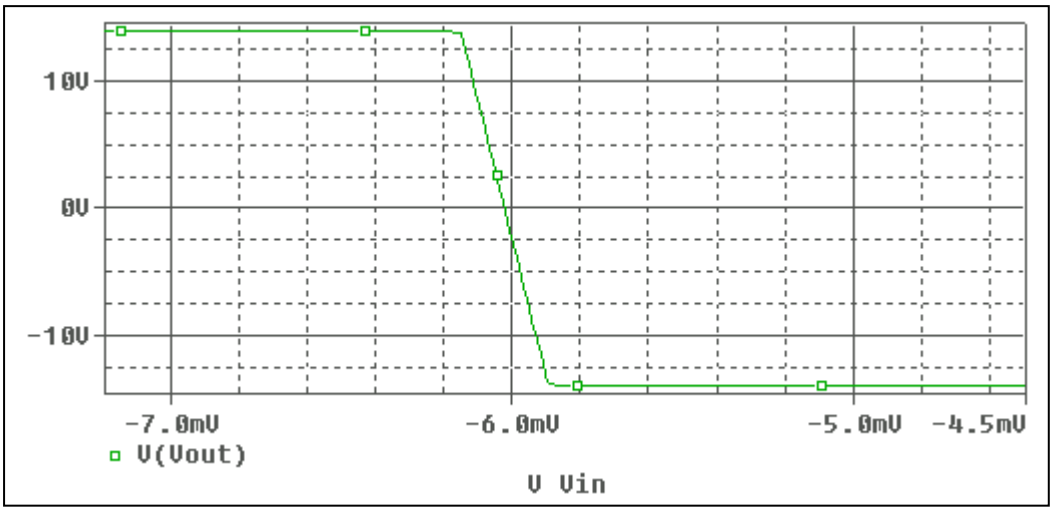
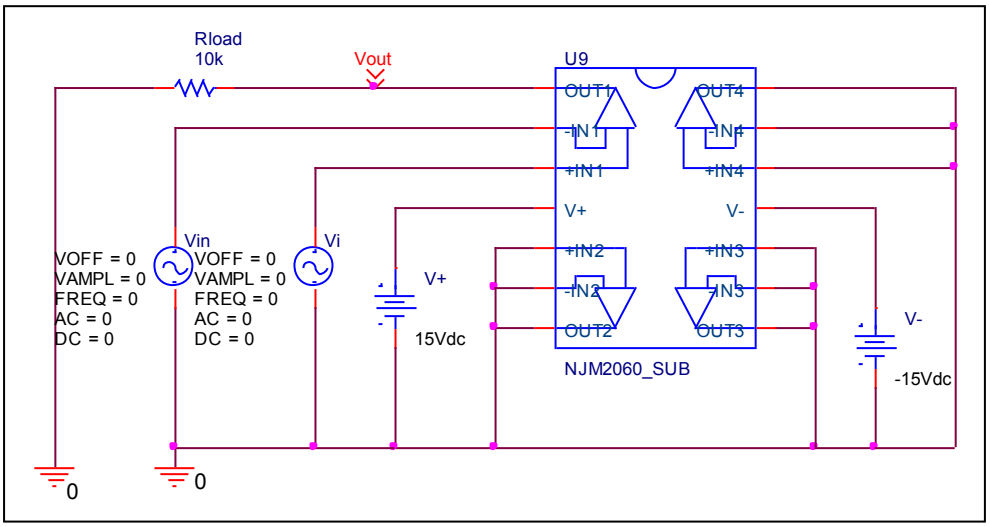
Input Offset Voltage

Simulation result



Evaluation circuit



Vos	Measurement		Simulation		Error	
	6	mV	6.0211	mV	0.351	%

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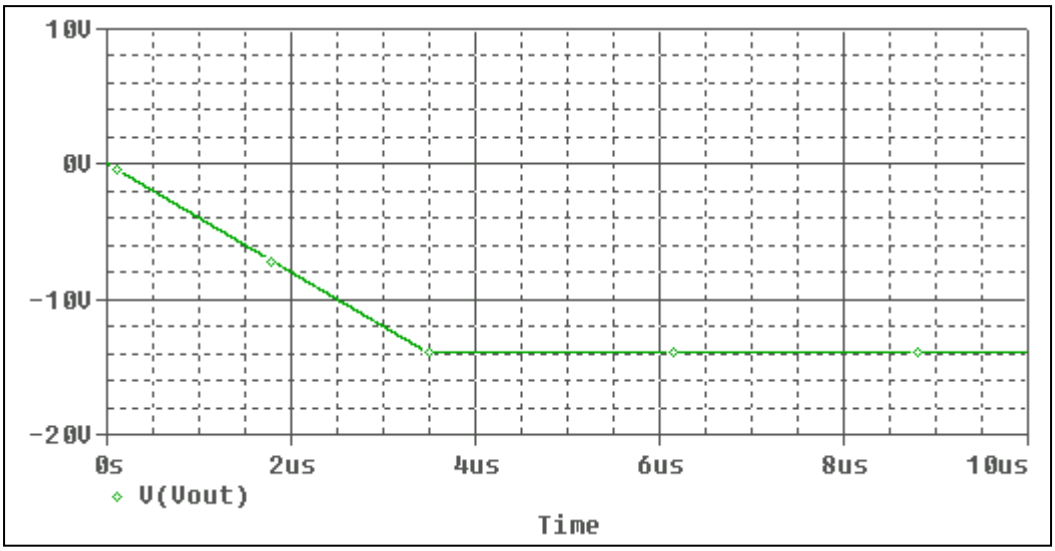
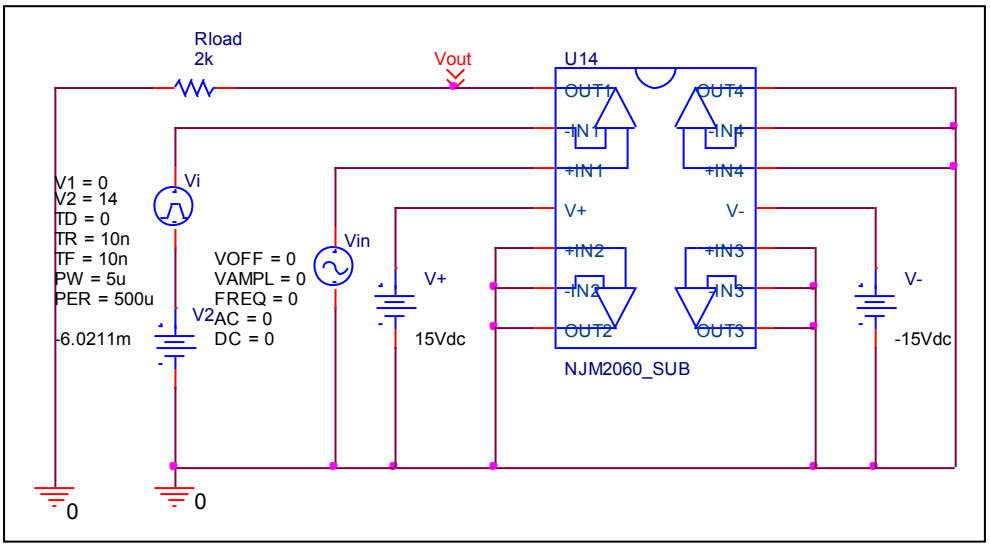
Slew Rate, +SR, -SR

Simulation result



Evaluation circuit



Slew Rate(v/us)	Data sheet	Simulation	%Error
	4V/us	4.013V/us	0.325

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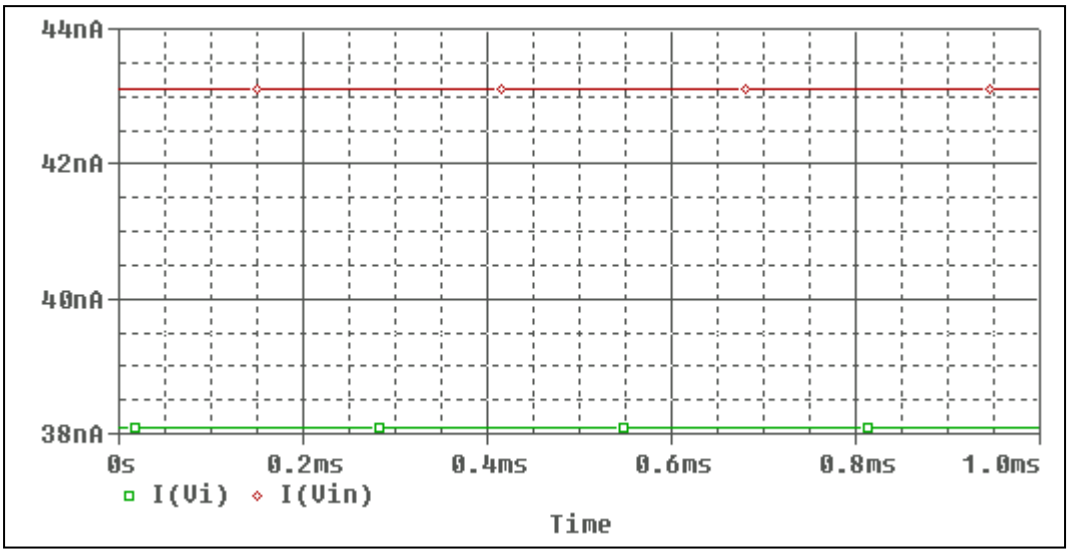
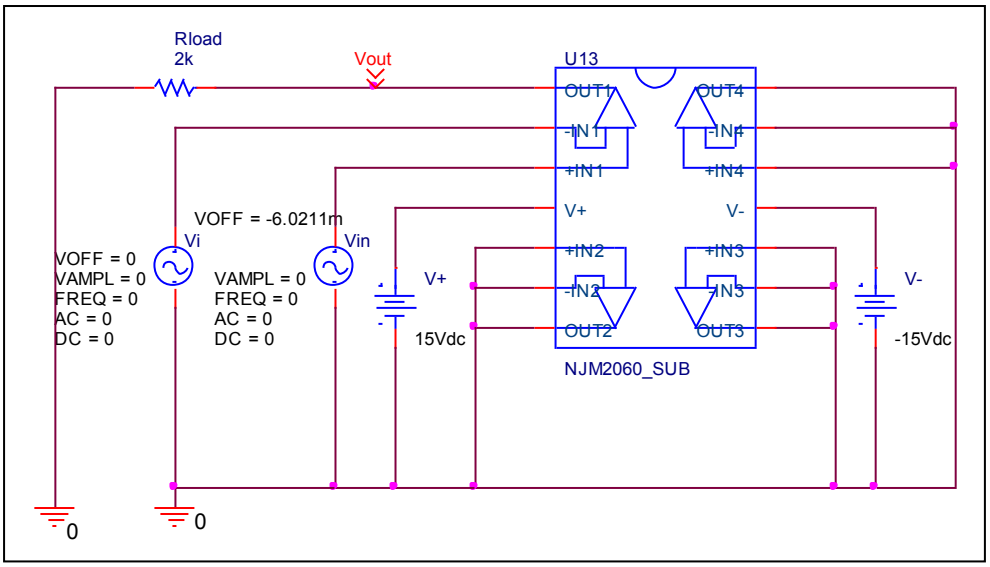
Input current Ib, Ibos

Simulation result



Evaluation circuit



	Data sheet	Simulation	%Error
Ib(nA)	40	40.5	1.25
Ibos(nA)	5	5.016	0.32

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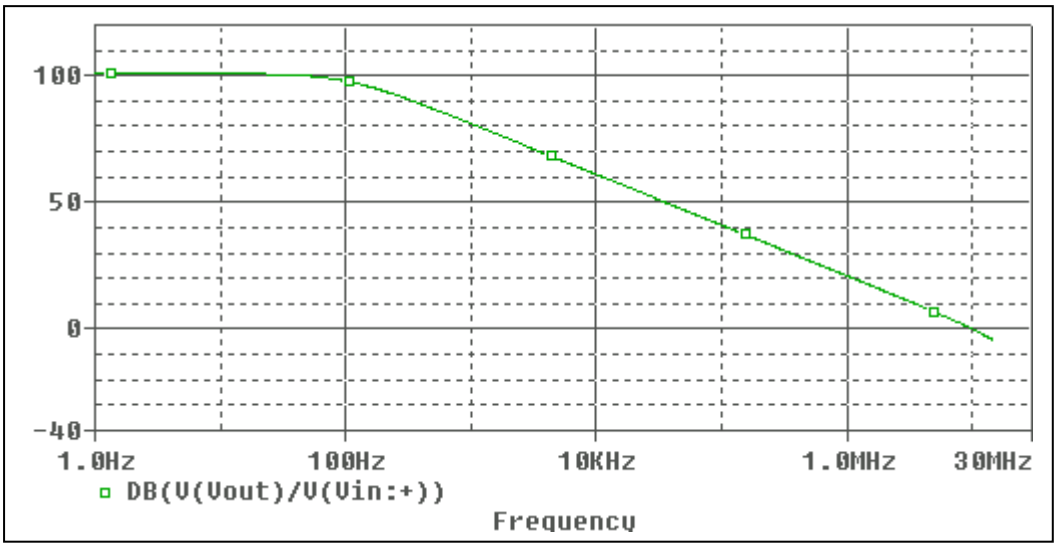
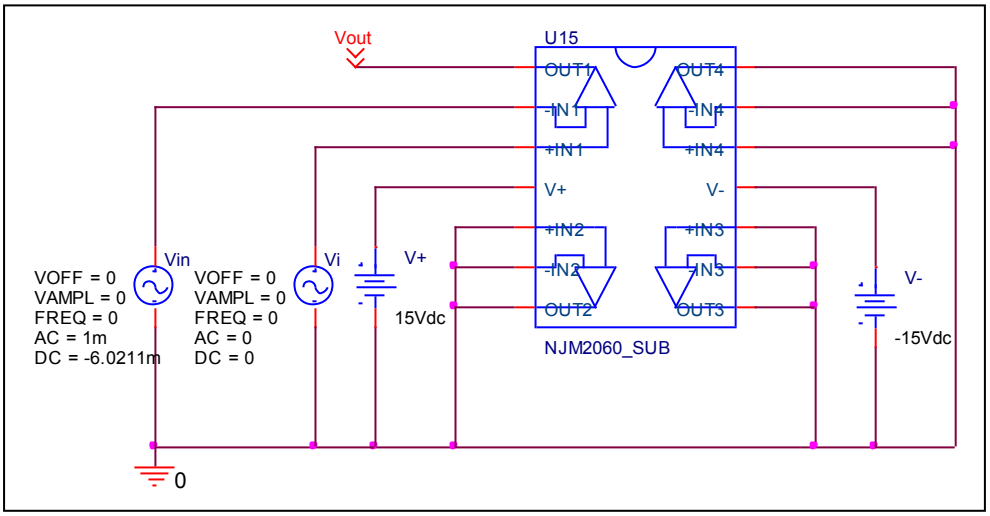
Open Loop Voltage Gain vs. Frequency , Av-dc, f-0dB

Simulation result



Evaluation circuit



	Data sheet	Simulation	%Error
f-0dB(MHz)	10	10.034	0.34
Av-dc(dB)	100	100.4	0.4

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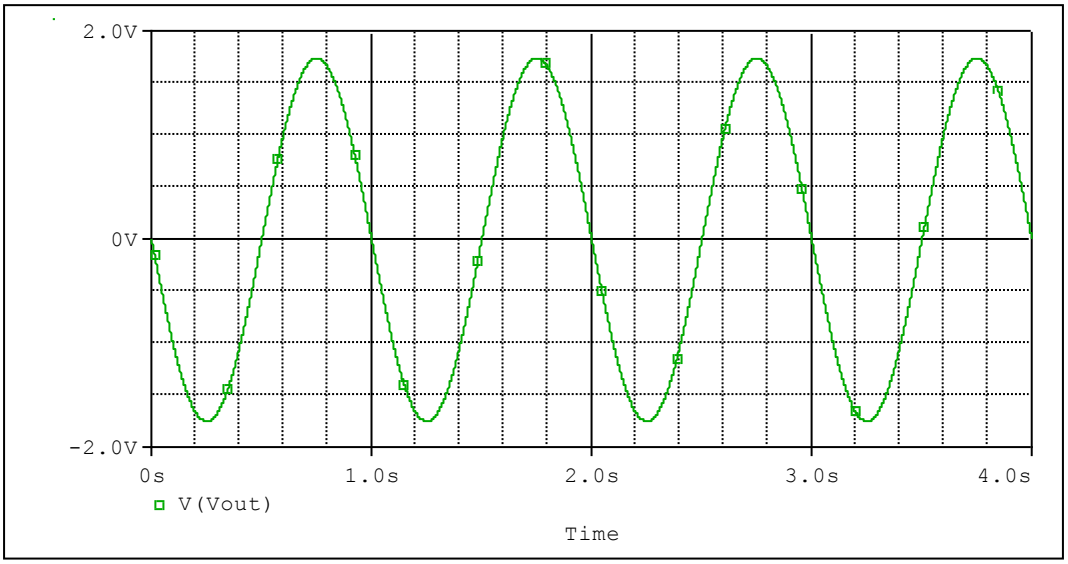
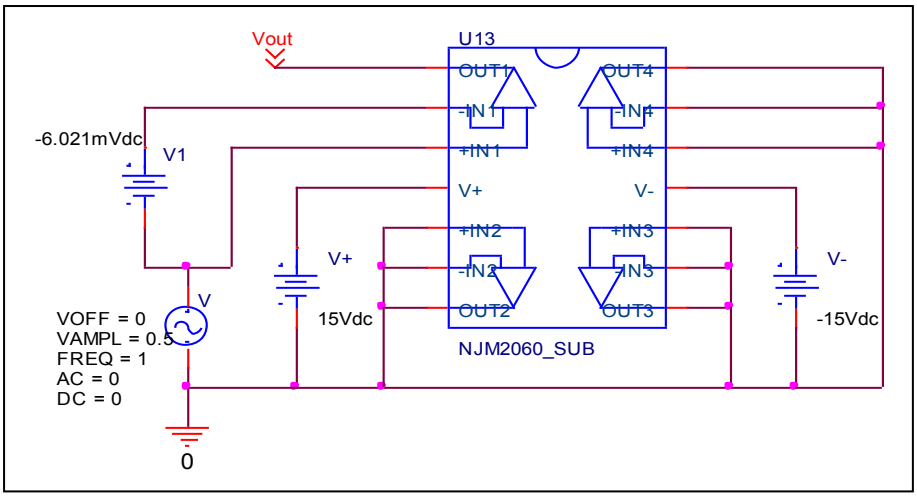
Common-Mode Rejection Voltage gain

Simulation result



Evaluation circuit



Common Mode Reject Ratio=104712/3.487=30029.251

CMRR	Data sheet	Simulation	%Error
	90	89.55	-0.5

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