

Device Modeling Report

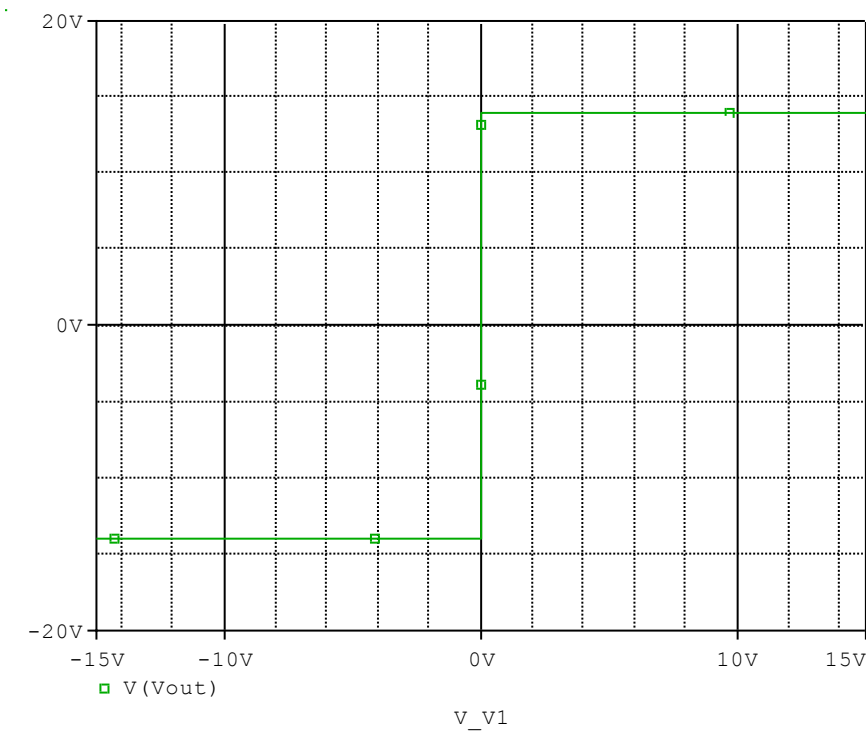
COMPONENTS: OPERATIONAL AMPLIFIER
PART NUMBER: NJM4562
MANUFACTURER: NEW JAPAN RADIO CO.,LTD



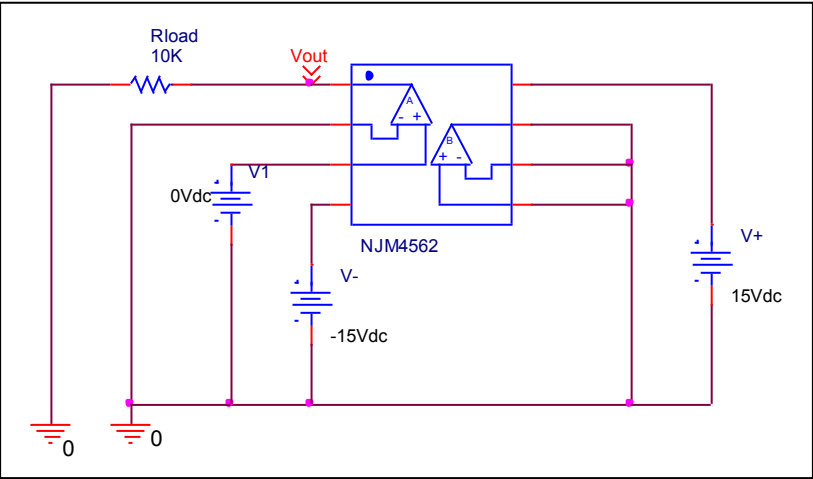
Bee Technologies Inc.

Output Voltage Swing

Simulation result



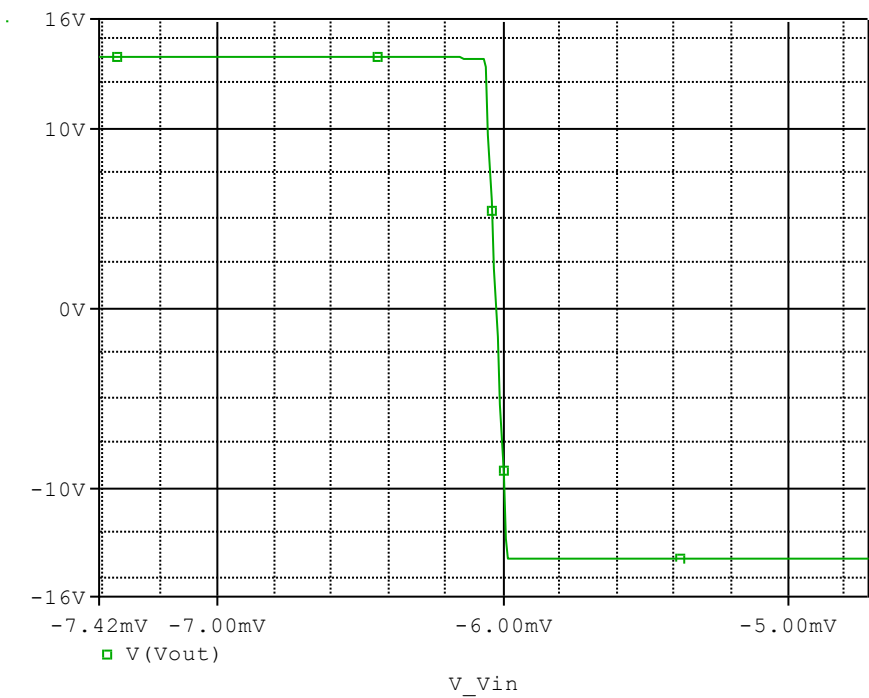
Evaluation circuit



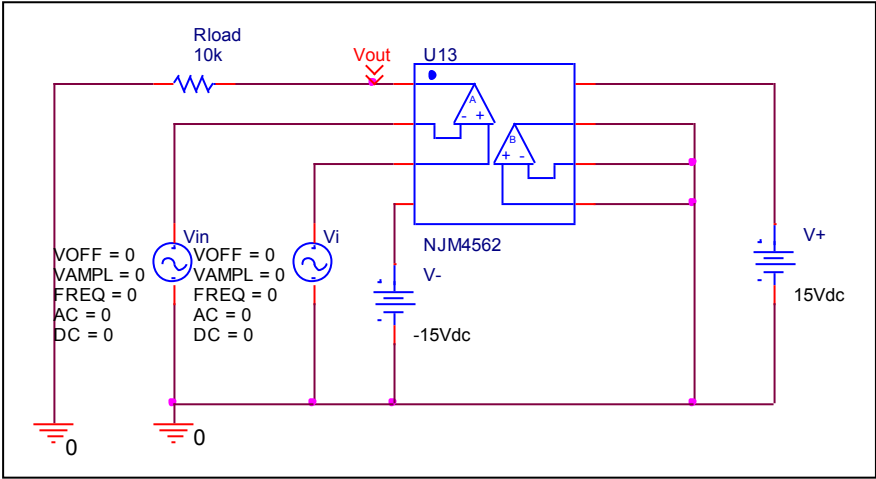
Output Voltage Swing	Data sheet	Simulation	%Error
+ $V_{out}(V)$	14.000	13.943	-0.407
- $V_{out}(V)$	14.000	13.943	-0.407

Input Offset Voltage

Simulation result



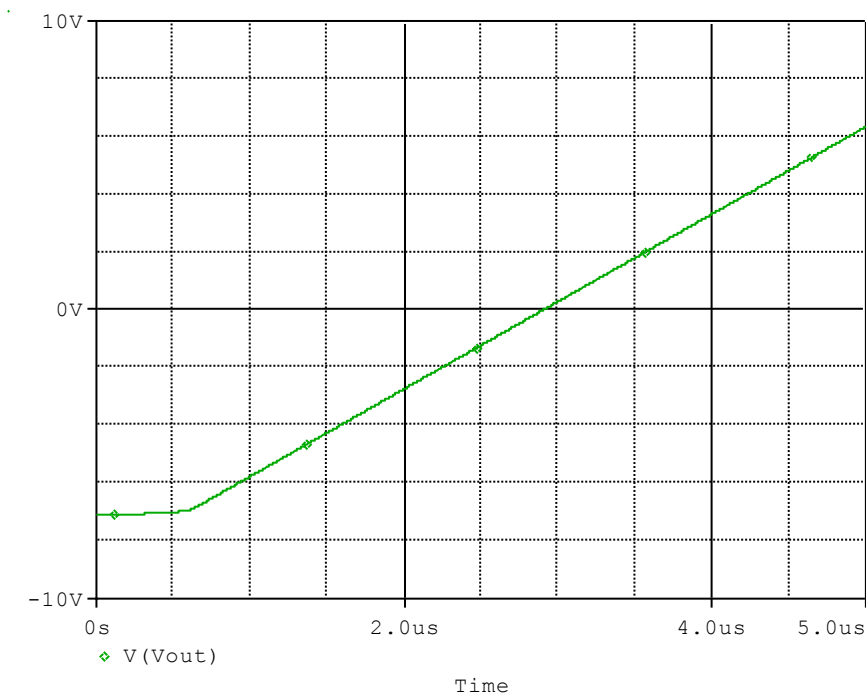
Evaluation circuit



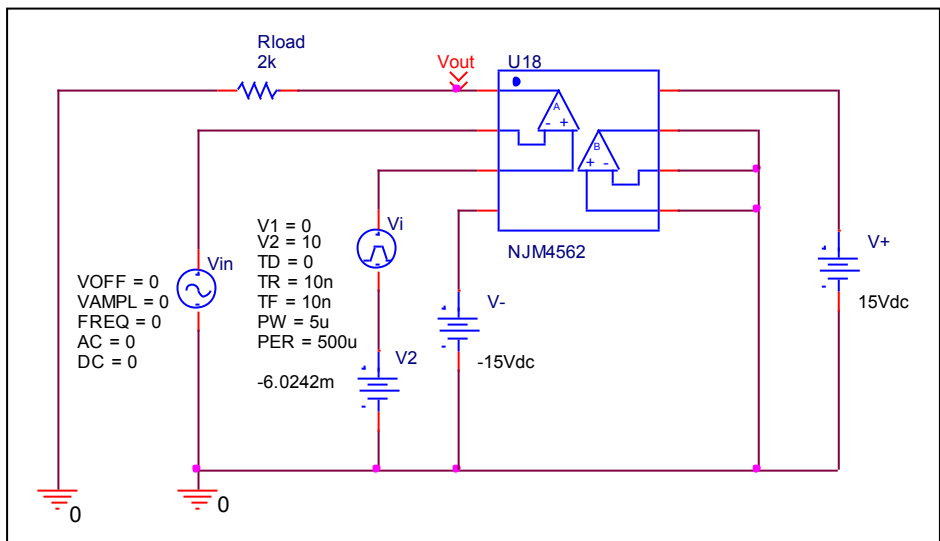
Vos	Measurement		Simulation		Error	
	6.000	mV	6.0242	mV	0.403	%

Slew Rate

Simulation result



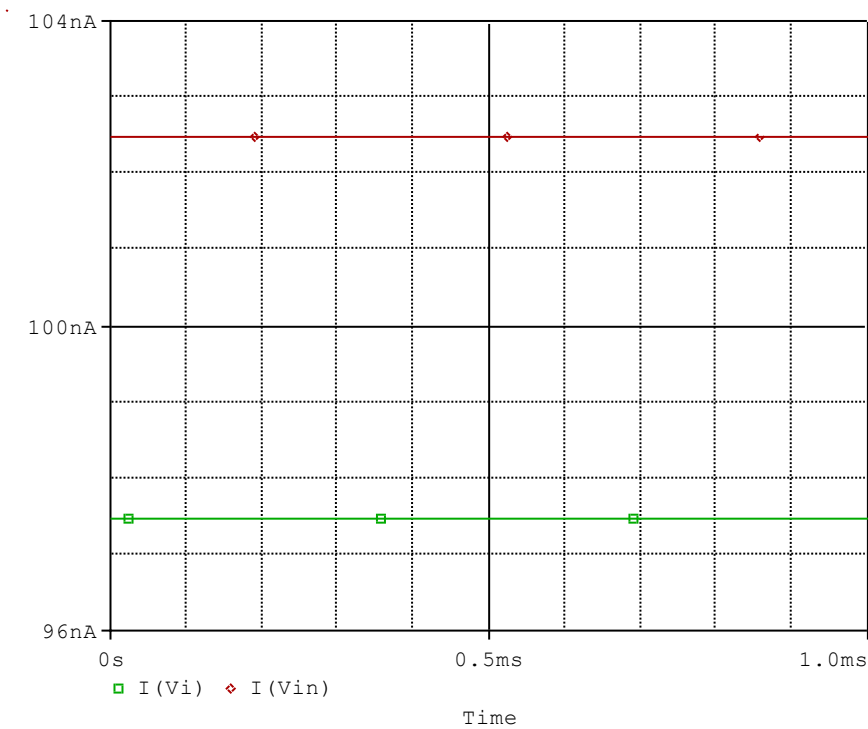
Evaluation circuit



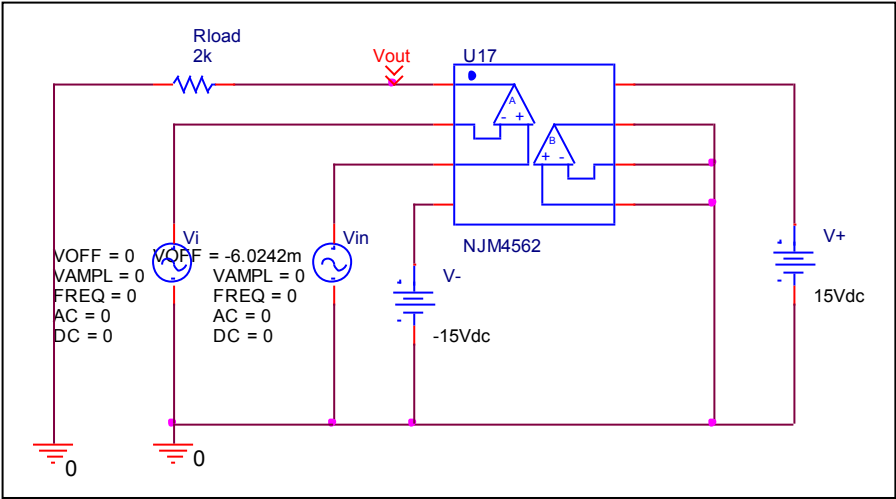
Slew Rate(v/us)	Data sheet	Simulation	%Error
	3.000	2.995	-0.167

Input current

Simulation result



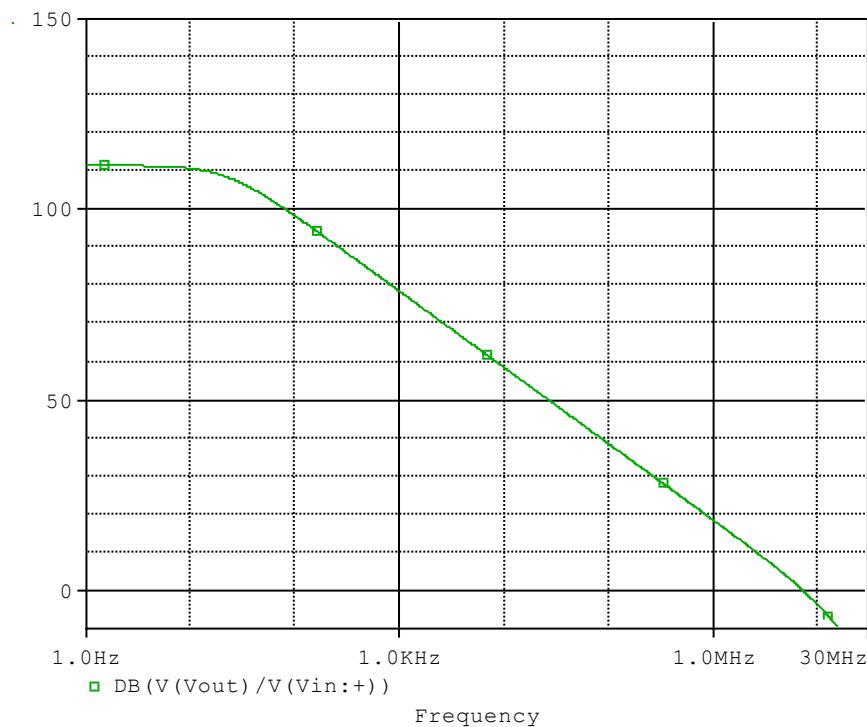
Evaluation circuit



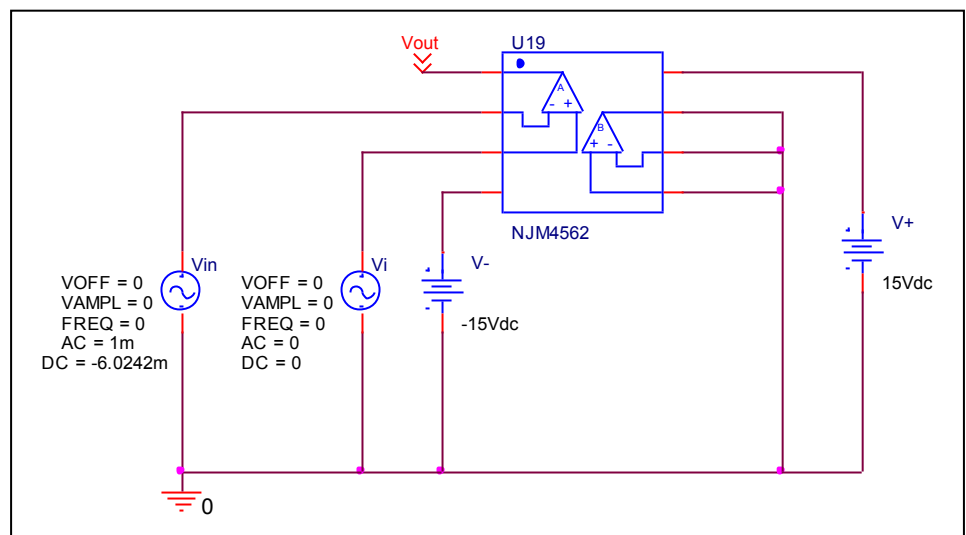
	Data sheet	Simulation	%Error
Ib(nA)	100.000	99.970	-0.030
Ibos(nA)	5.000	5.017	1.420

Open Loop Voltage Gain vs. Frequency

Simulation result



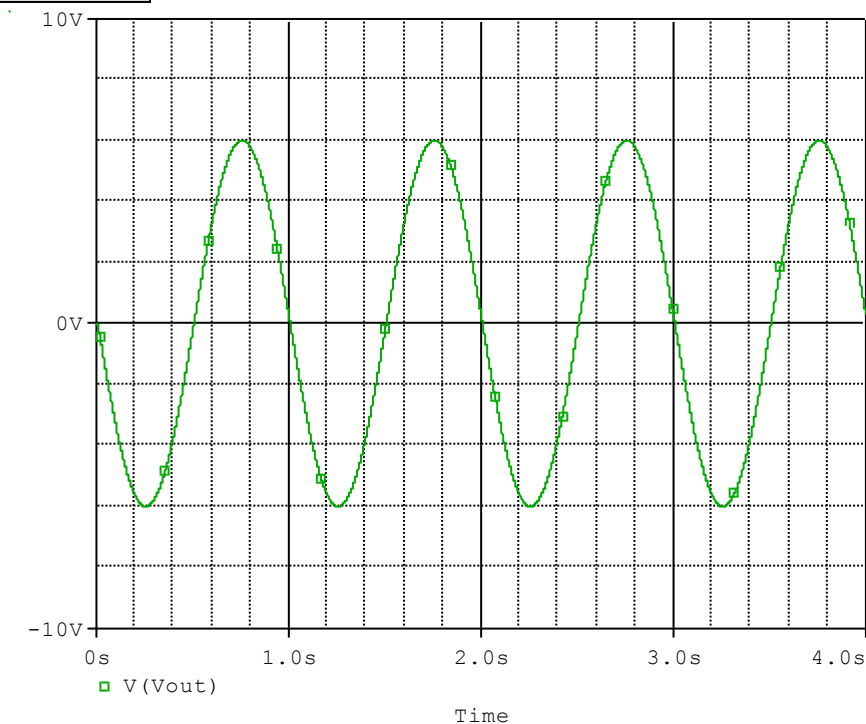
Evaluation circuit



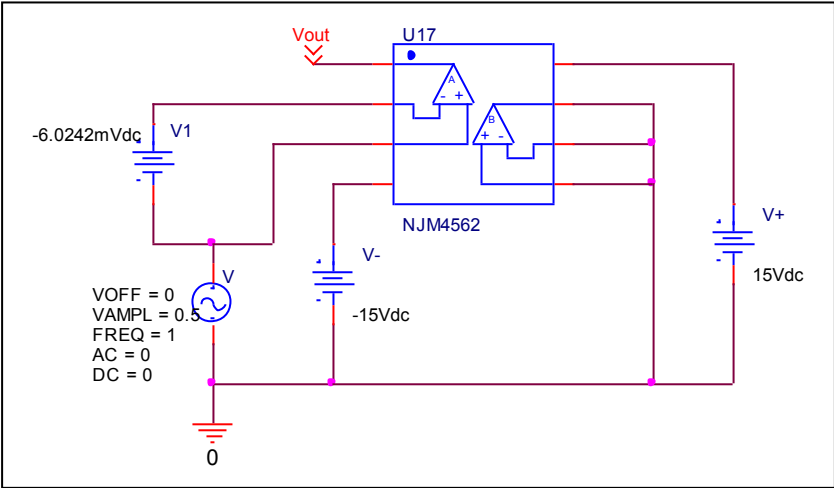
	Data sheet	Simulation	%Error
f-0dB(MHz)	7.000	7.008	0.114
Av-dc(dB)	110.000	110.022	0.020

Common-Mode Rejection Voltage gain

Simulation result



Evaluation circuit



Common Mode Reject Ratio= $317029/11.992=26436.707$

CMRR	Data sheet	Simulation	%Error
	90.000	88.444	-1.729