

Device Modeling Report

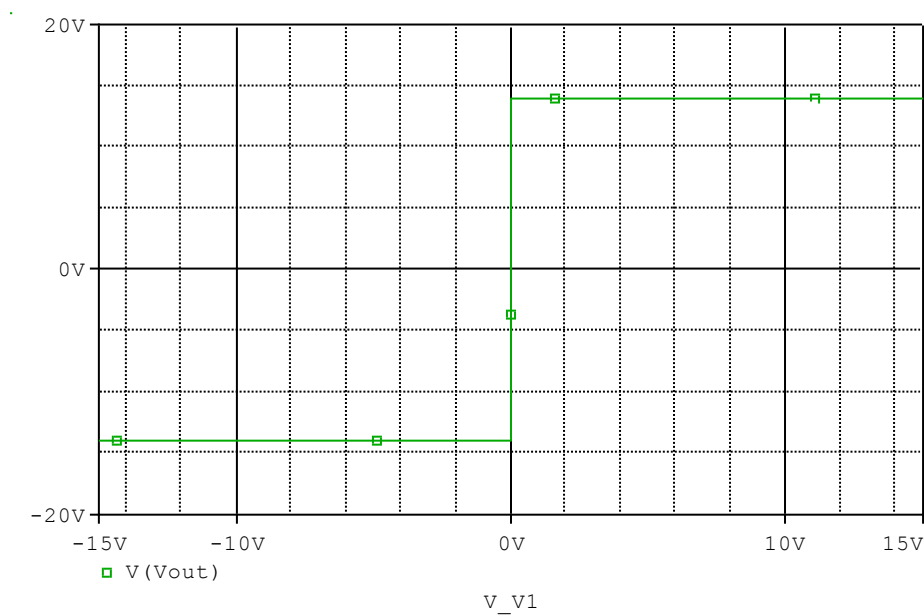
COMPONENTS: OPERATIONAL AMPLIFIER
PART NUMBER: NJM4560
MANUFACTURER: NEW JAPAN RADIO CO., LTD



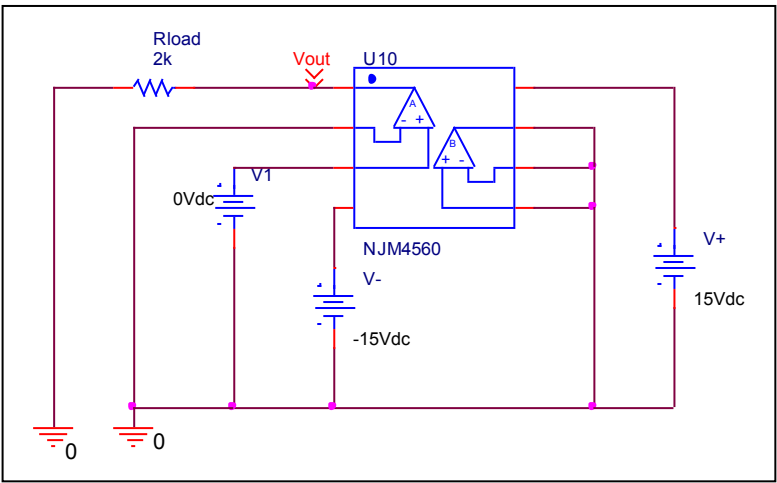
Bee Technologies Inc.

Output Voltage Swing

Simulation result



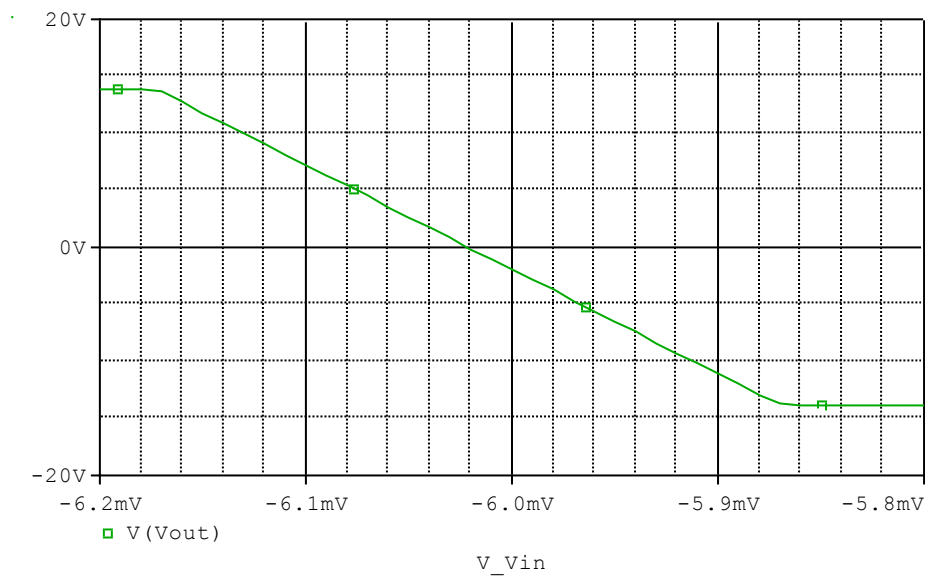
Evaluation circuit



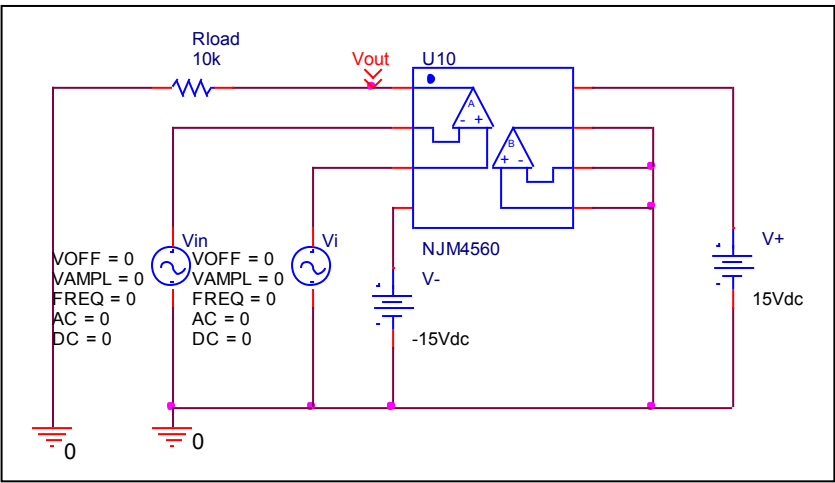
Output Voltage Swing	Data sheet	Simulation	%Error
+Vout(V)	+14.000	+13.998	0.0142
-Vout(V)	-14.000	-13.998	0.0142

Input Offset Voltage

Simulation result



Evaluation circuit



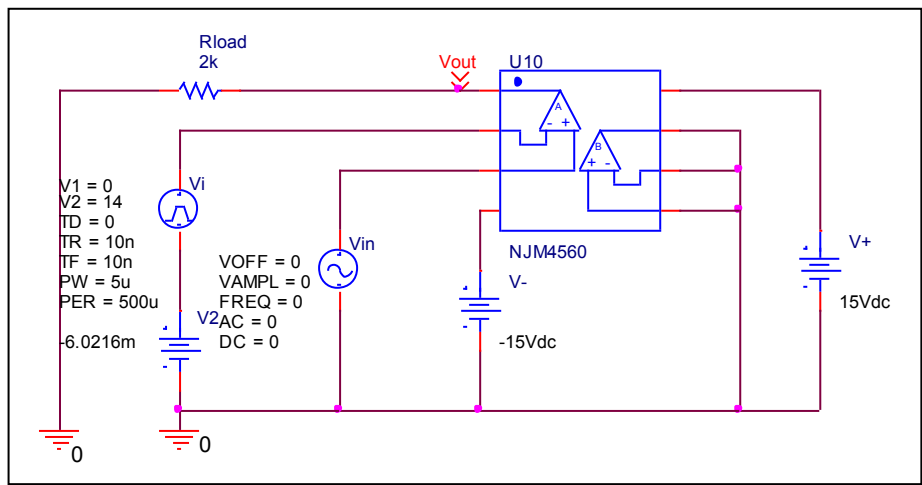
Vos	Measurement		Simulation		Error	
	6.000	mV	6.0216	mV	0.360	%

Slew Rate

Simulation result



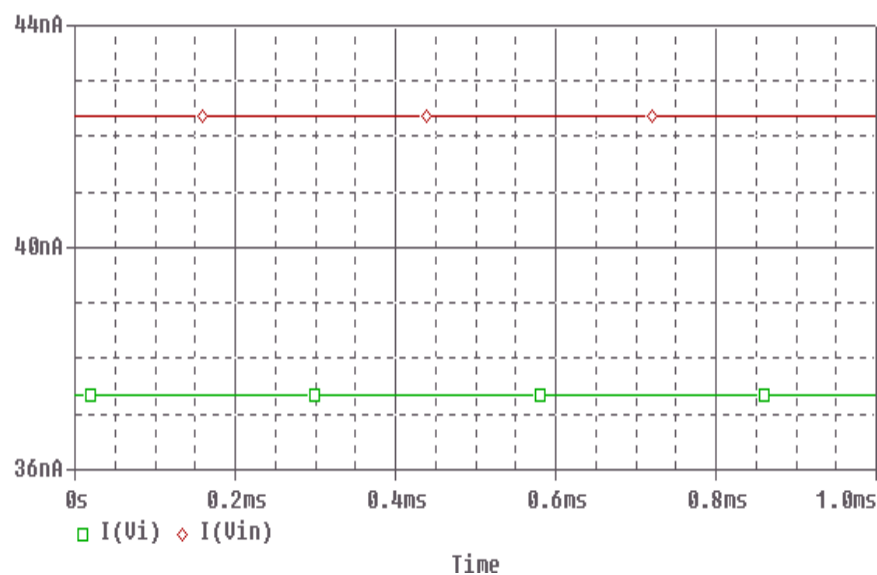
Evaluation circuit



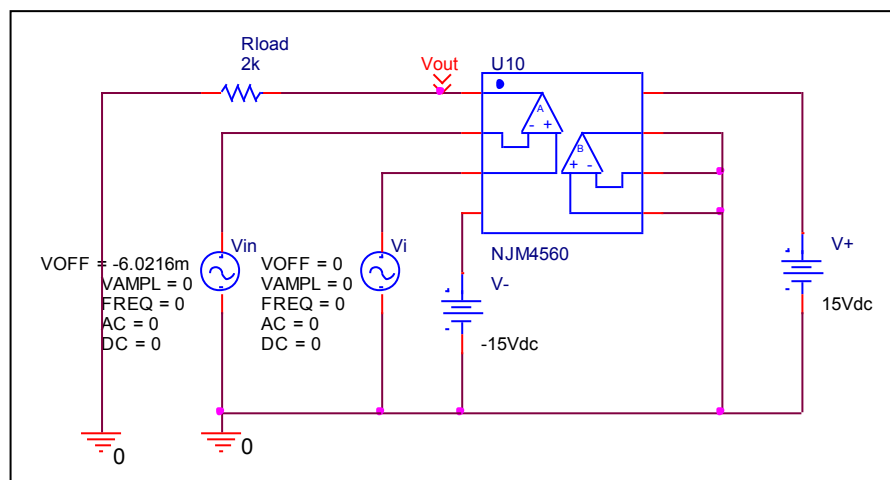
Slew Rate(v/us)	Data sheet	Simulation	%Error
	4.000	4.0619	1.540

Input current

Simulation result



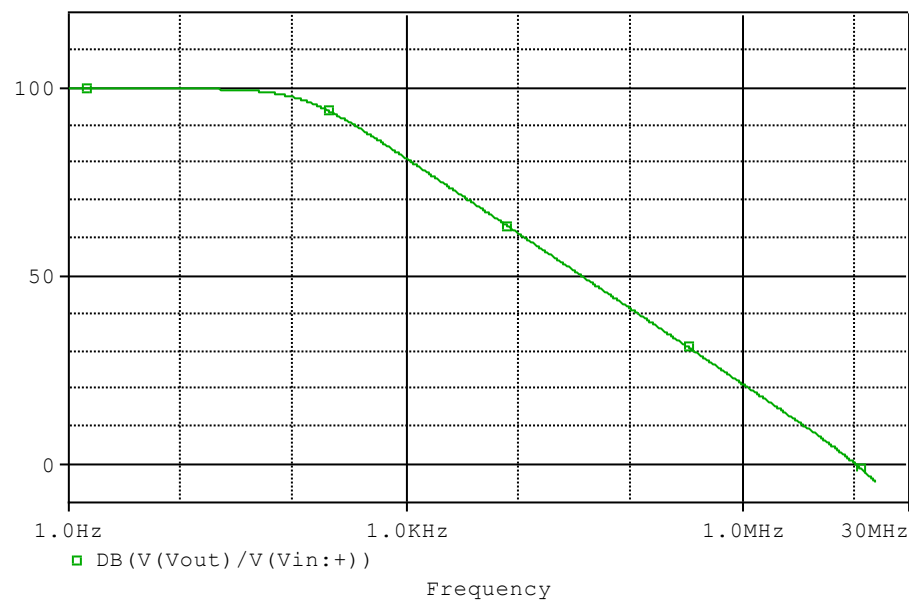
Evaluation circuit



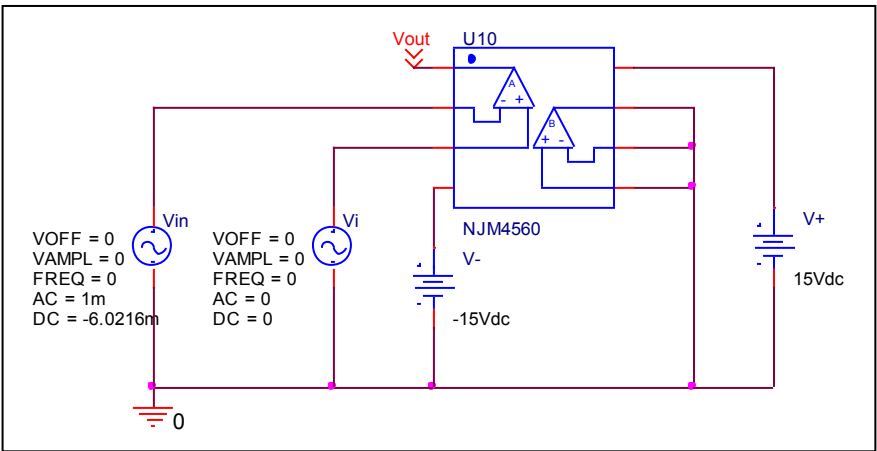
	Data sheet	Simulation	%Error
Ib(nA)	40.000	39.856	0.360
Ibos(nA)	5.000	5.011	0.220

Open Loop Voltage Gain vs. Frequency

Simulation result



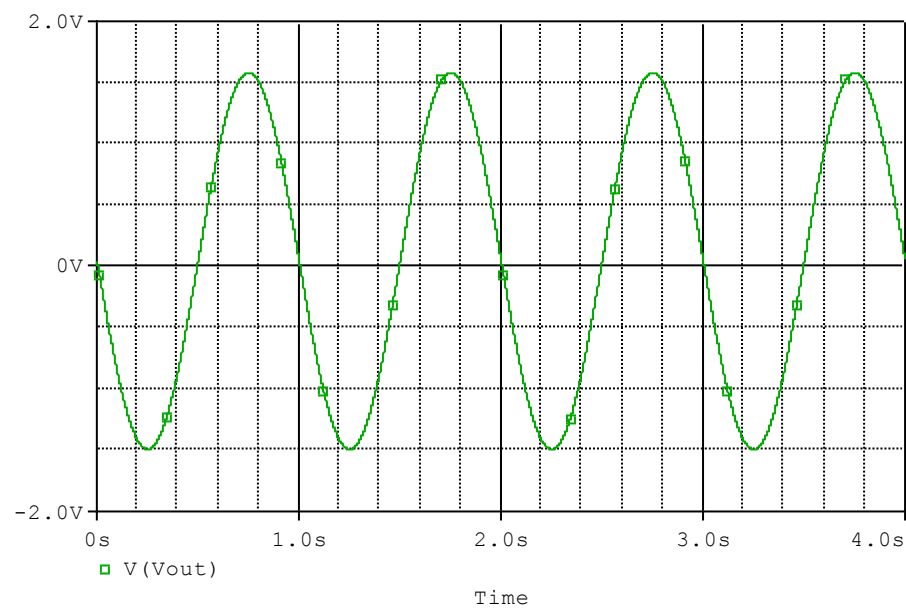
Evaluation circuit



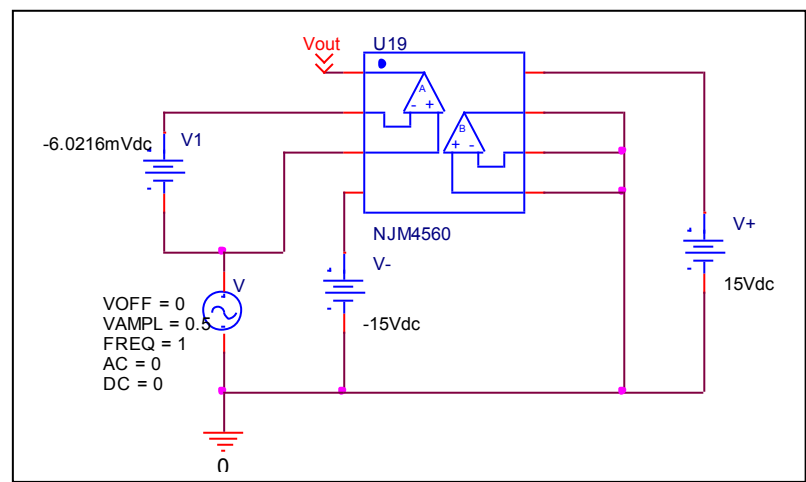
	Data sheet	Simulation	%Error
f-0dB(MHz)	10.000	10.165	1.650
Av-dc	100.000	99.799	-0.201

Common-Mode Rejection Voltage gain

Simulation result



Evaluation circuit



Common Mode Reject Ratio= $97723/3.074=31790.17530900$

CMRR	Data sheet	Simulation	%Error
	90.000	90.045	0.050