

Device Modeling Report

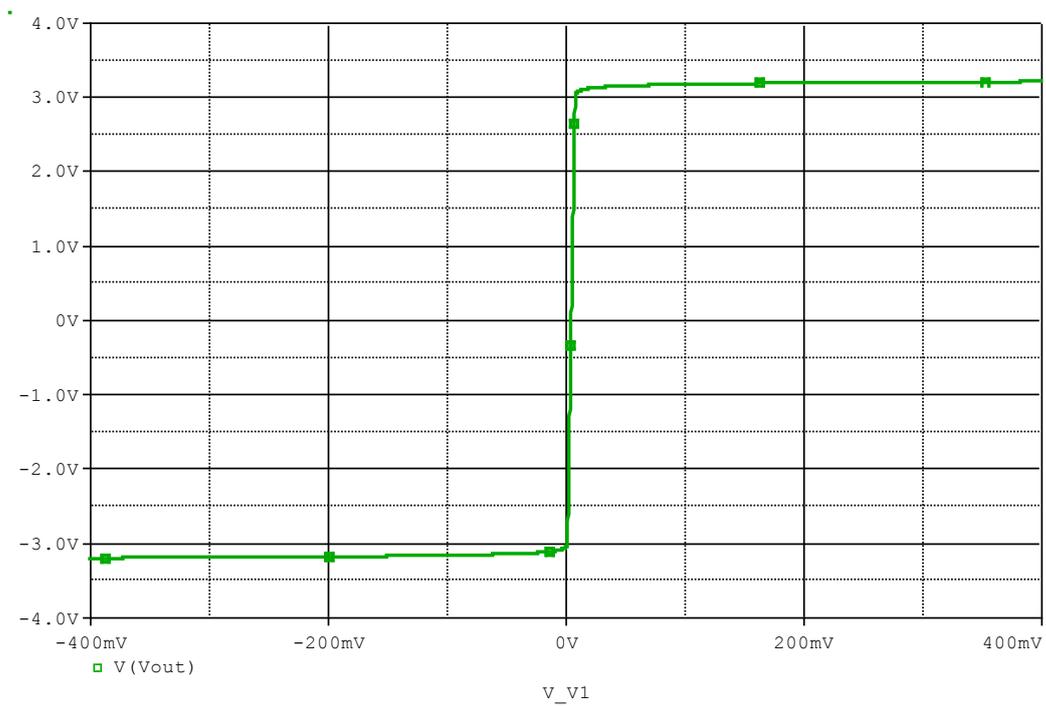
COMPONENTS: OPERATIONAL AMPLIFIER
PART NUMBER: NJM2722
MANUFACTURER: NEW JAPAN RADIO



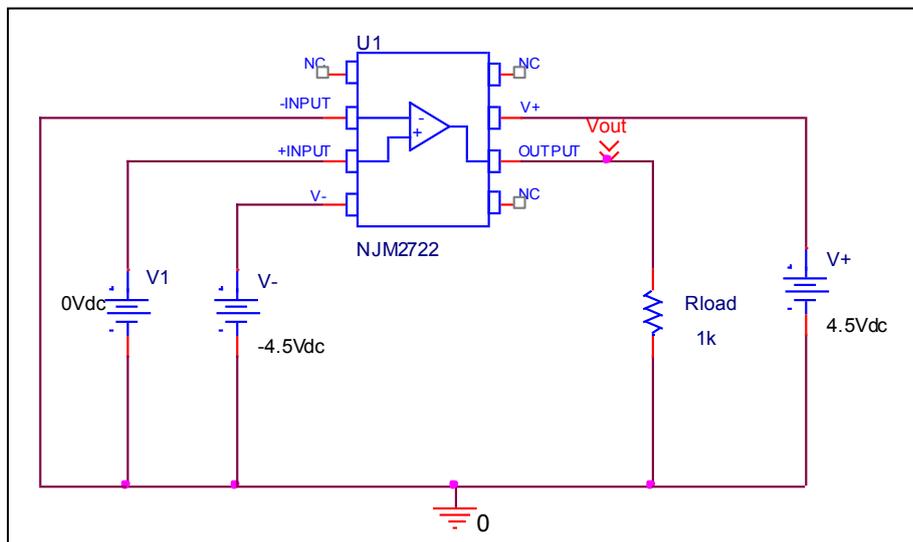
Bee Technologies Inc.

Output Voltage Swing

Simulation result



Evaluation circuit

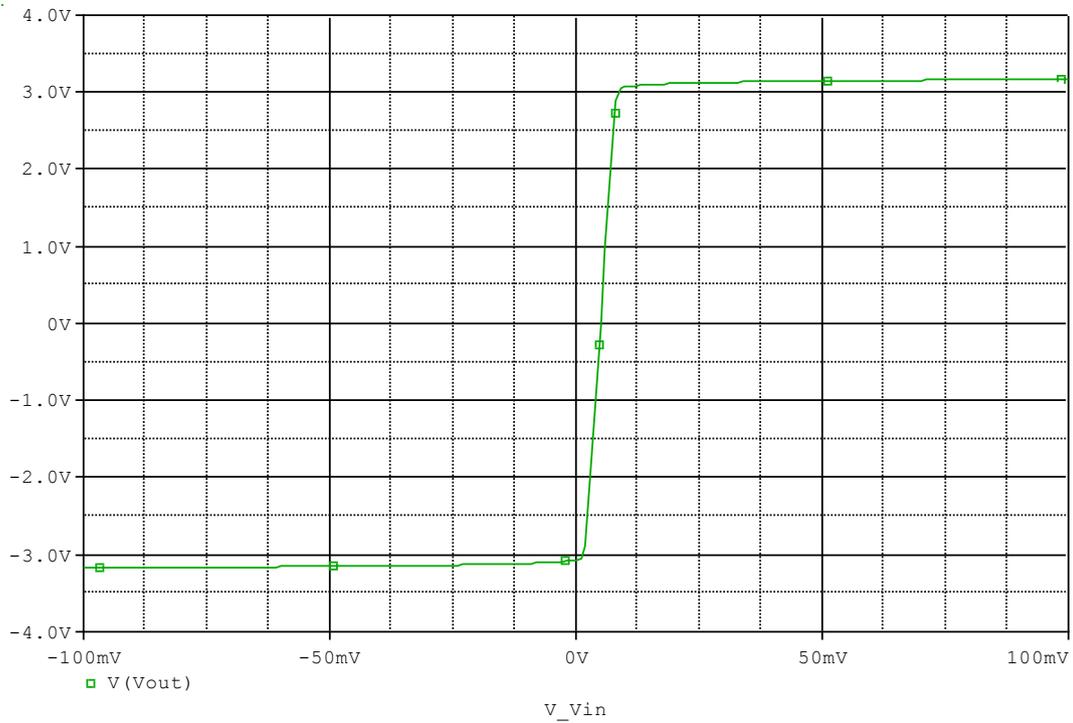


Comparison table

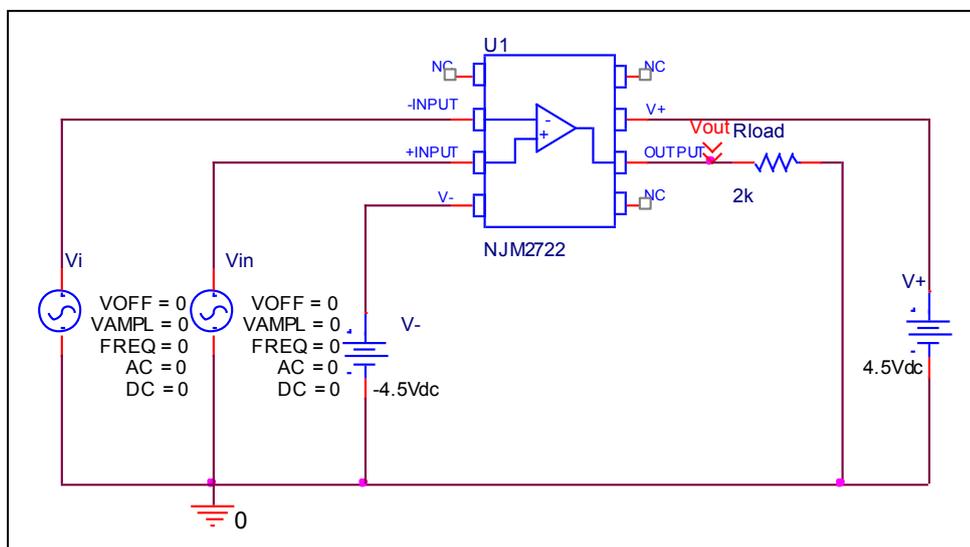
Output Voltage Swing	Measurement	Simulation	%Error
+VOUT(V)	3.200	3.206	0.200
-VOUT(V)	-3.200	-3.206	0.200

Input Offset Voltage

Simulation result



Evaluation circuit

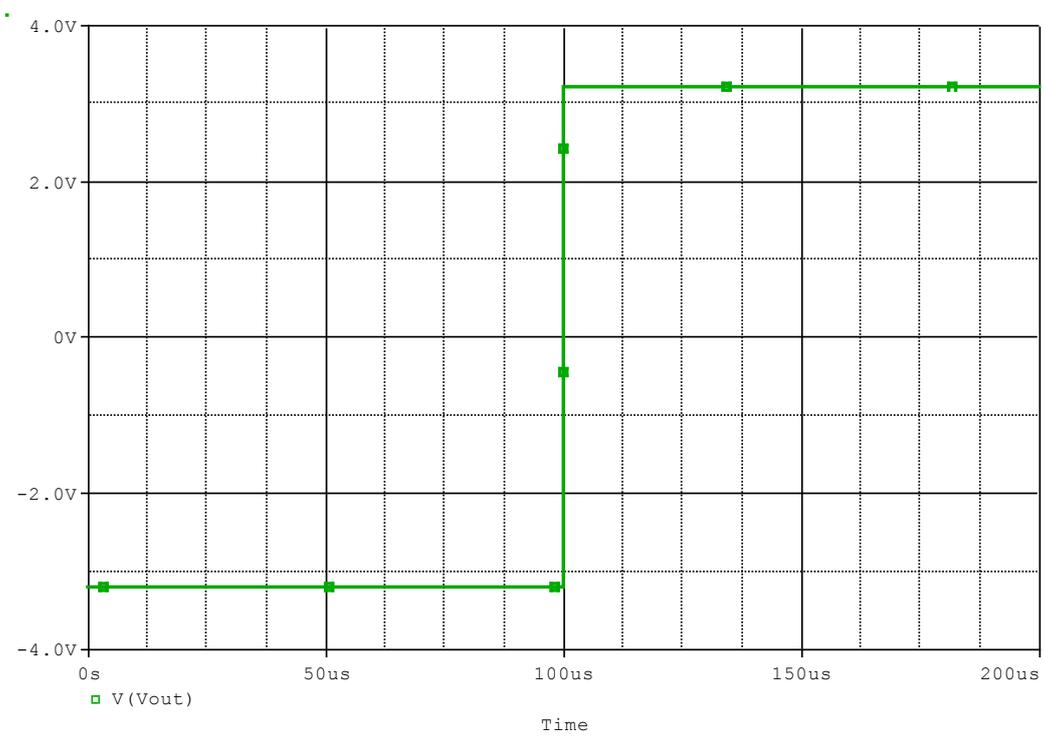


Comparison table

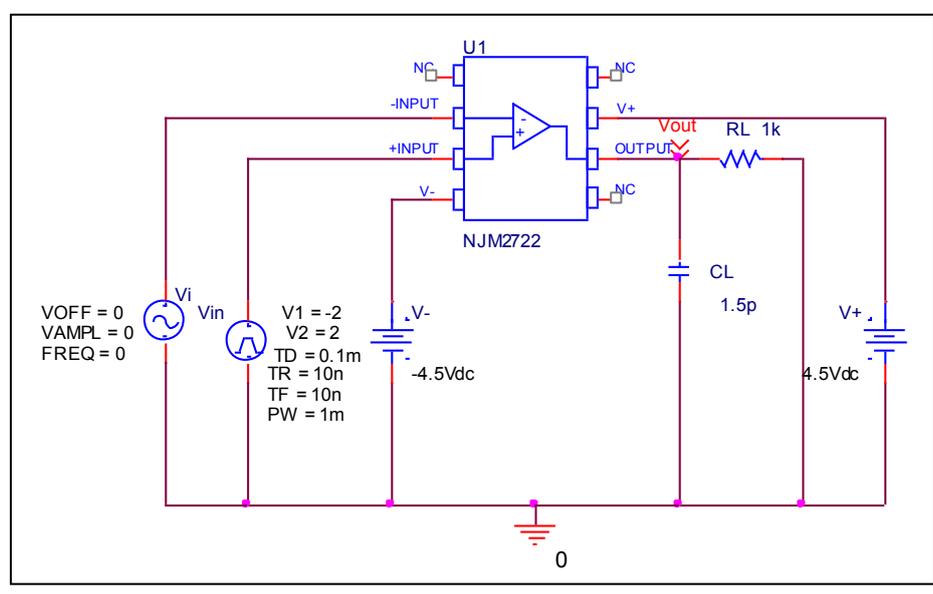
Vos(mV)	Measurement	Simulation	%Error
		5.000	5.004

Slew Rate

Simulation result



Evaluation circuit

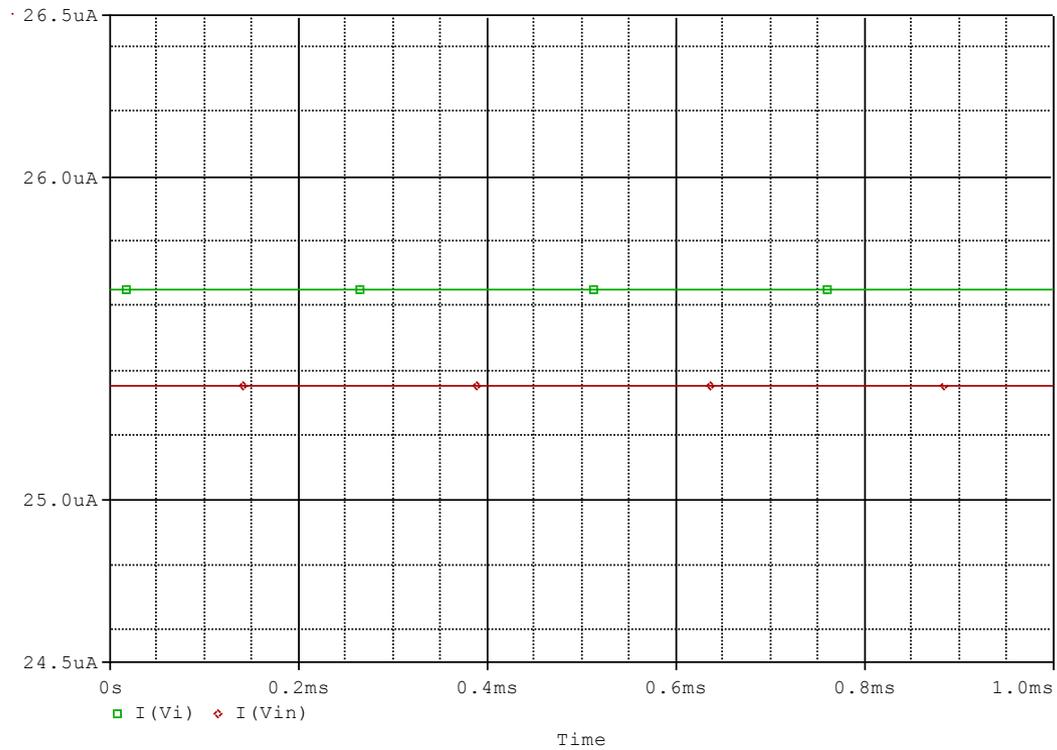


Comparison table

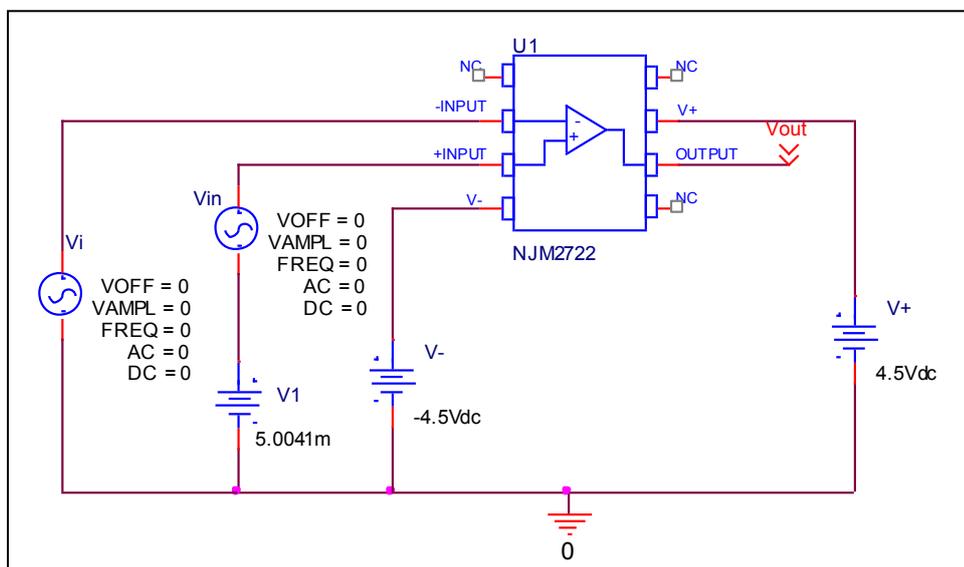
Slew Rate(v/us)	Measurement	Simulation	%Error
		1000.000	1047.959

Input current Ib, Ibos

Simulation result



Evaluation circuit

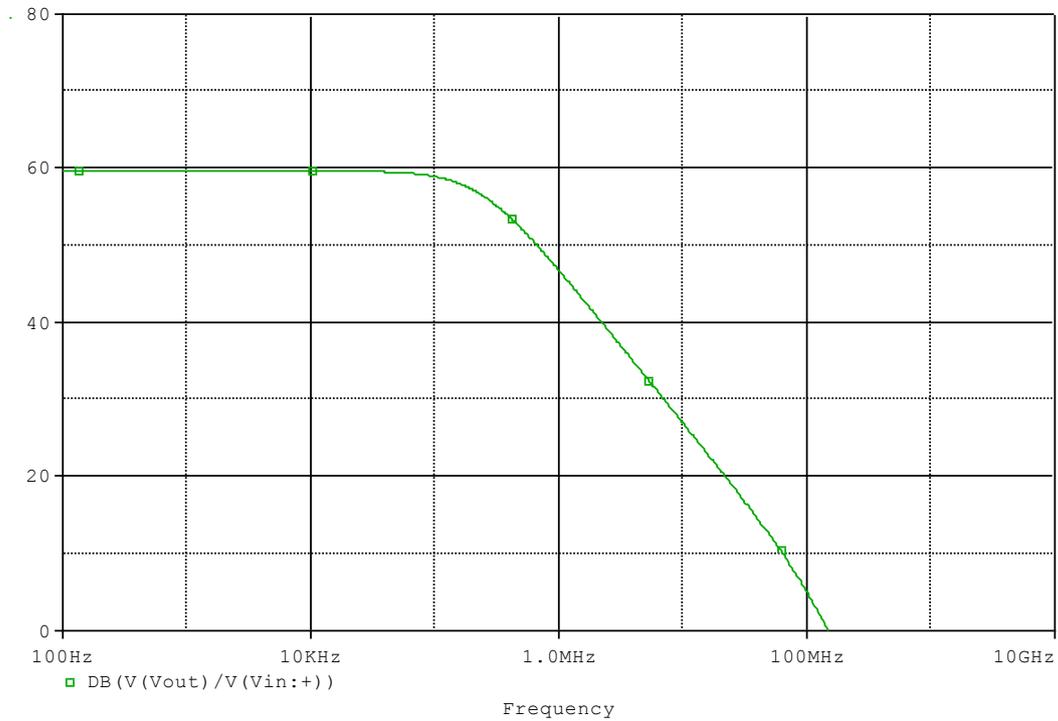


Comparison table

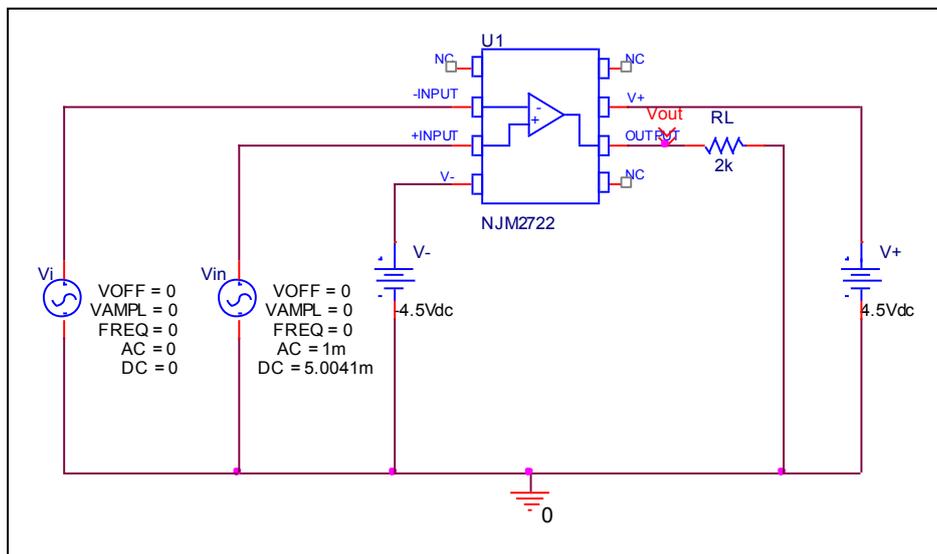
	Measurement	Simulation	%Error
Ib(uA)	25.500	25.503	0.012
Ibos(uA)	0.300	0.300	-0.067

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

Simulation result



Evaluation circuit

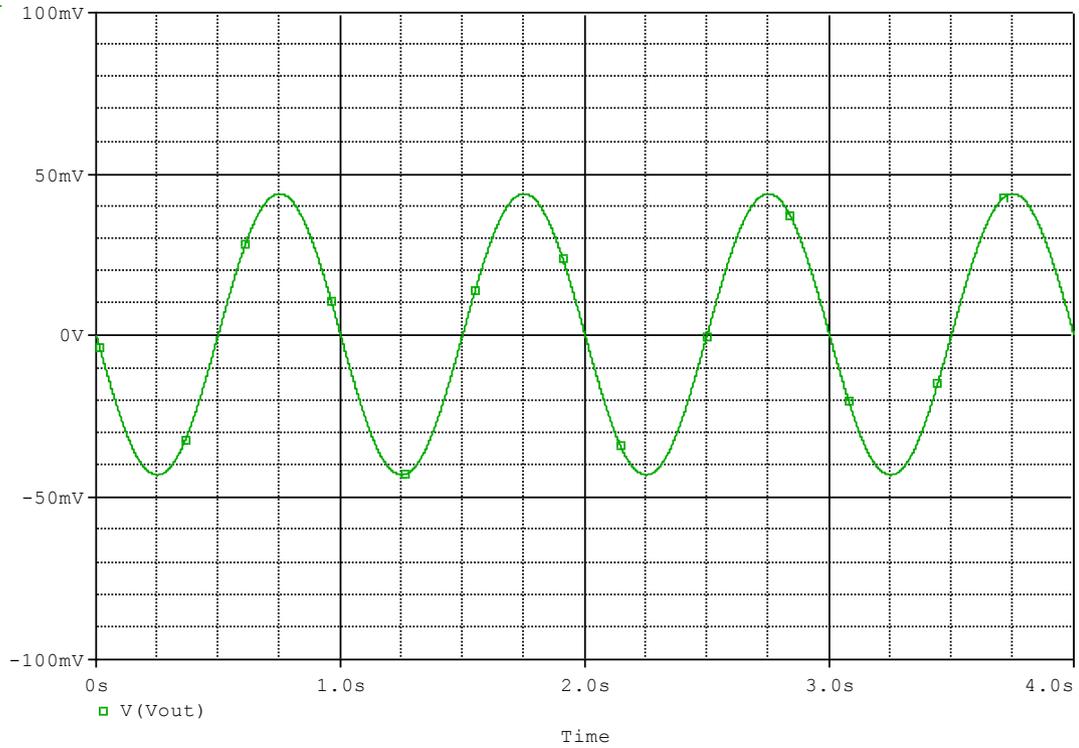


Comparison table

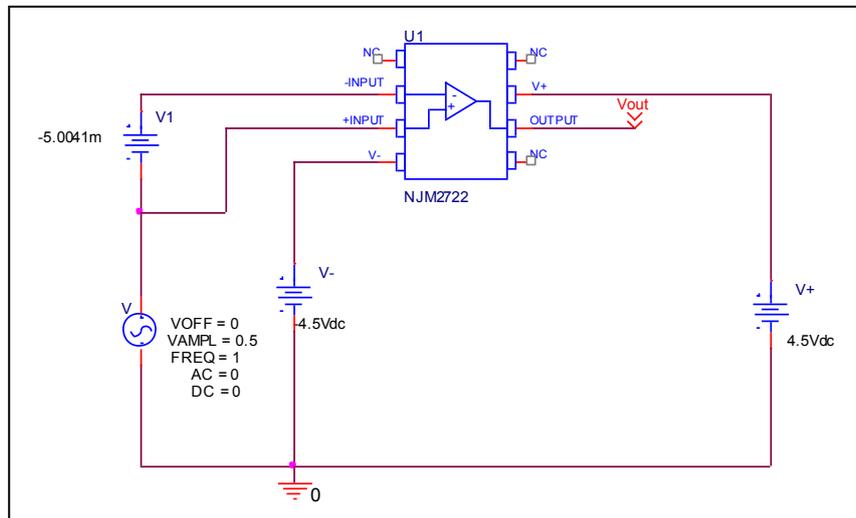
	Measurement	Simulation	%Error
f-0dB(MHz)	170.000	162.000	-4.706
Av-dc(dB)	60.000	59.662	-0.563

Common-Mode Rejection Voltage gain

Simulation result



Evaluation circuit



$$\text{Common Mode Reject Ratio} = 20 \cdot \text{LOG}(963.274/0.098103) = 79.8413\text{dB}$$

CMRR (dB)	Measurement	Simulation	%Error
		80.000	80.879