

Device Modeling Report

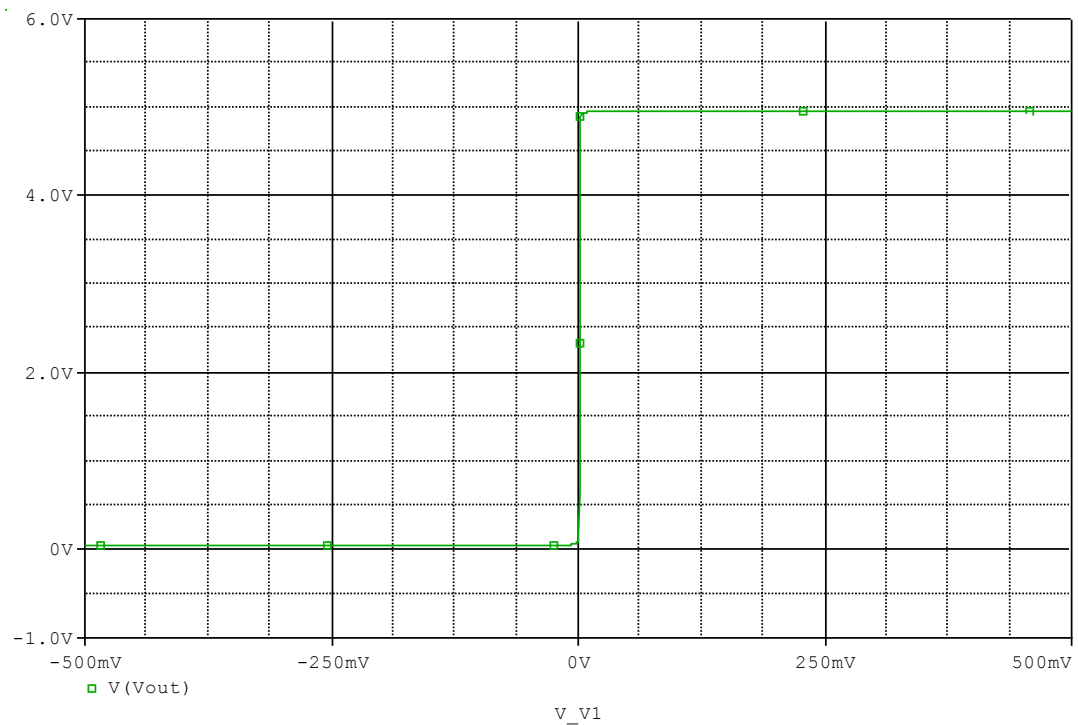
COMPONENTS: OPERATIONAL AMPLIFIER
PART NUMBER: NJM2732SCC
MANUFACTURER: NEW JAPAN RADIO



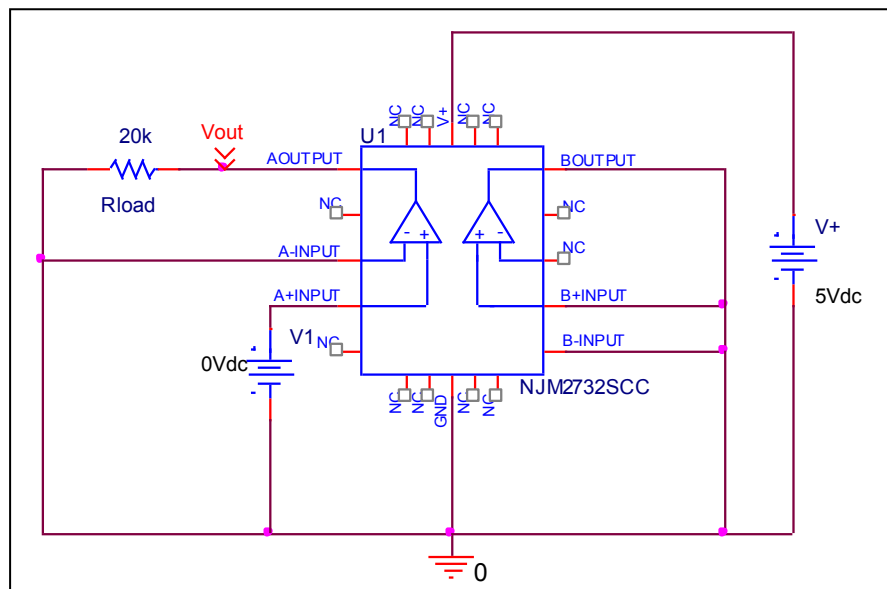
Bee Technologies Inc.

Output Voltage Swing

Simulation result



Evaluation circuit

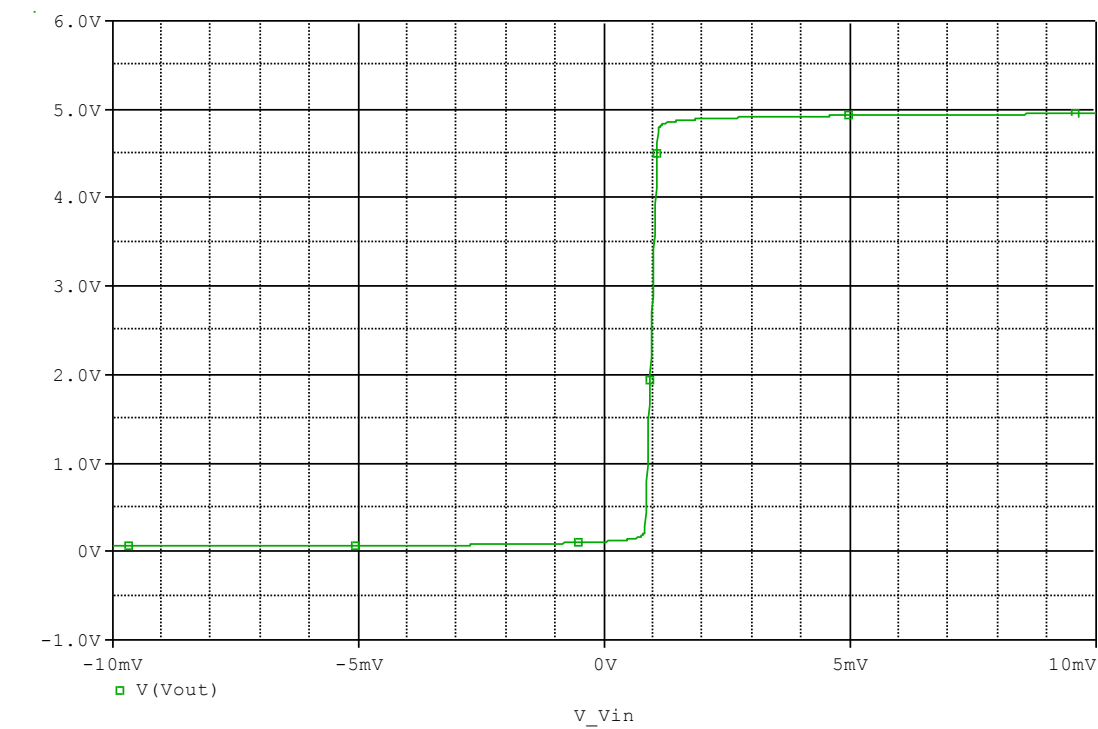


Comparison table

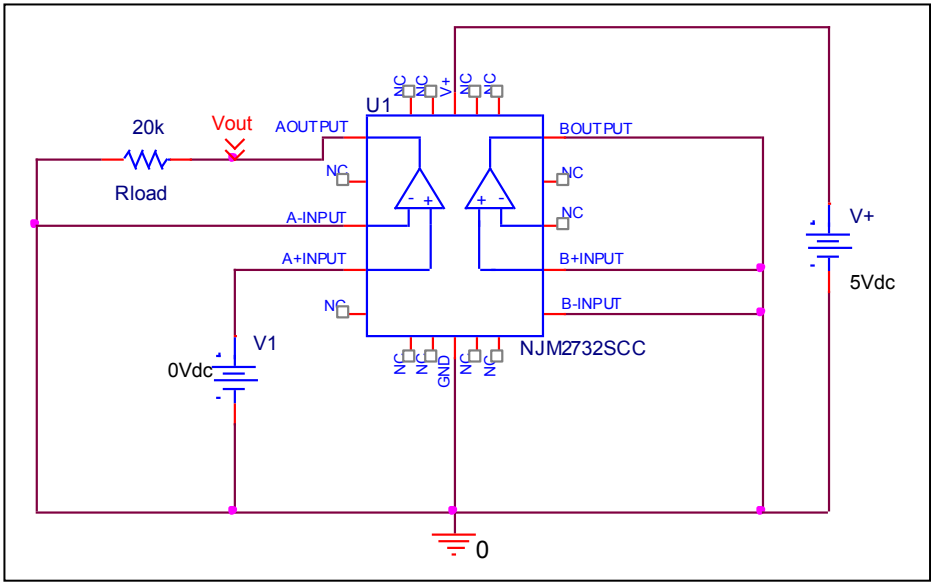
Output Voltage Swing	Measurement	Simulation	%Error
VOH(V)	4.950	4.950	-0.010
VOL(V)	0.050	0.050	0.068

Input Offset Voltage

Simulation result



Evaluation circuit

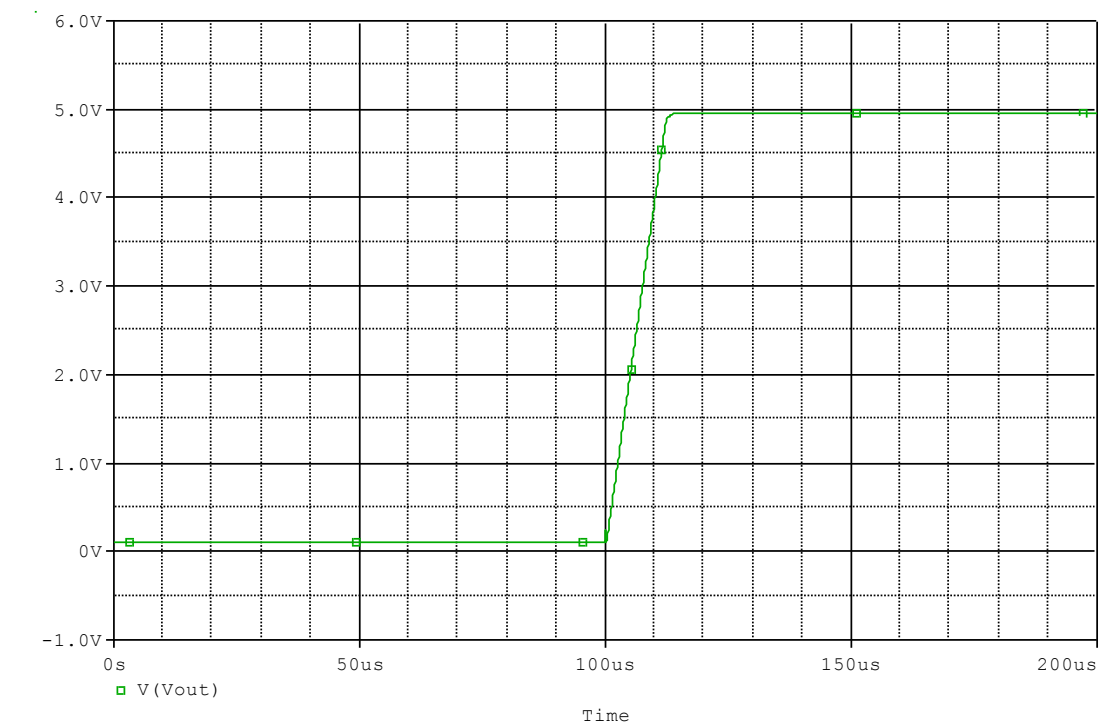


Comparison table

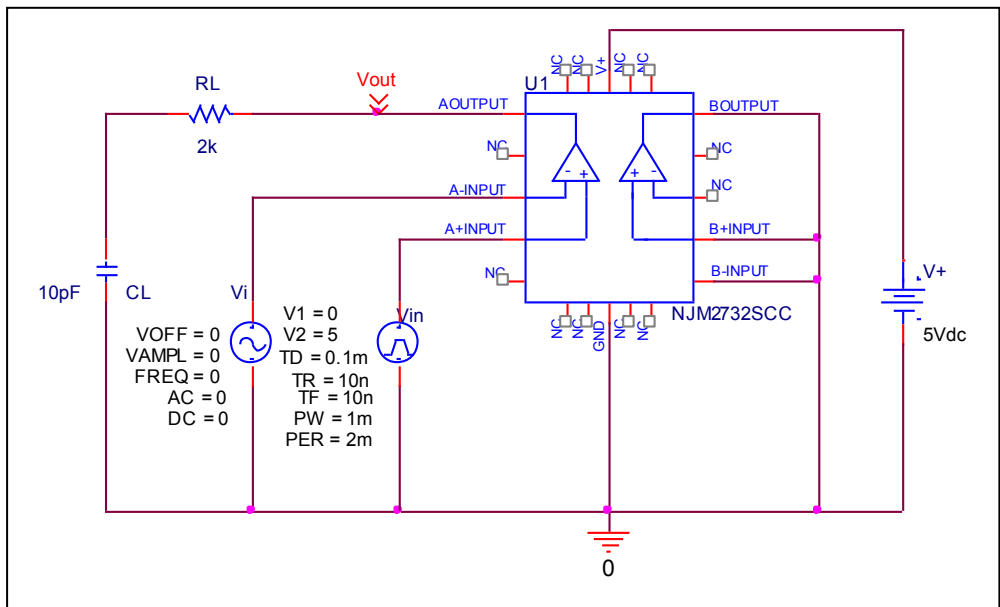
Vos(mV)	Measurement	Simulation	%Error
	1.000	1.045	4.500

Slew Rate

Simulation result



Evaluation circuit

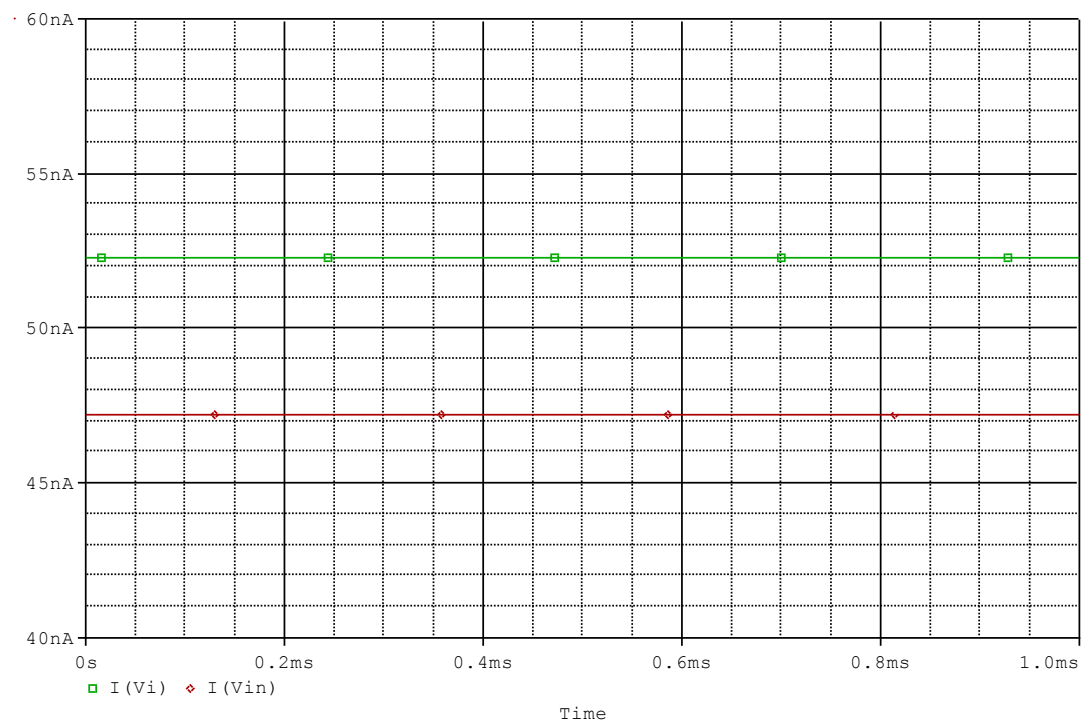


Comparison table

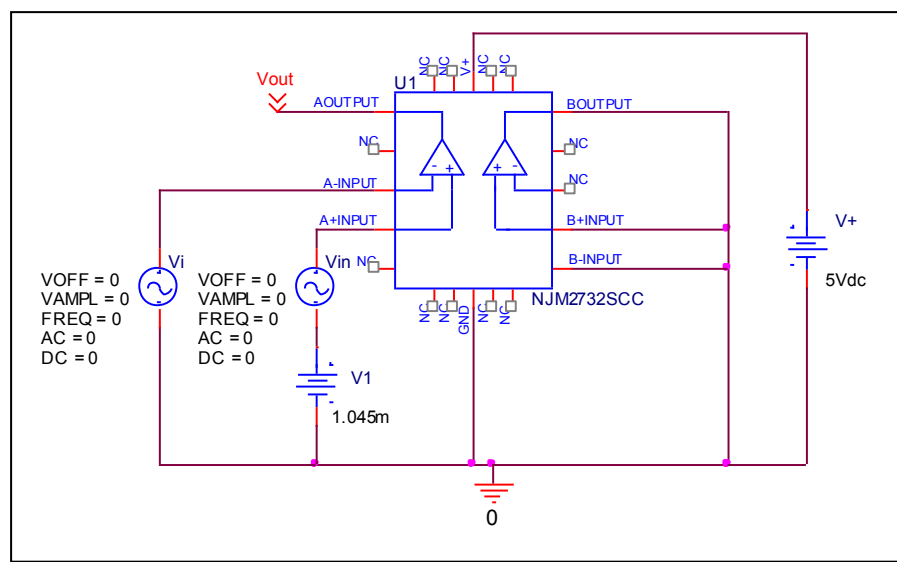
Slew Rate(v/us)	Measurement	Simulation	%Error
	0.400	0.392	-2.000

Input current Ib, Ibos

Simulation result



Evaluation circuit

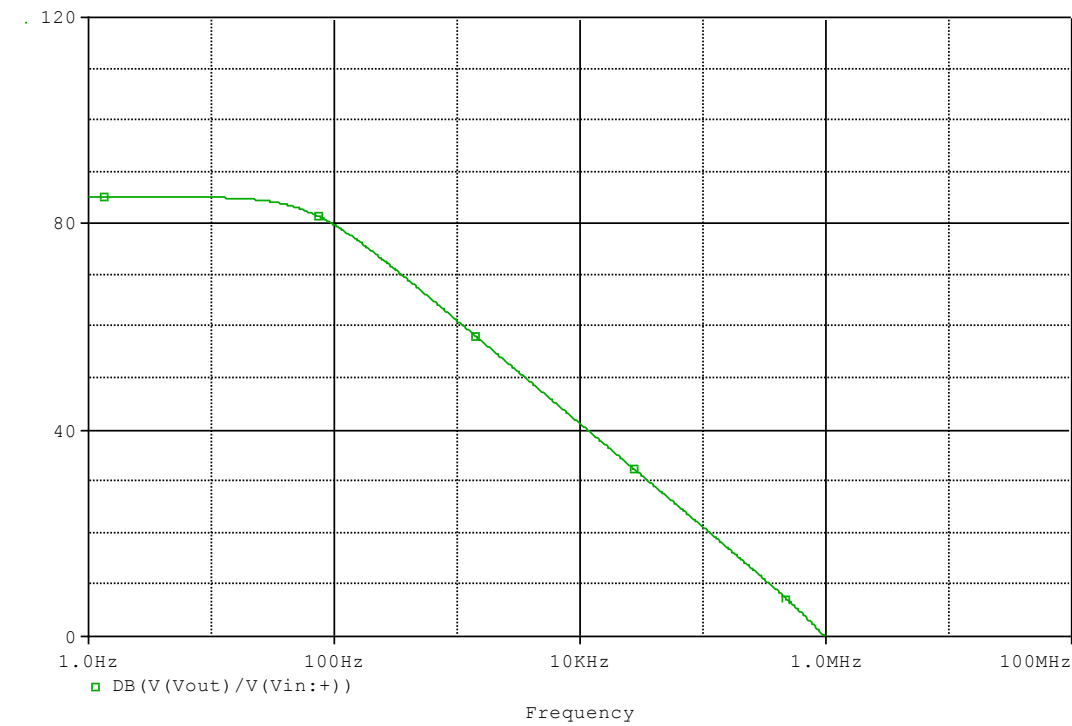


Comparison table

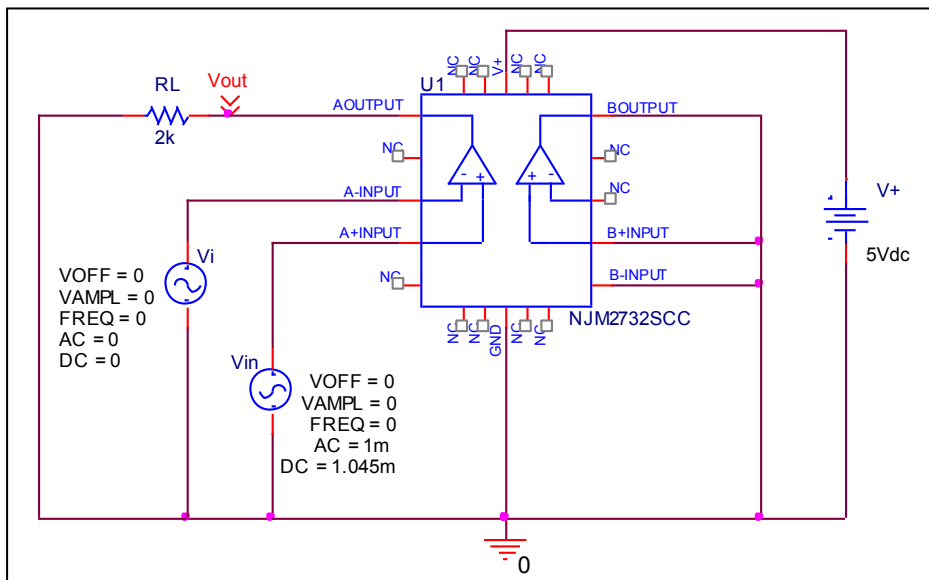
	Measurement	Simulation	%Error
Ib(nA)	50.000	49.741	-0.518
Ibos(nA)	5.000	5.088	1.760

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

Simulation result



Evaluation circuit

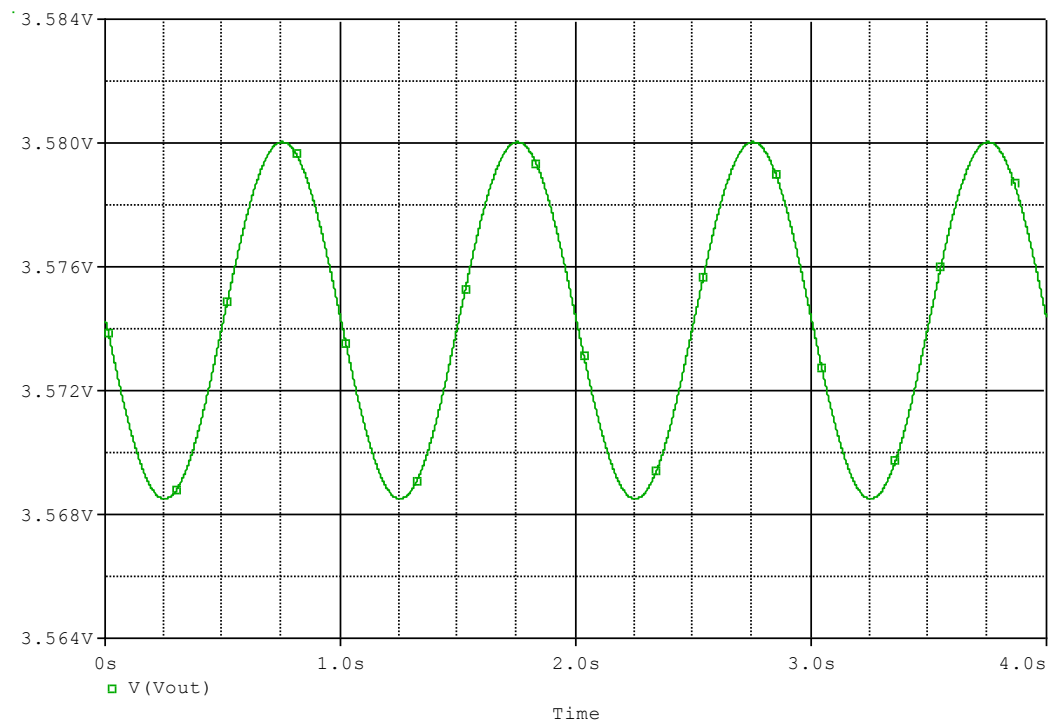


Comparison table

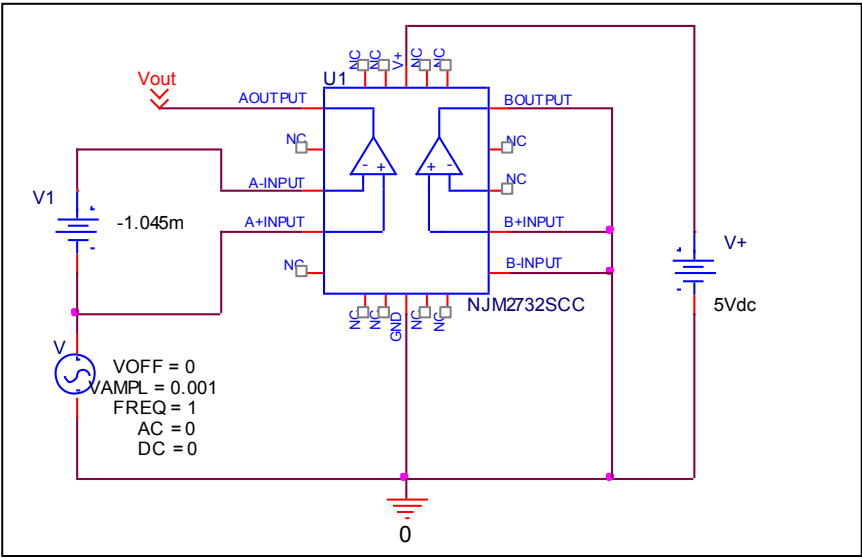
	Measurement	Simulation	%Error
f-0dB(MHz)	1.000	0.968	-3.200
Av-dc(dB)	85.000	85.187	0.220

Common-Mode Rejection Voltage gain

Simulation result



Evaluation circuit



Common Mode Reject Ratio= $20 \cdot \text{LOG}(18169.793 / (0.0115 / 0.002))$
= 69.9936dB

CMRR (dB)	Measurement	Simulation	%Error
	70.000	69.994	-0.009