

Device Modeling Report

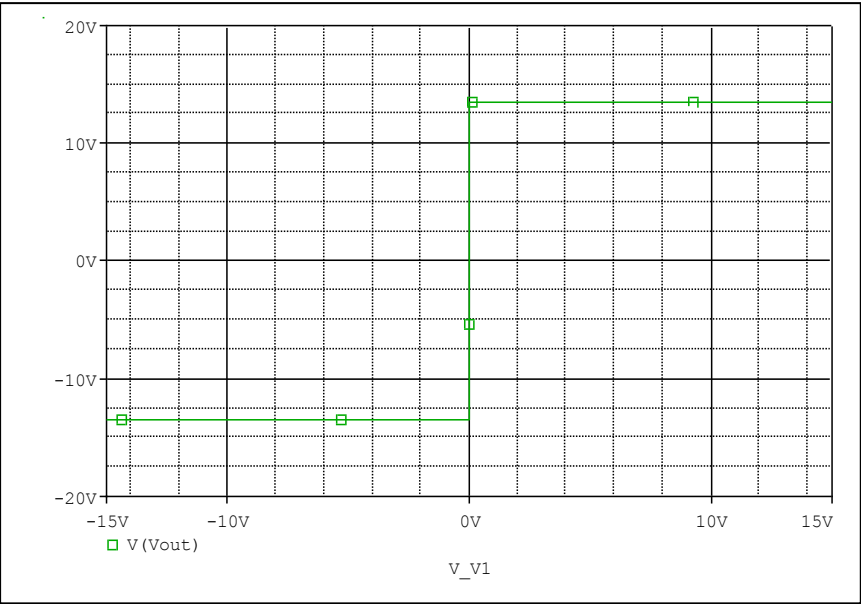
COMPONENTS:MOSFET: OPERATIONAL AMPLIFIER
PART NUMBER: UPC4082G2
MANUFACTURER: NEC



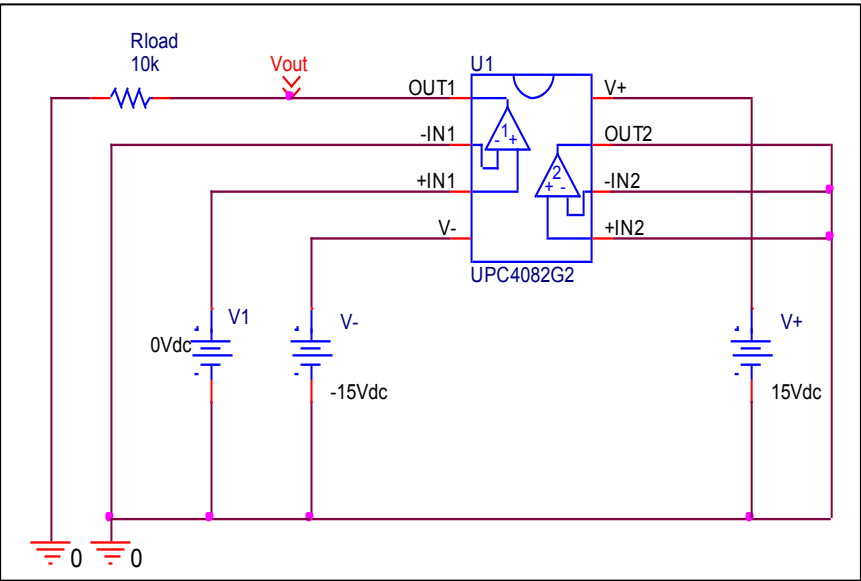
Bee Technologies Inc.

Output Voltage Swing

Simulation result



Evaluation circuit

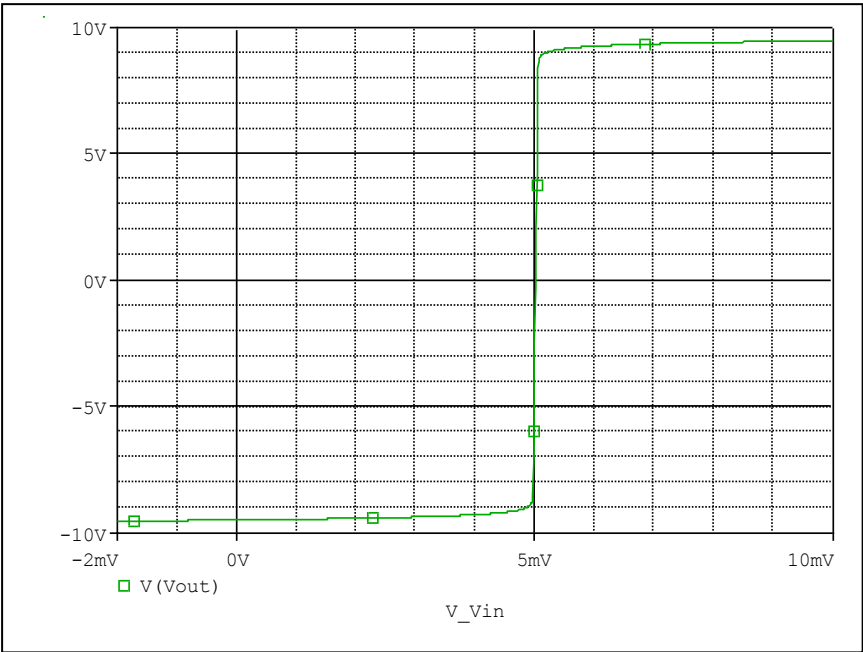


Comparison table

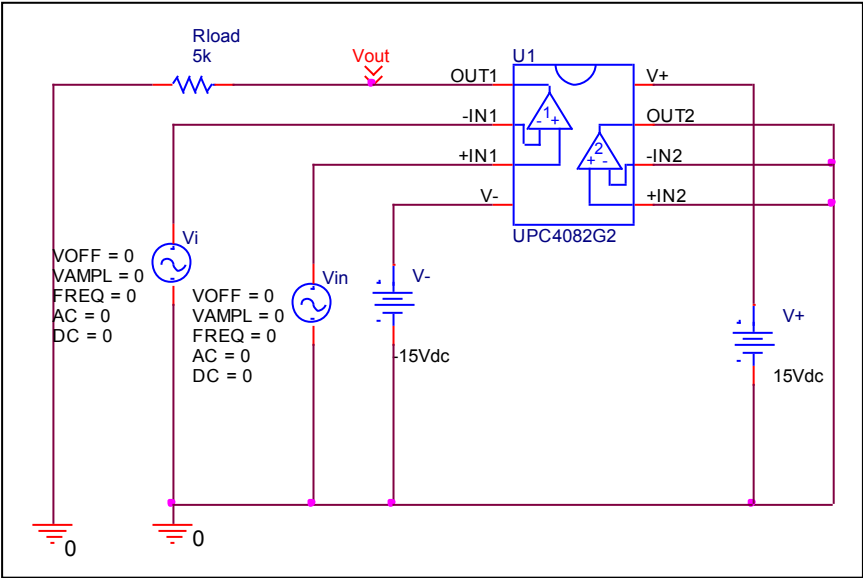
	Measurement	Simulation	%Error
+Vout(V)	13.500	13.487	-0.096
-Vout(V)	13.500	13.487	-0.096

Input Offset Voltage

Simulation result



Evaluation circuit

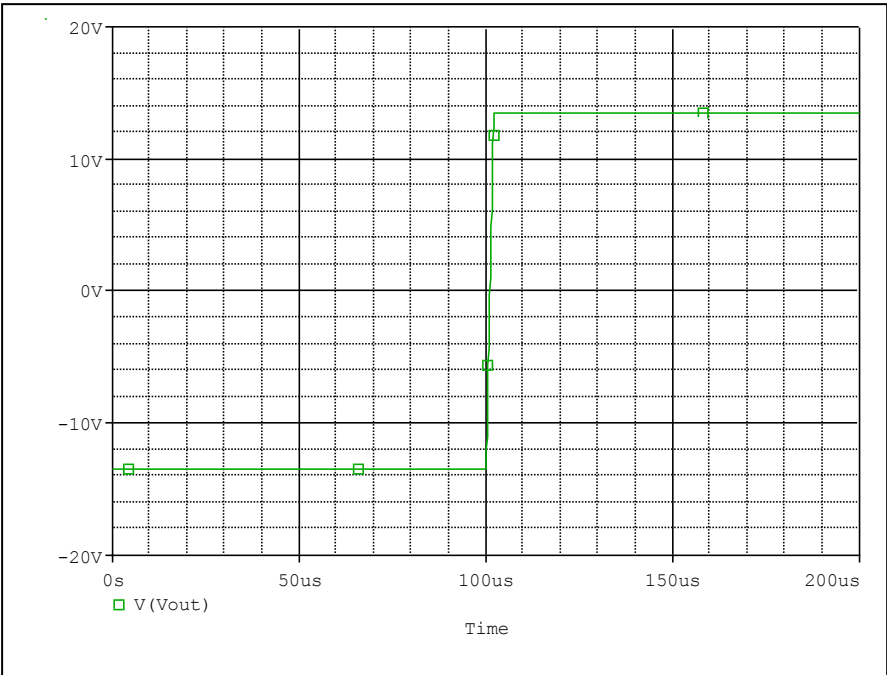


Comparison table

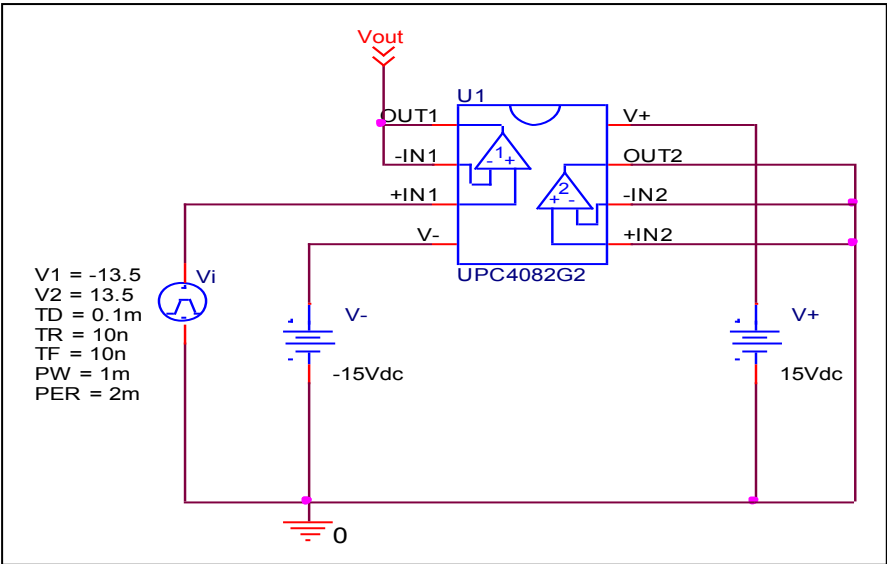
	Measurement	Simulation	%Error
Vos (mV)	5.000	5.010	0.200

Slew Rate

Simulation result



Evaluation circuit

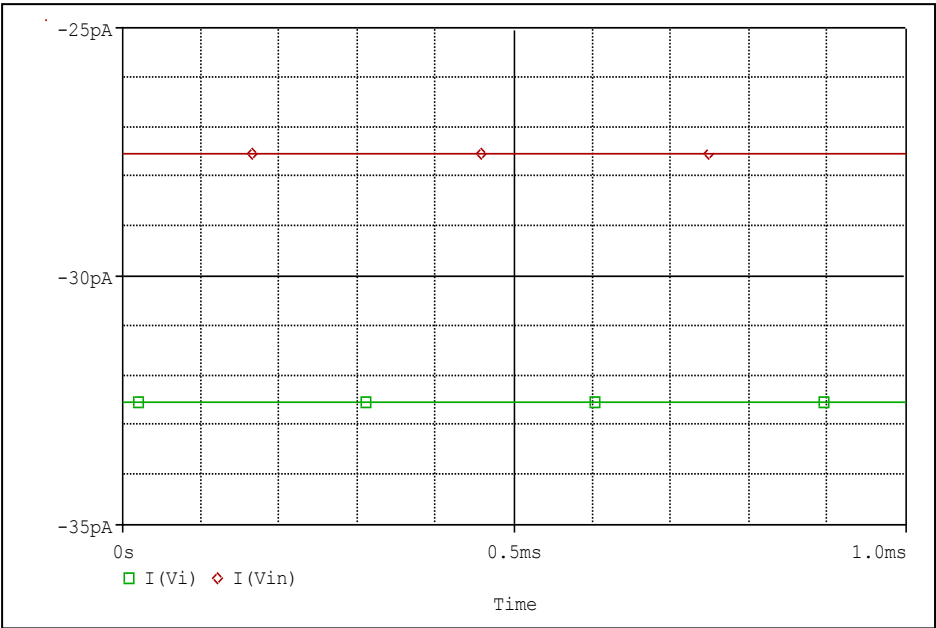


Comparison table

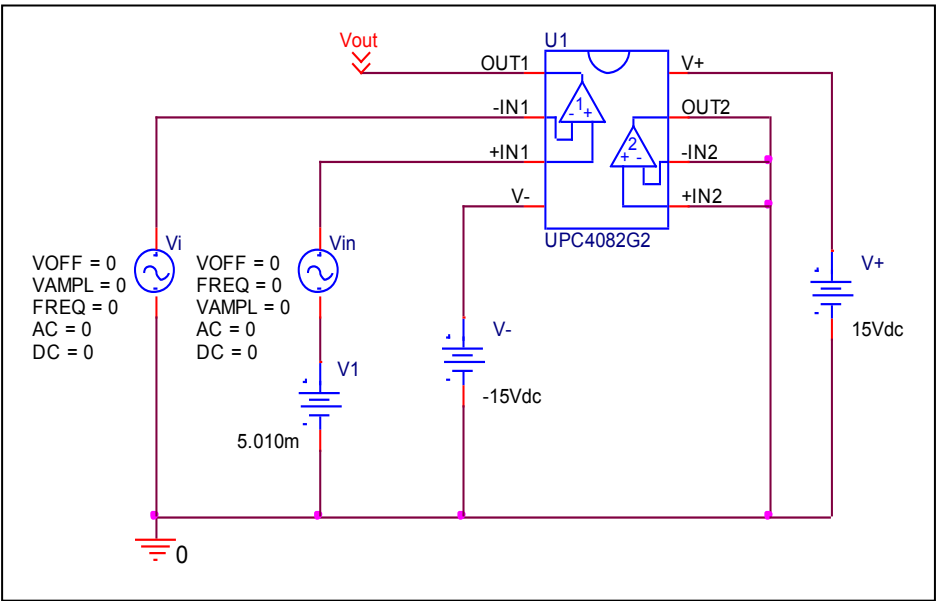
	Measurement	Simulation	%Error
Slew Rate(v/us)	13.000	13.025	0.192

Input current

Simulation result



Evaluation circuit

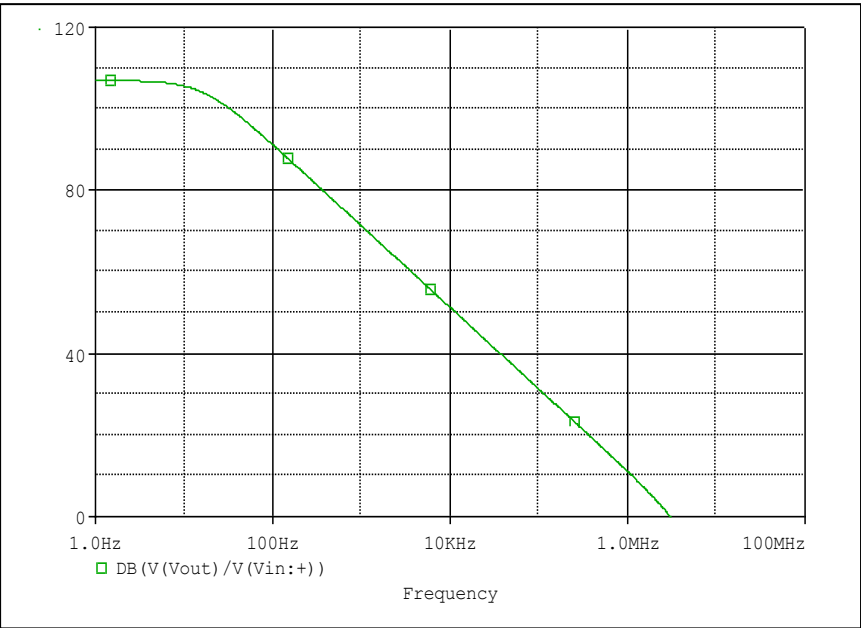


Comparison table

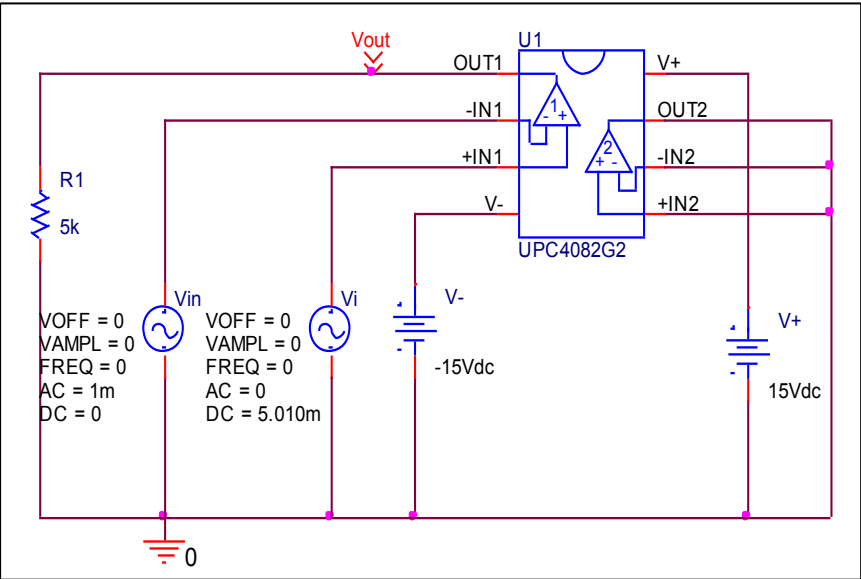
	Measurement	Simulation	%Error
Ib (pA)	30.000	30.044	0.147
Ibos (pA)	5.000	4.990	-0.200

Open Loop Voltage Gain vs. Frequency

Simulation result



Evaluation circuit

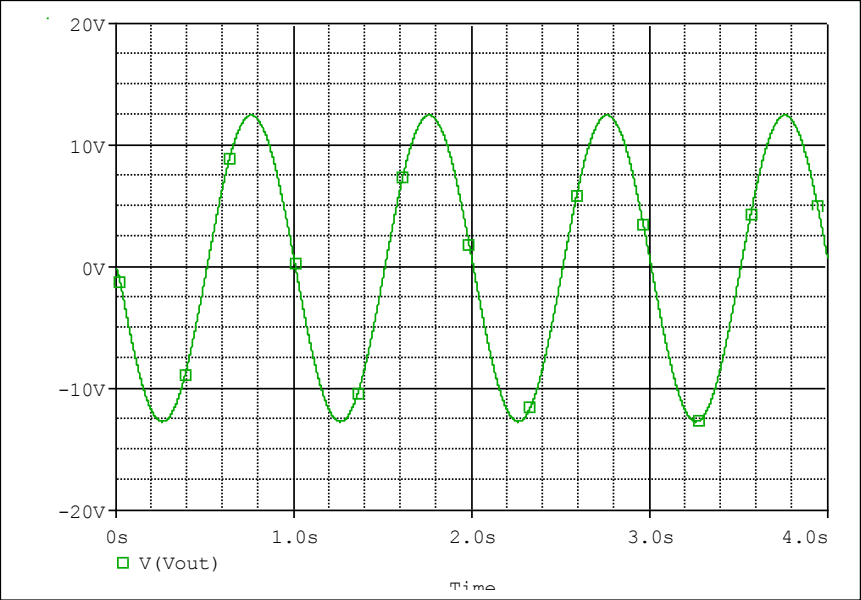


Comparison table

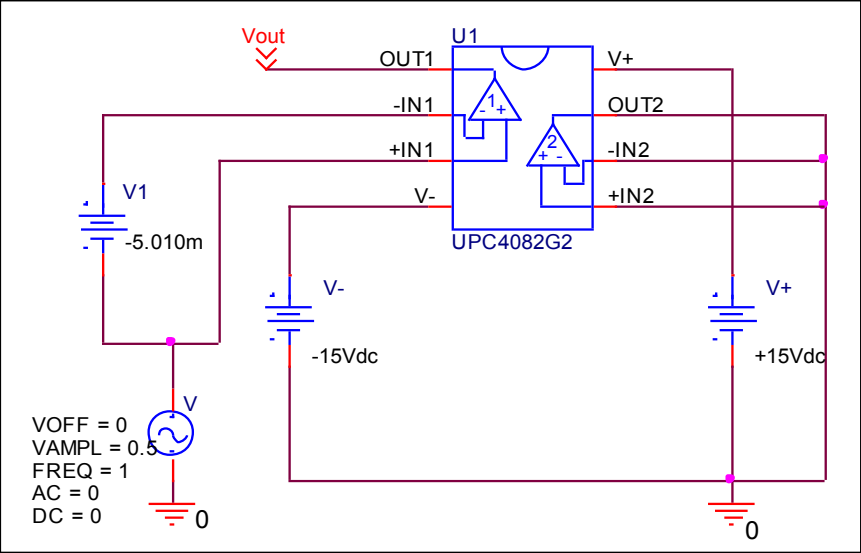
	Measurement	Simulation	%Error
f-0dB(MHz)	3.000	3.037	1.233
Av-dc(dB)	106.000	106.928	0.875

Common-Mode Rejection Voltage gain

Simulation result



Evaluation circuit



$$CMRR=20*\text{LOG}(222024.0395/25.174) = 78.909 \text{ dB}$$

Comparison table

	Measurement	Simulation	%Error
CMRR(dB)	76.000	78.909	3.828