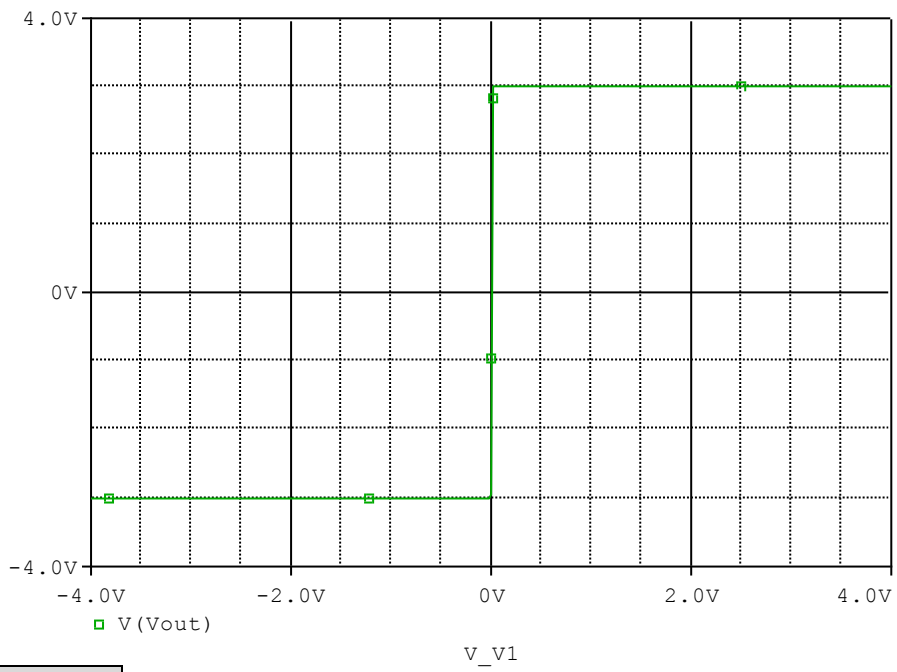
Device Modeling Report

COMPONENTS: OPERATIONAL AMPLIFIER
PART NUMBER:NJM2745
MANUFACTURER: NEW JAPAN RADIO CO.,LTD

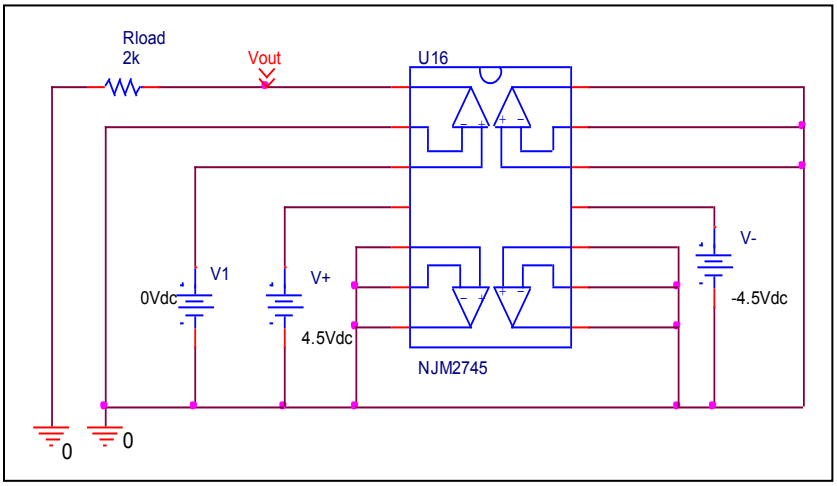
Bee Technologies Inc.

Output Voltage Swing

Simulation result



Evaluation circuit

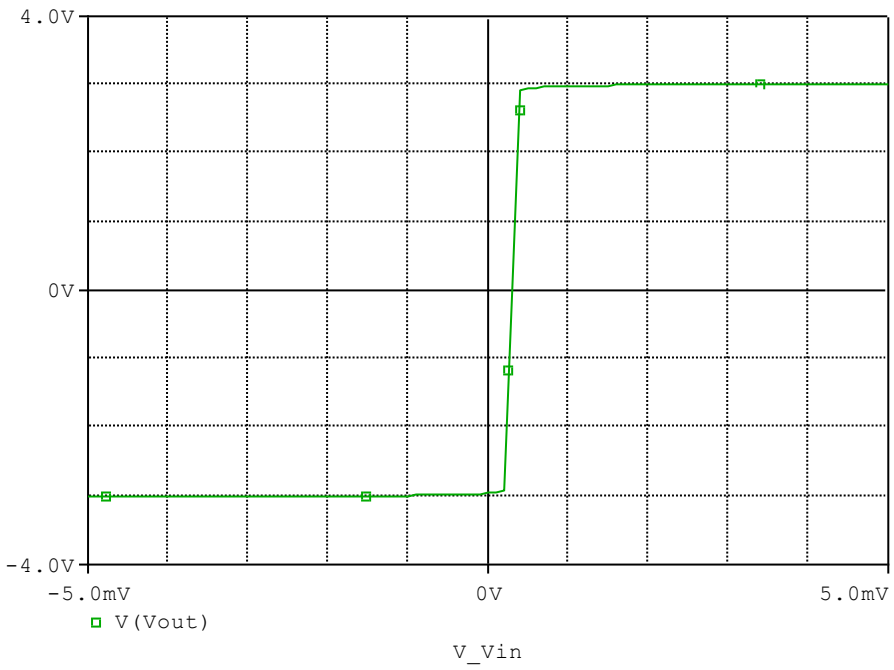


Comparison table

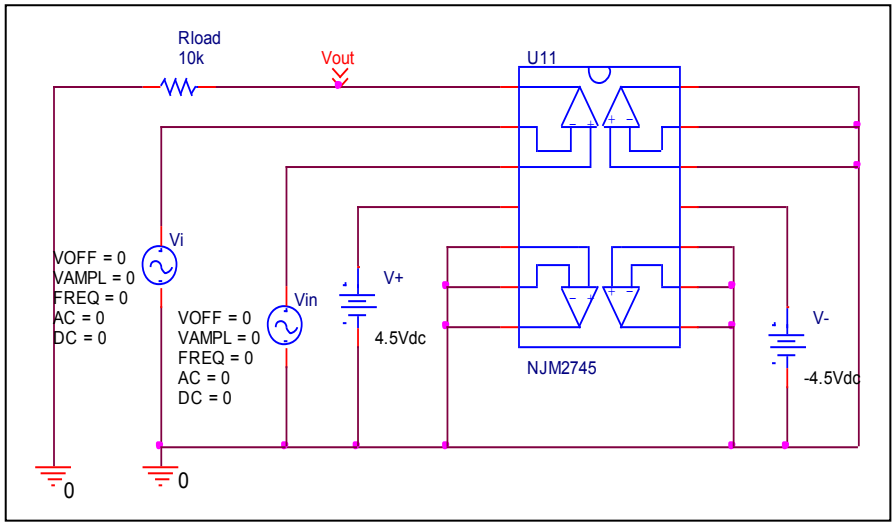
Output Voltage Swing	Data sheet	Simulation	%Error
+Vom	3.000	3.000	0.000
-Vom	-3.000	-3.000	0.000

Input Offset Voltage

Simulation result



Evaluation circuit

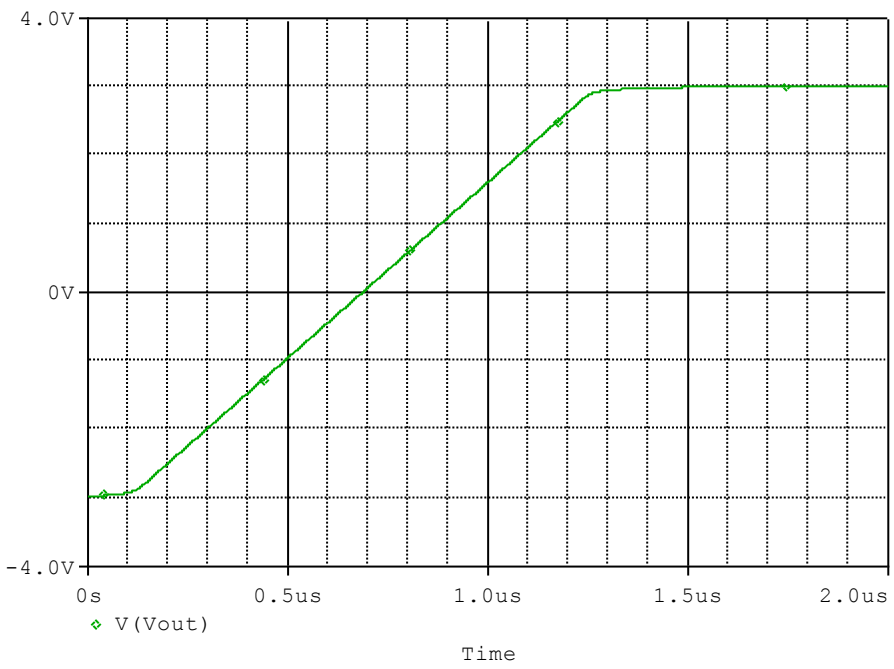


Comparison table

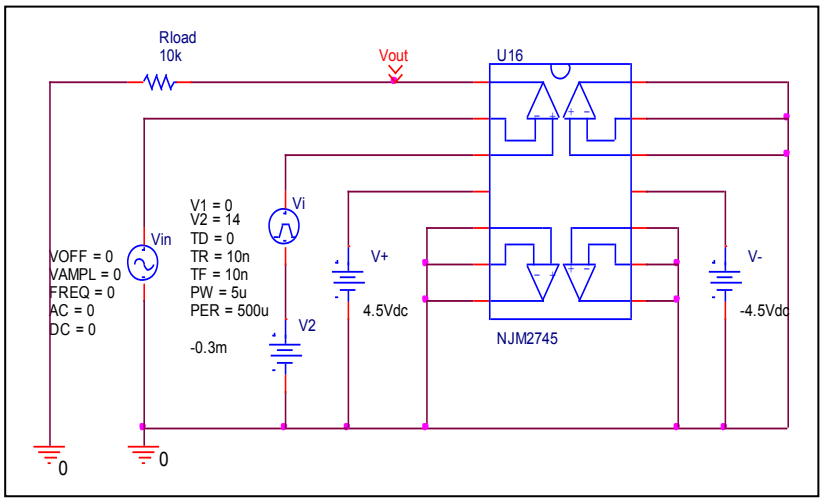
Vos	Measurement		Simulation		Error	
	0.300	mV	0.300	mV	0.000	%

Slew Rate

Simulation result



Evaluation circuit

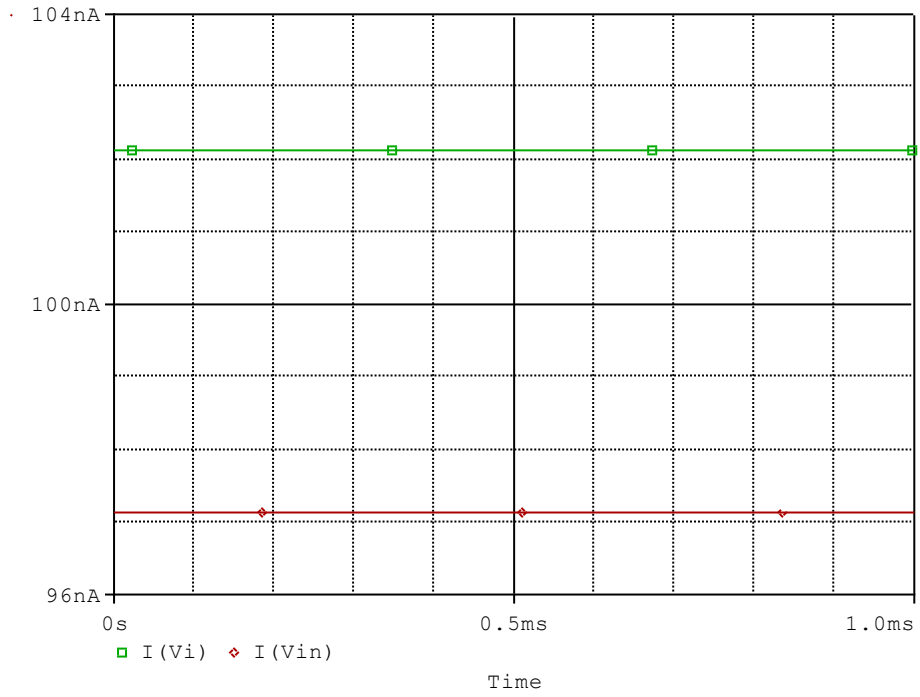


Comparison table

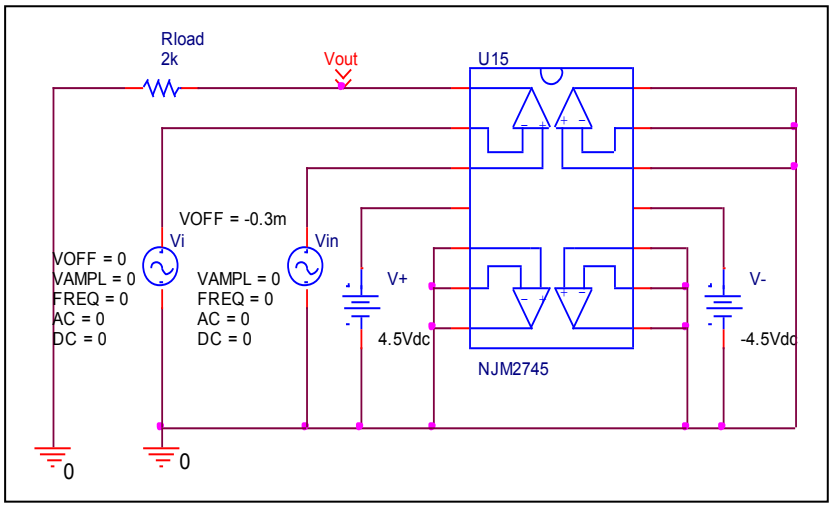
Slew Rate(v/us)	Data sheet	Simulation	%Error
	5.000	5.126	2.520

Input current

Simulation result



Evaluation circuit

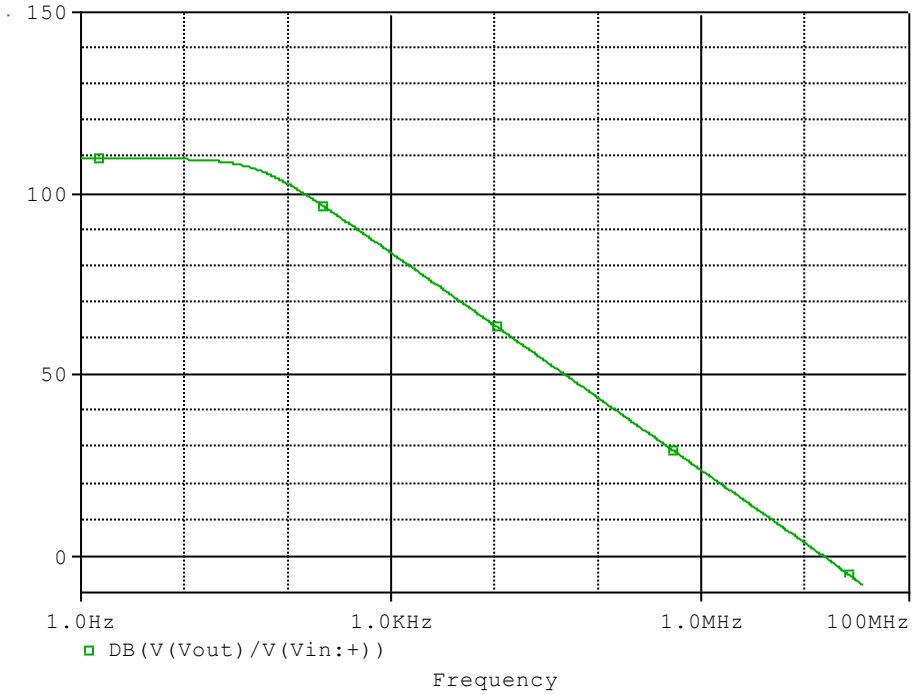


Comparison table

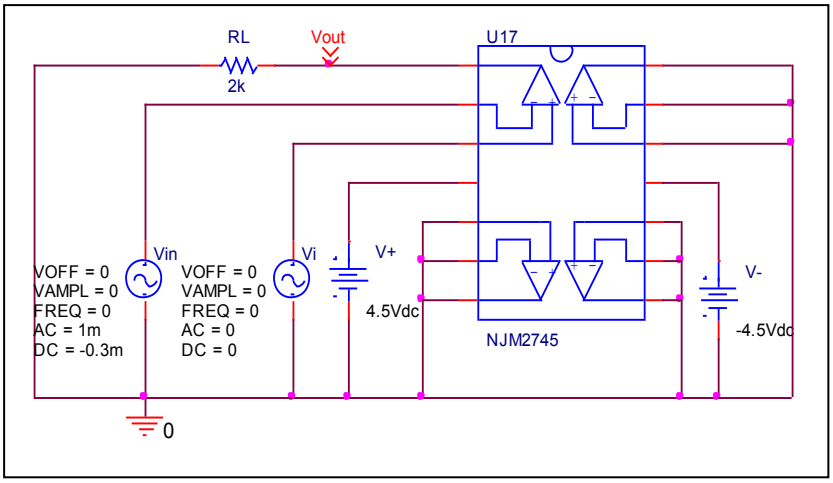
	Data sheet	Simulation	%Error
Ib(nA)	100.000	99.682	-0.318
Ibos(nA)	5.000	5.019	0.380

Open Loop Voltage Gain vs. Frequency

Simulation result



Evaluation circuit

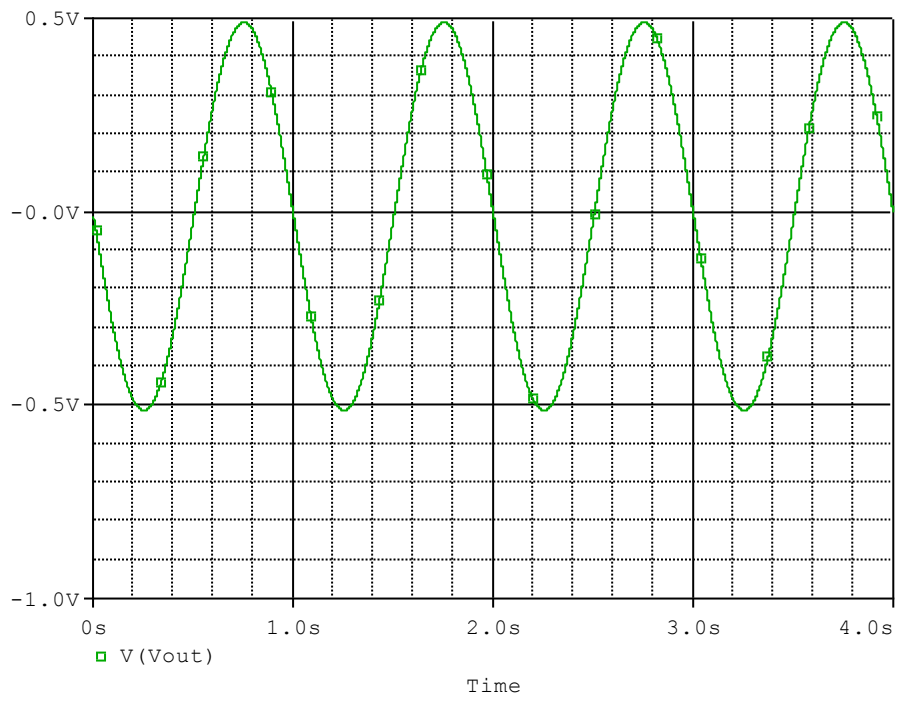


Comparison table

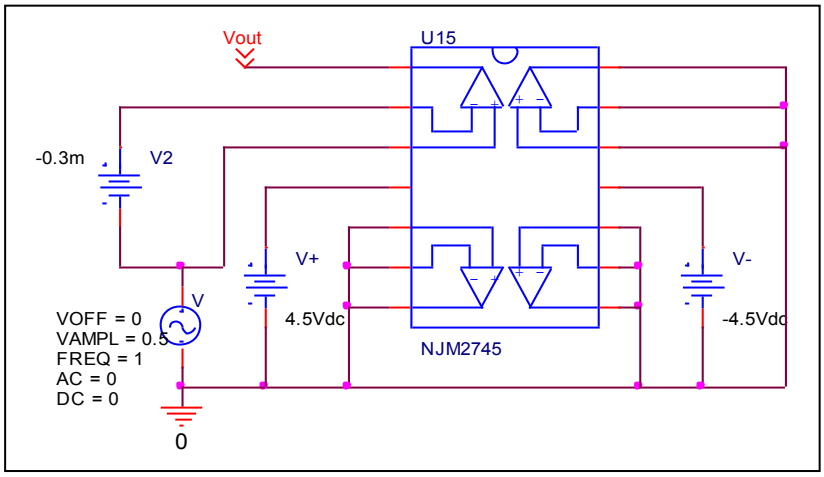
	Data sheet	Simulation	%Error
f-0dB(MHz)	15.000	15.031	0.207
Av-dc	110.000	109.651	-0.317

Common-Mode Rejection Voltage gain

Simulation result



Evaluation circuit



Common Mode Reject Ratio=303773.58/1.002 = 303167.245 = 109.633dB

Comparison table

CMRR(dB)	Data sheet	Simulation	%Error
	110.000	109.633	0.333