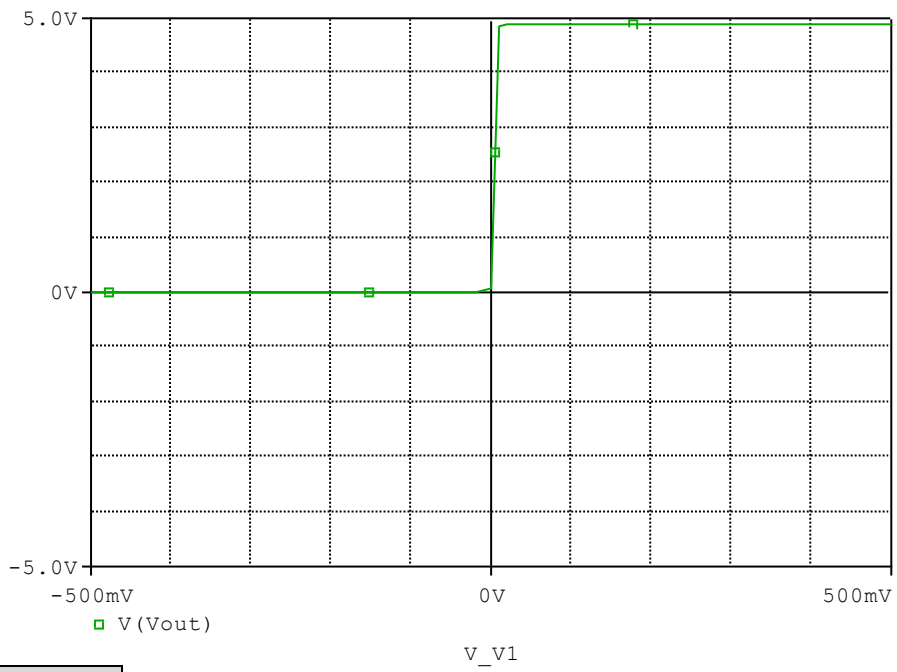
Device Modeling Report

COMPONENTS: OPERATIONAL AMPLIFIER
PART NUMBER:NJM2747
MANUFACTURER: NEW JAPAN RADIO CO.,LTD

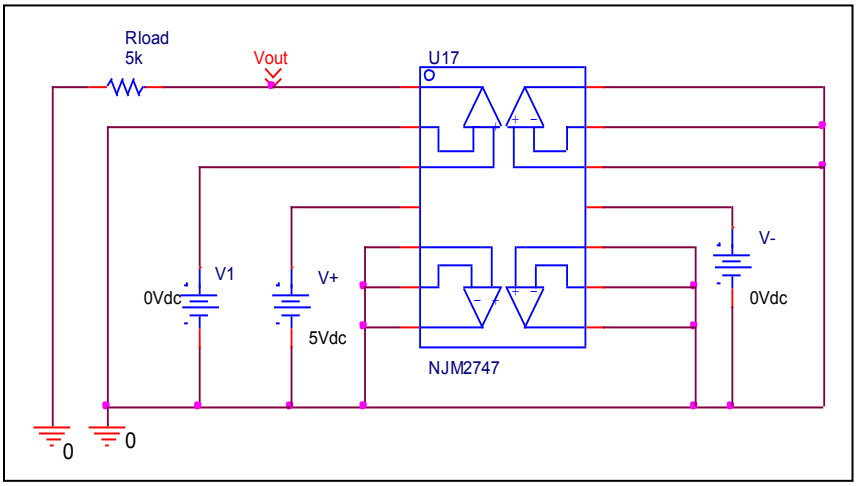
Bee Technologies Inc.

Output Voltage Swing

Simulation result



Evaluation circuit

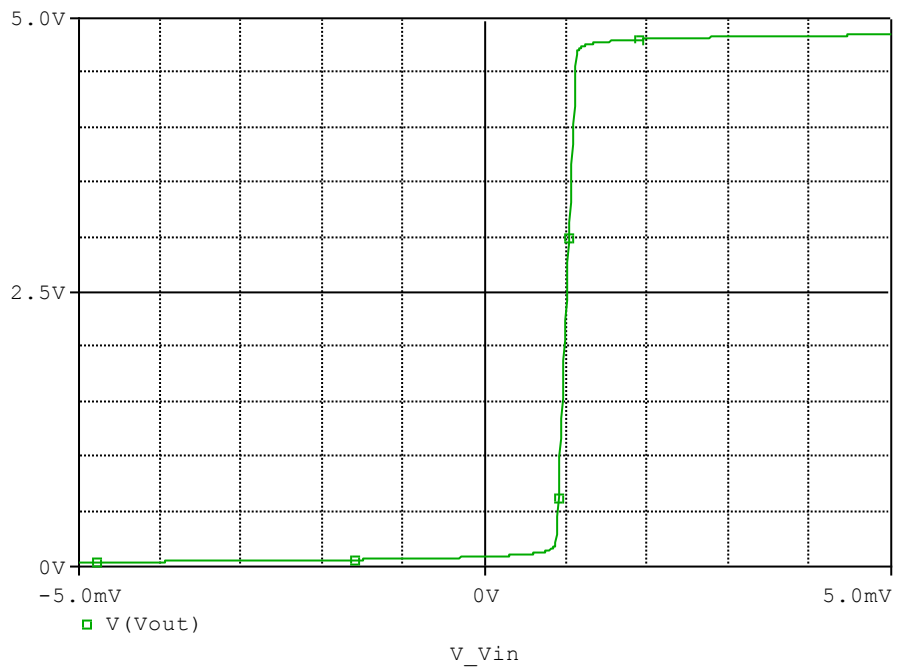


Comparison table

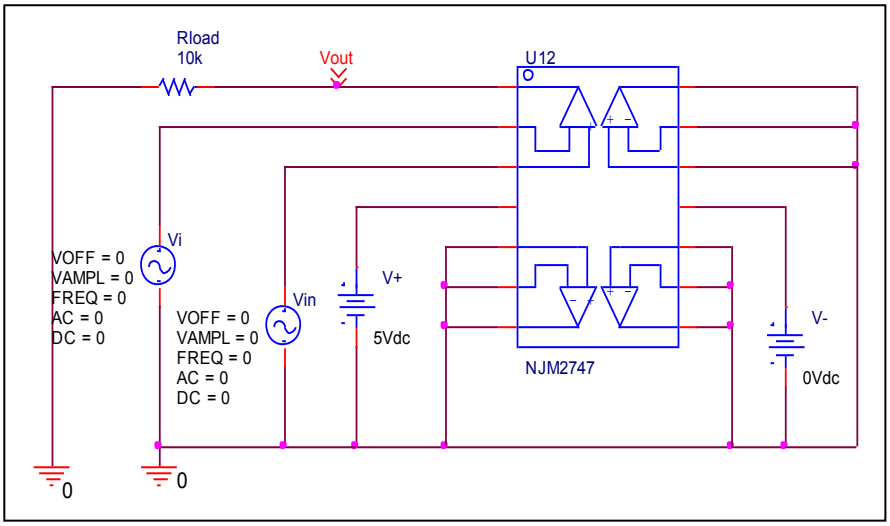
Output Voltage Swing	Data sheet	Simulation	%Error
VOH	4.900	4.900	0.000

Input Offset Voltage

Simulation result



Evaluation circuit

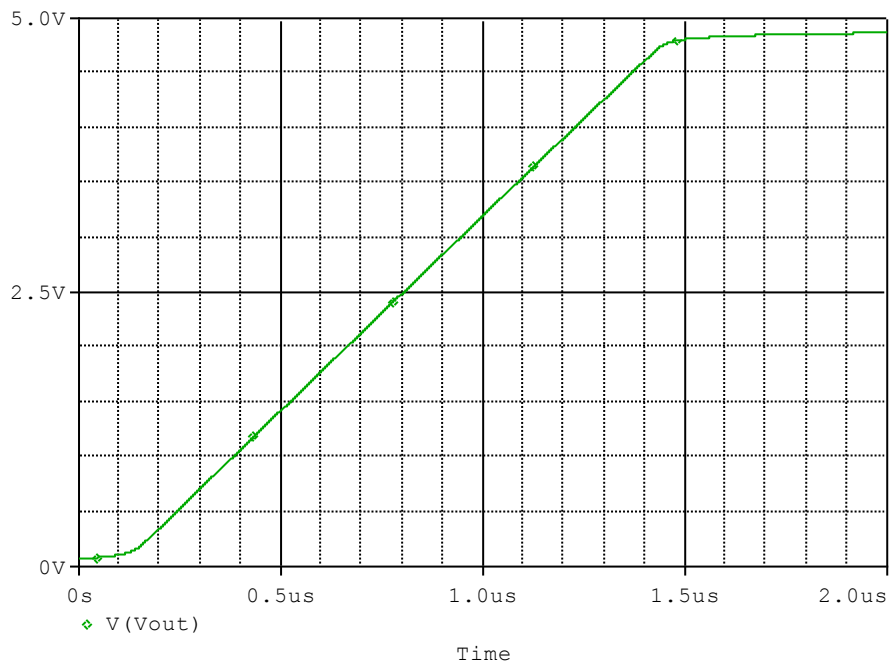


Comparison table

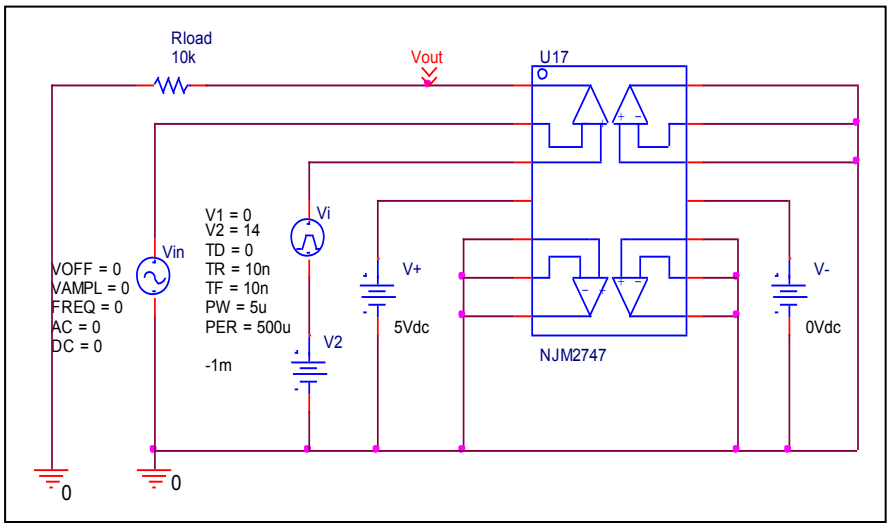
Vos	Measurement		Simulation		Error	
	1.000	mV	1.000	mV	0.000	%

Slew Rate

Simulation result



Evaluation circuit

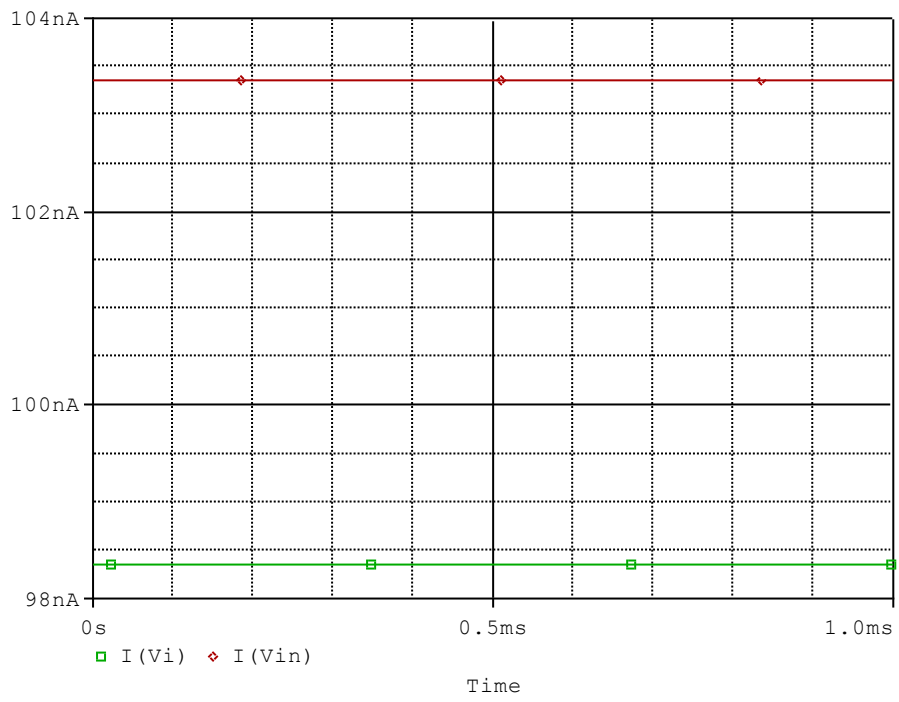


Comparison table

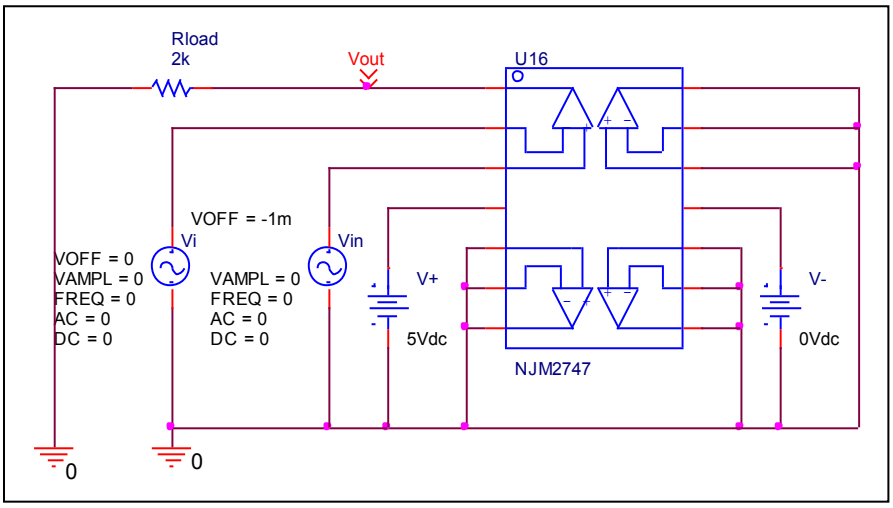
Slew Rate(v/us)	Data sheet	Simulation	%Error
	3.500	3.530	0.857

Input current

Simulation result



Evaluation circuit

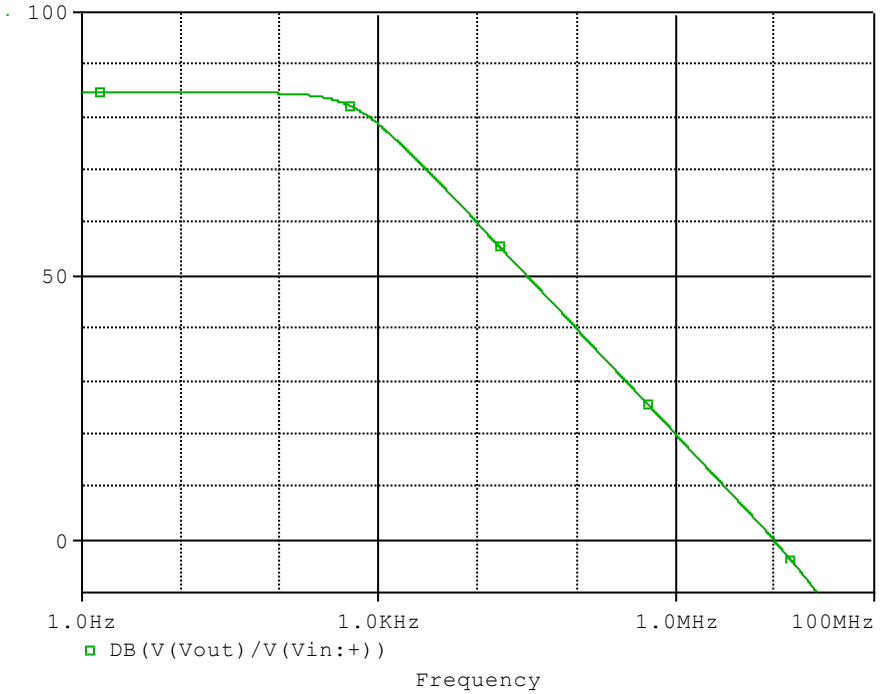


Comparison table

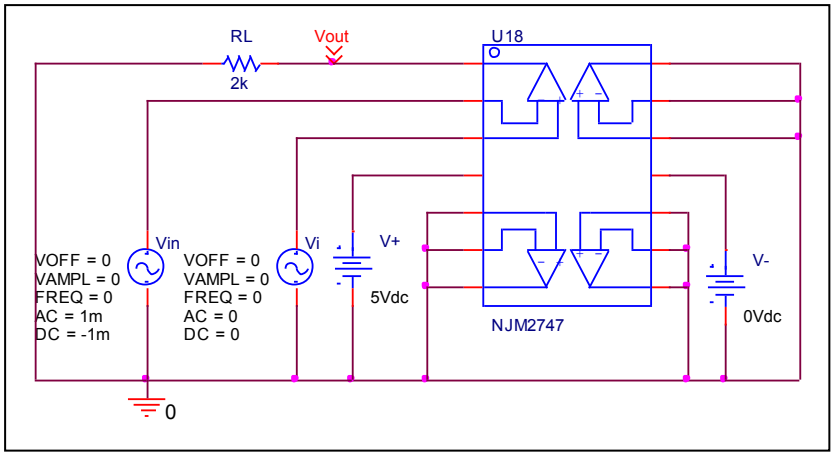
	Data sheet	Simulation	%Error
Ib(nA)	100.000	100.856	0.856
Ibos(nA)	5.000	5.001	0.020

Open Loop Voltage Gain vs. Frequency

Simulation result



Evaluation circuit

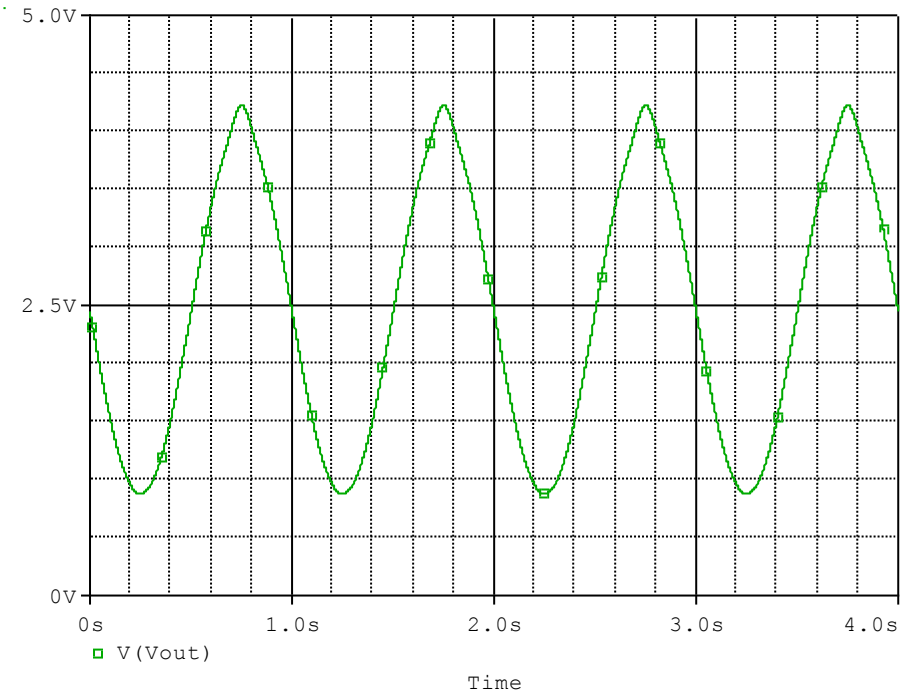


Comparison table

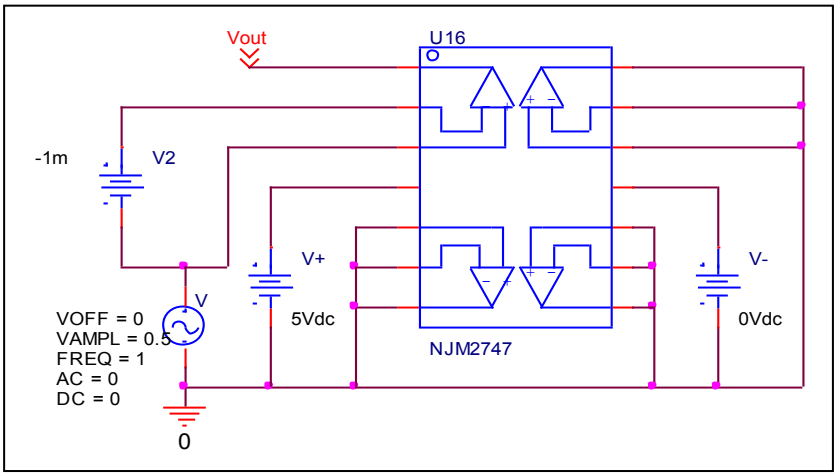
	Data sheet	Simulation	%Error
f-0dB(MHz)	10.000	9.600	-4.000
Av-dc	85.000	84.724	-0.325

Common-Mode Rejection Voltage gain

Simulation result



Evaluation circuit



Common Mode Reject Ratio=17226.617/3.35 = 5142.273 = 74.223dB

Comparison table

CMRR(dB)	Data sheet	Simulation	%Error
	75.000	74.223	-1.036