

Device Modeling Report

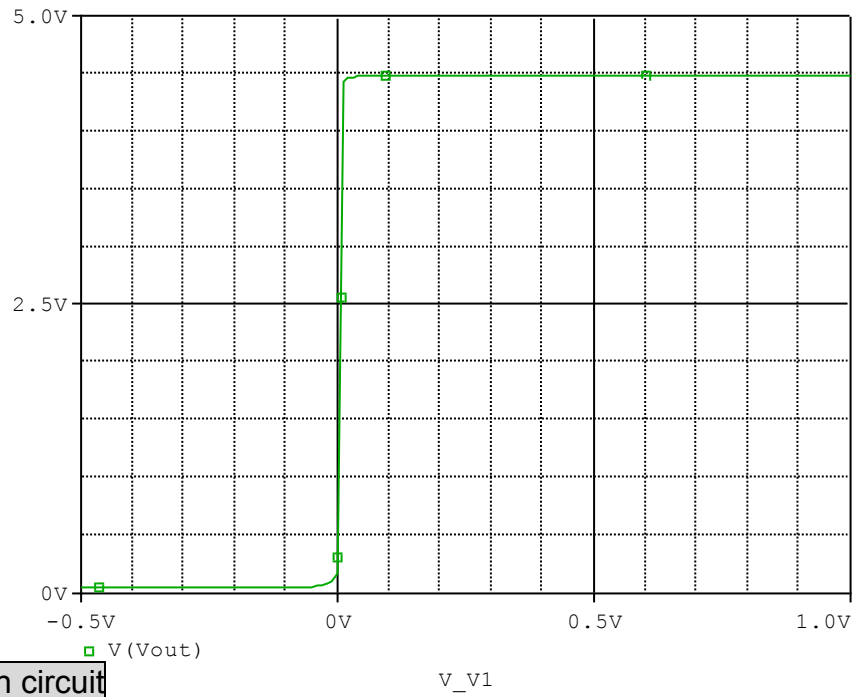
COMPONENTS: OPERATIONAL AMPLIFIER
PART NUMBER: NJM2717
MANUFACTURER: NEW JAPAN RADIO CO.,LTD



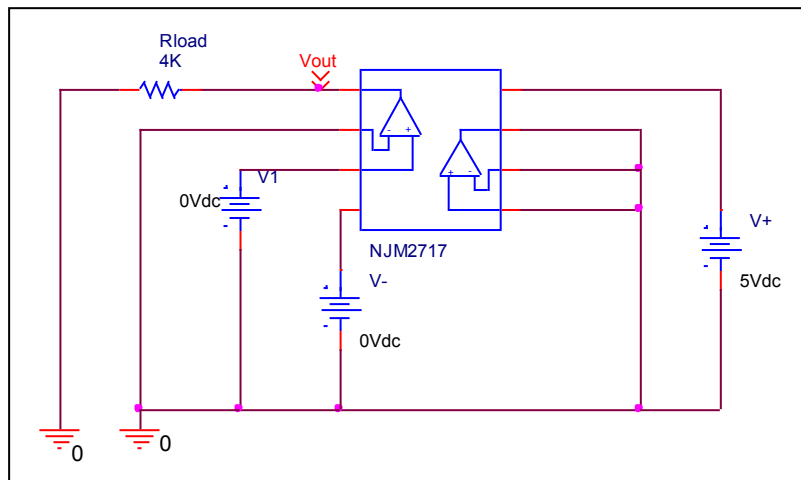
Bee Technologies Inc.

Output Voltage Swing

Simulation result



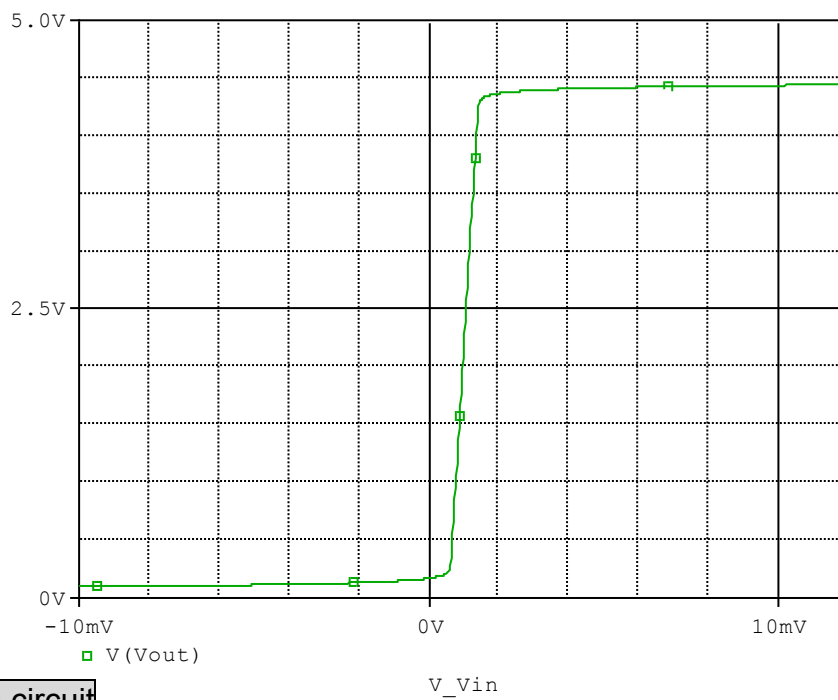
Evaluation circuit



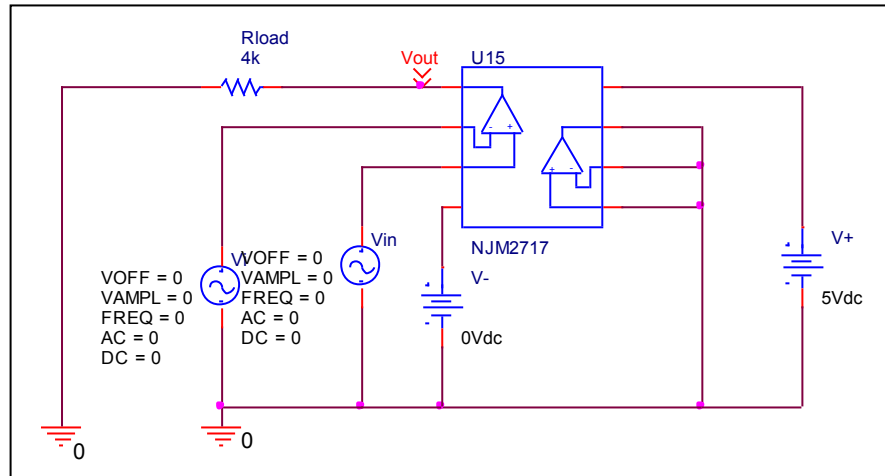
Output Voltage Swing	Data sheet	Simulation	%Error
$V_{OH}(V)$	4.500	4.489	-0.244
$V_{OL}(V)$	0.050	0.050	0.000

Input Offset Voltage

Simulation result



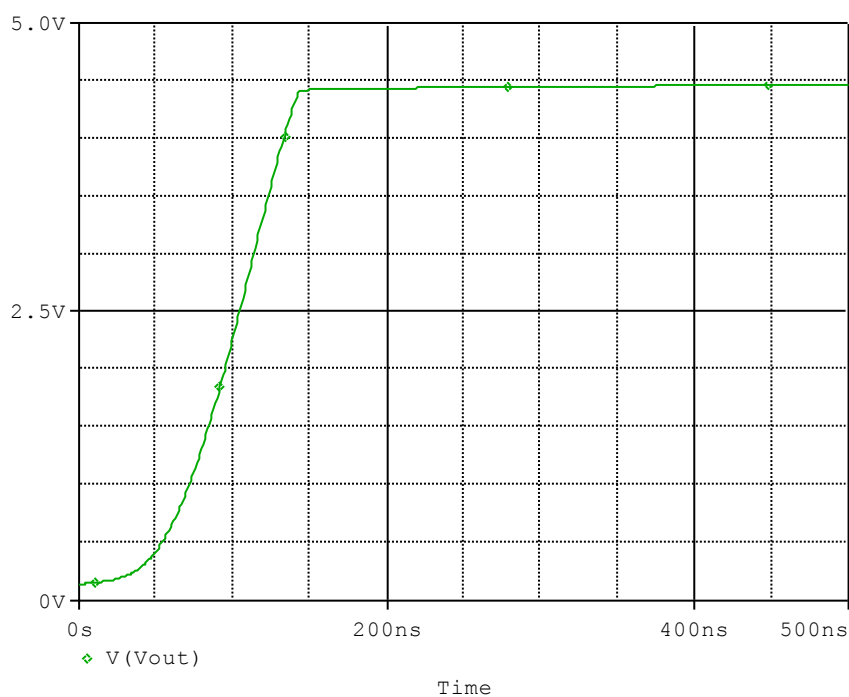
Evaluation circuit



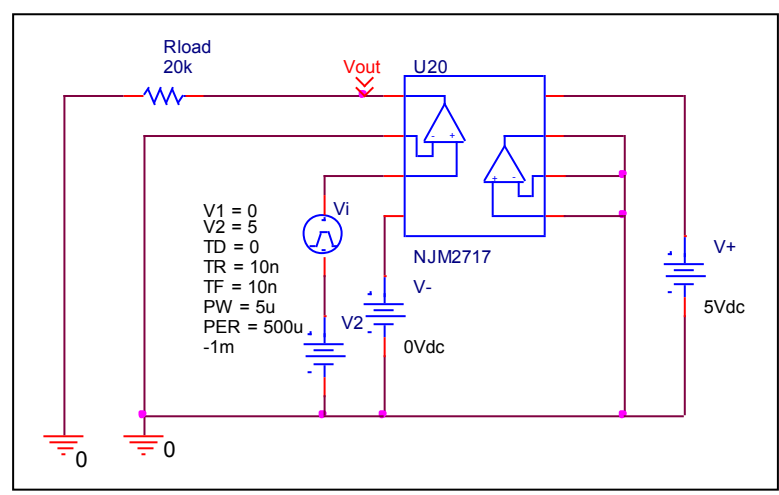
Vos	Measurement		Simulation		Error	
	1.000	mV	1.000	mV	0.000	%

Slew Rate

Simulation result



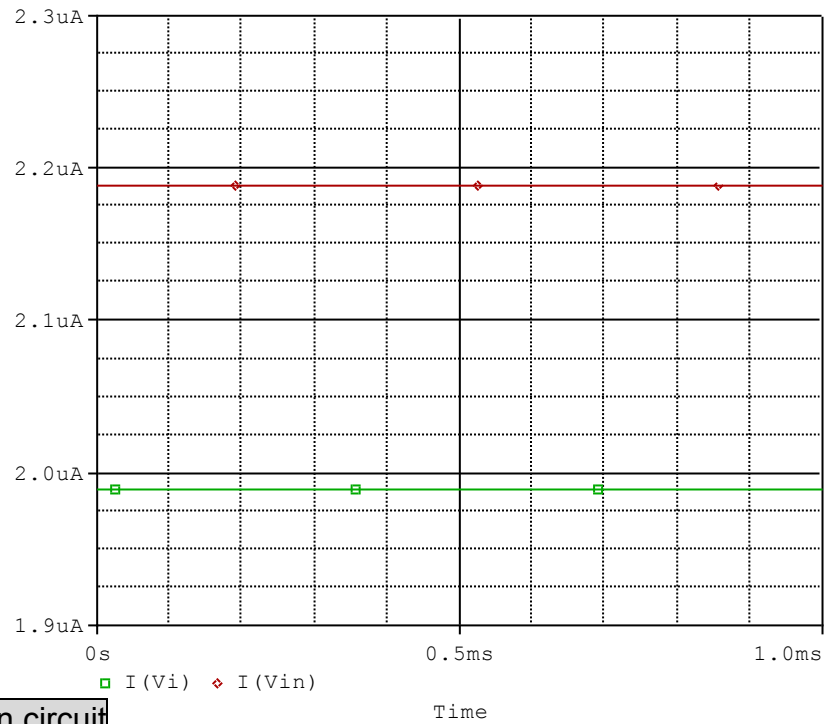
Evaluation circuit



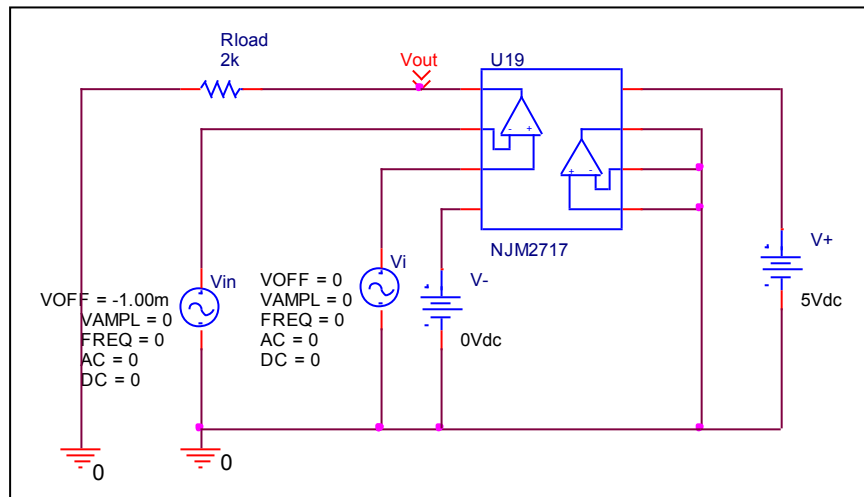
Slew Rate(v/us)	Data sheet	Simulation	%Error
		40.000	40.286

Input current

Simulation result



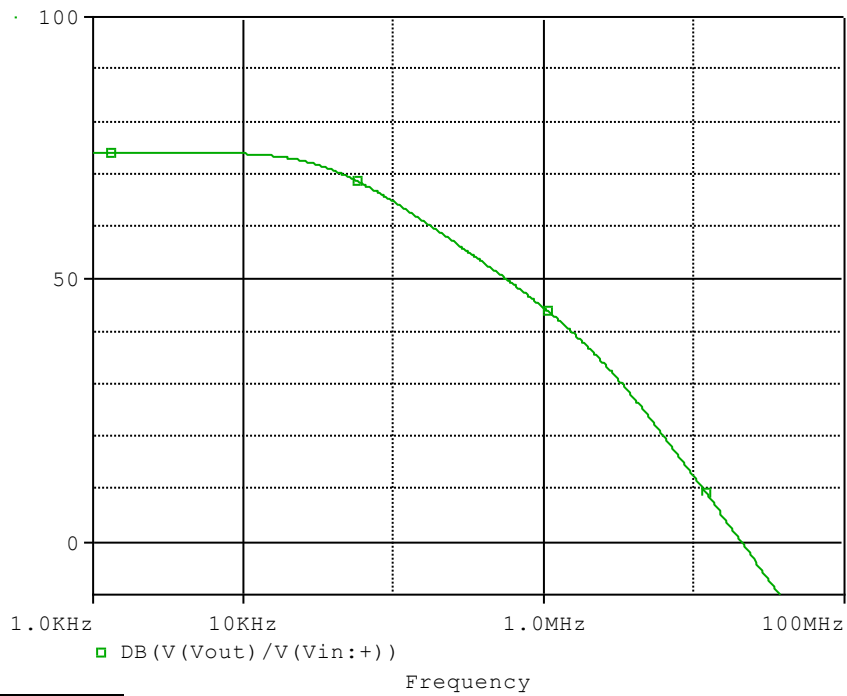
Evaluation circuit



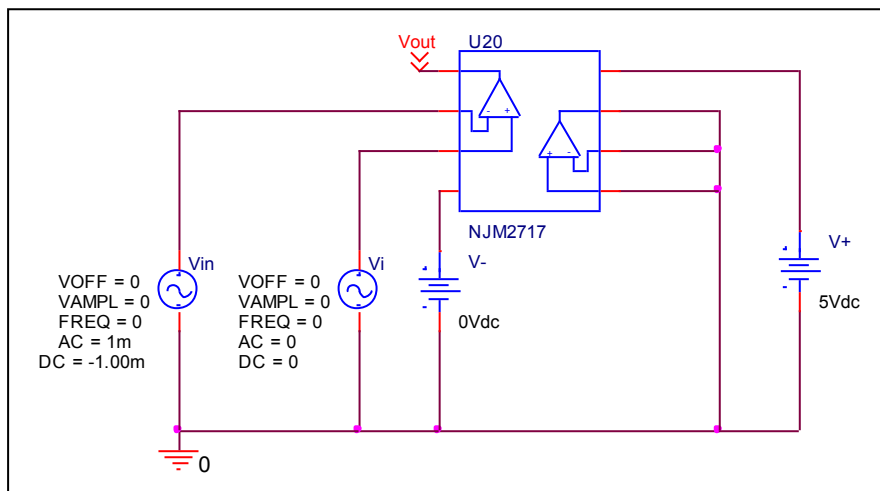
	Data sheet	Simulation	%Error
Ib(uA)	2.000	2.088	4.400
Ibos(uA)	0.200	0.200	0.000

Open Loop Voltage Gain vs. Frequency

Simulation result



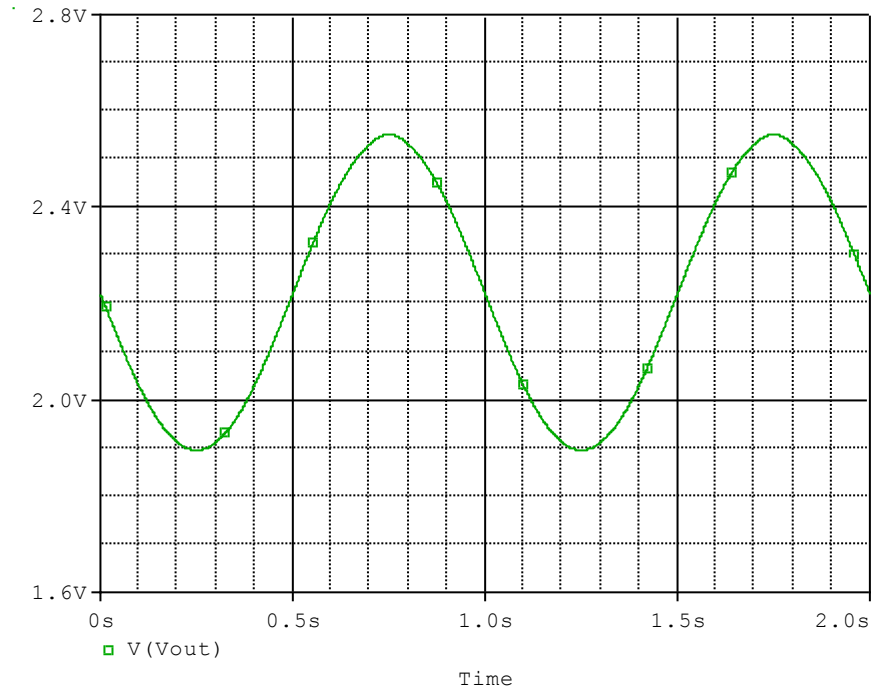
Evaluation circuit



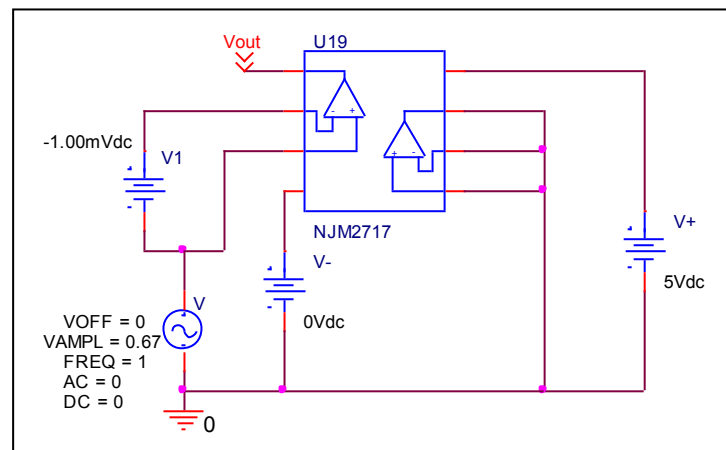
	Data sheet	Simulation	%Error
f-0dB(MHz)	20.000	20.877	4.385
Av-dc(dB)	75.000	74.118	-1.176

Common-Mode Rejection Voltage gain

Simulation result



Evaluation circuit



Common Mode Reject Ratio= $5080.424/0.655=7756.372$

CMRR	Data sheet	Simulation	%Error
		80.000	77.793