

Device Modeling Report

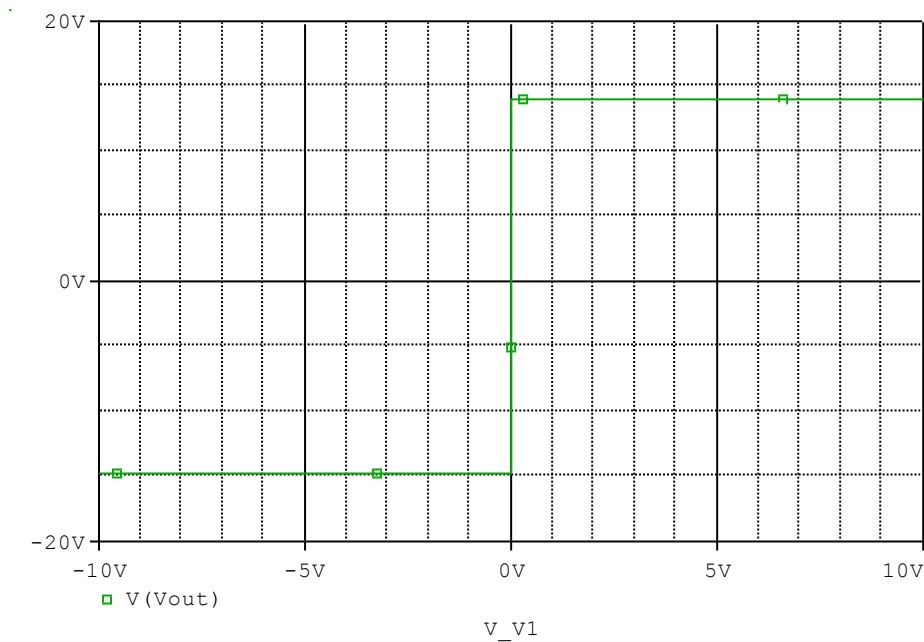
COMPONENTS: OPERATIONAL AMPLIFIER
PART NUMBER: NJM2742
MANUFACTURER: NEW JAPAN RADIO CO.,LTD



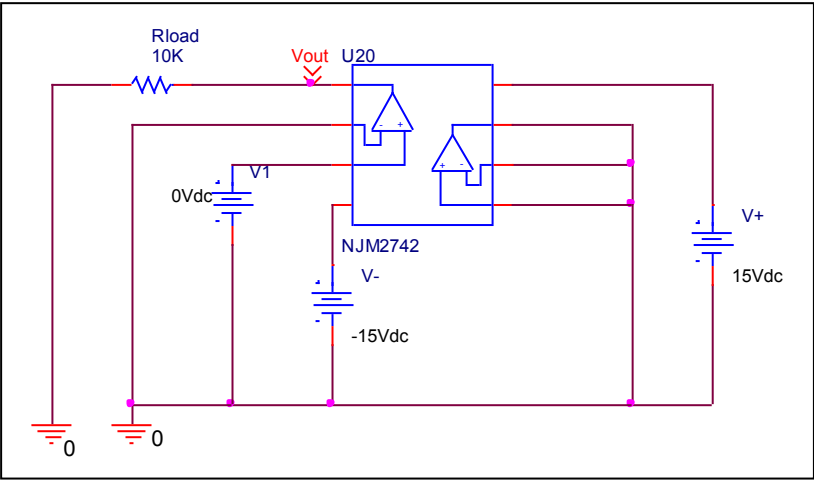
Bee Technologies Inc.

Output Voltage Swing

Simulation result



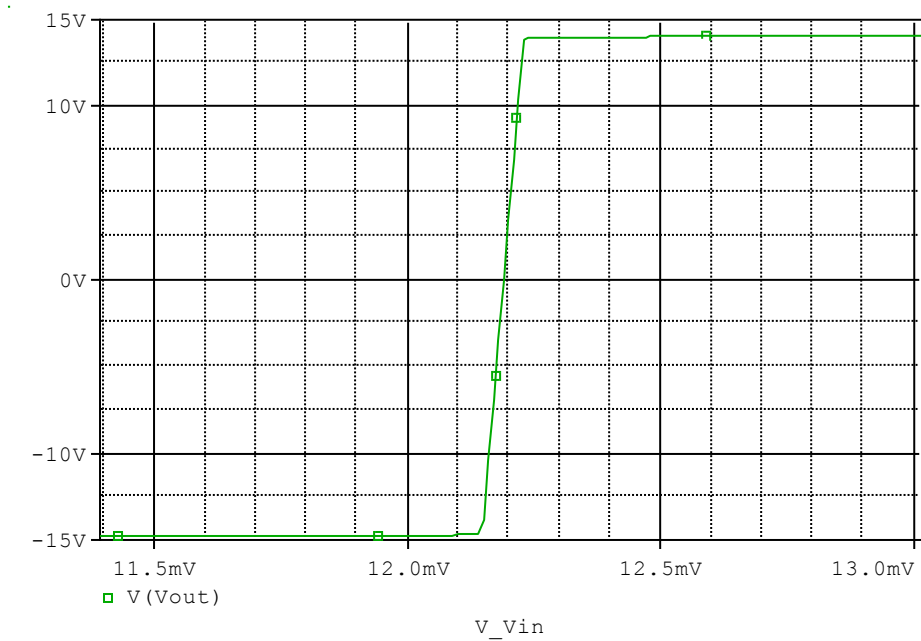
Evaluation circuit



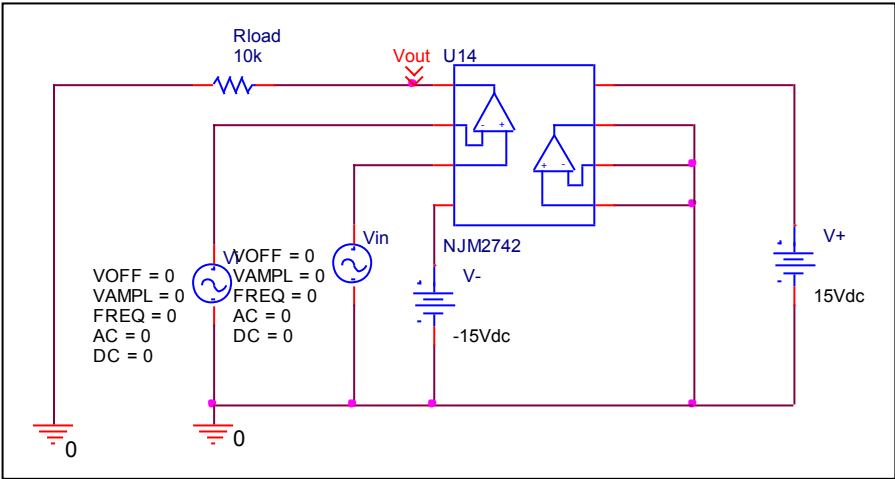
Output Voltage Swing	Data sheet	Simulation	%Error
+Vout(V)	14.000	14.010	0.071
-Vout(V)	14.800	14.810	0.067

Input Offset Voltage

Simulation result



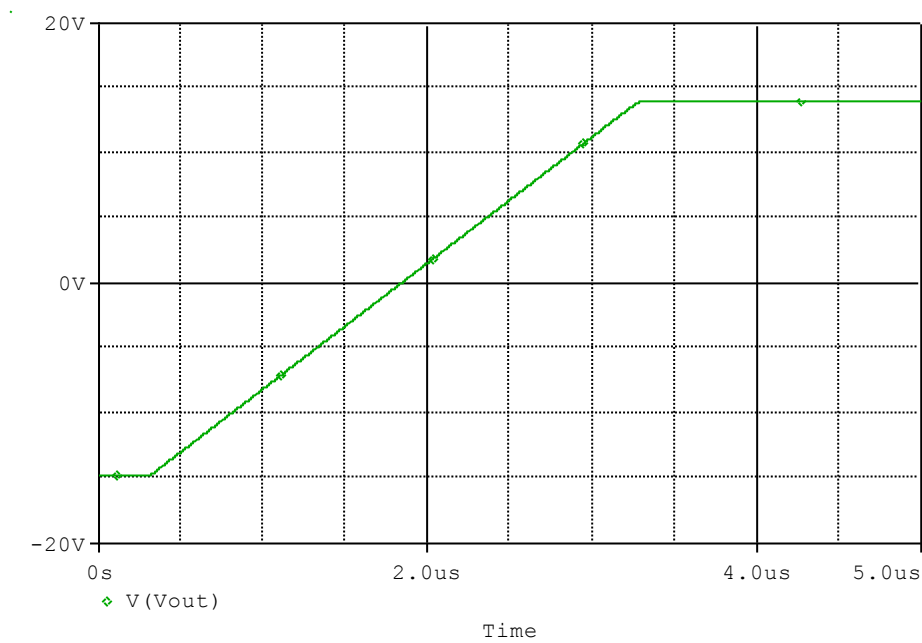
Evaluation circuit



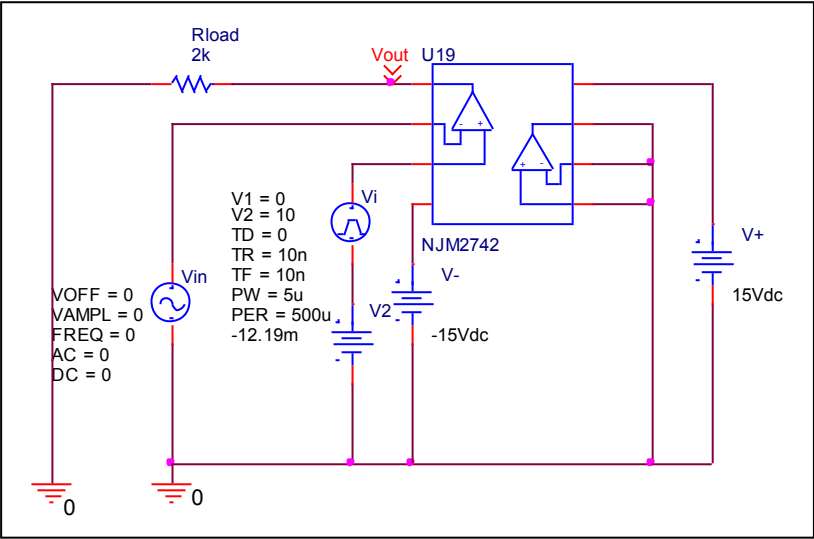
Vos	Measurement		Simulation		Error	
	12.000	mV	12.190	mV	1.580	%

Slew Rate

Simulation result



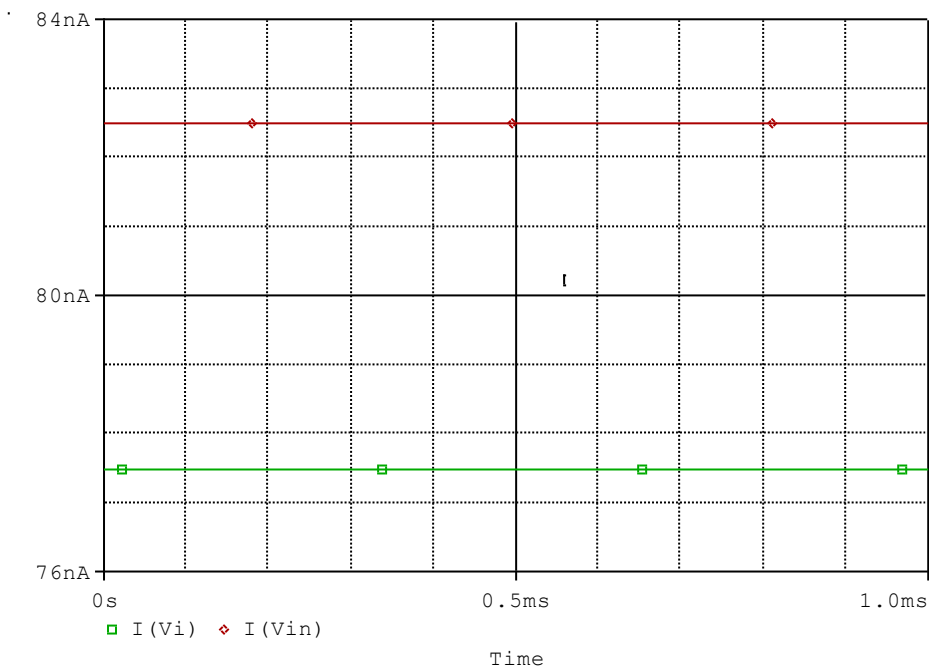
Evaluation circuit



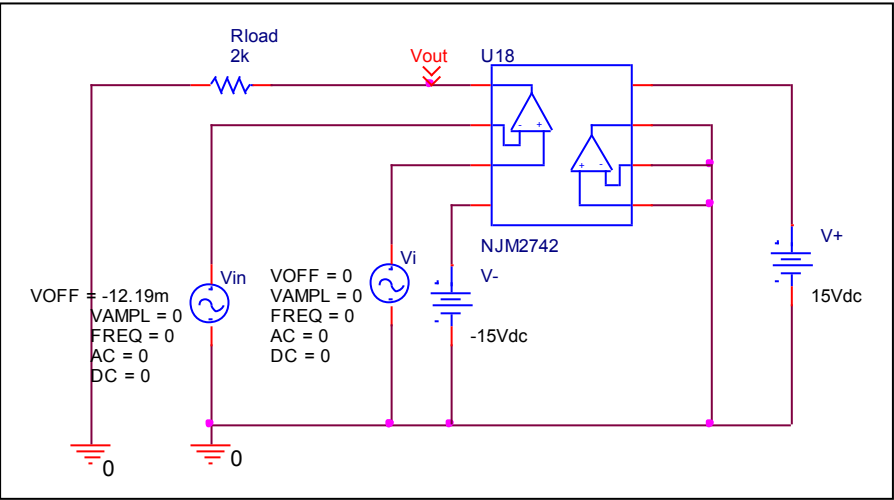
Slew Rate(v/us)	Data sheet	Simulation	%Error
	10.000	9.680	3.200

Input current

Simulation result



Evaluation circuit



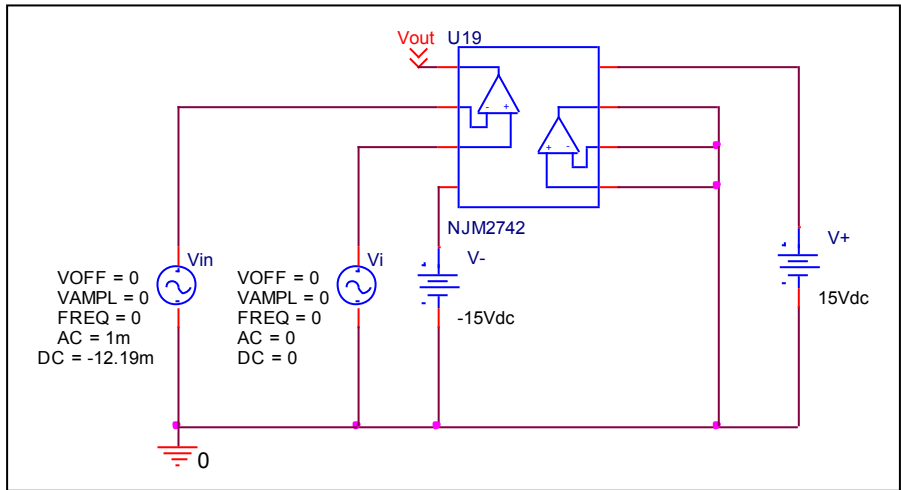
	Data sheet	Simulation	%Error
Ib(nA)	80.000	79.900	0.125
Ibos(nA)	5.000	5.010	0.200

Open Loop Voltage Gain vs. Frequency

Simulation result



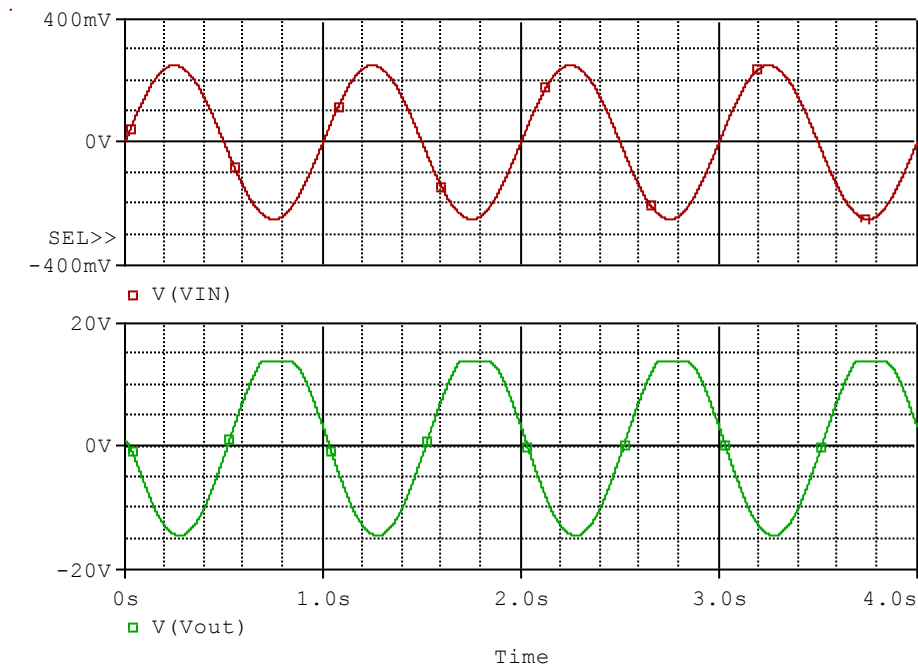
Evaluation circuit



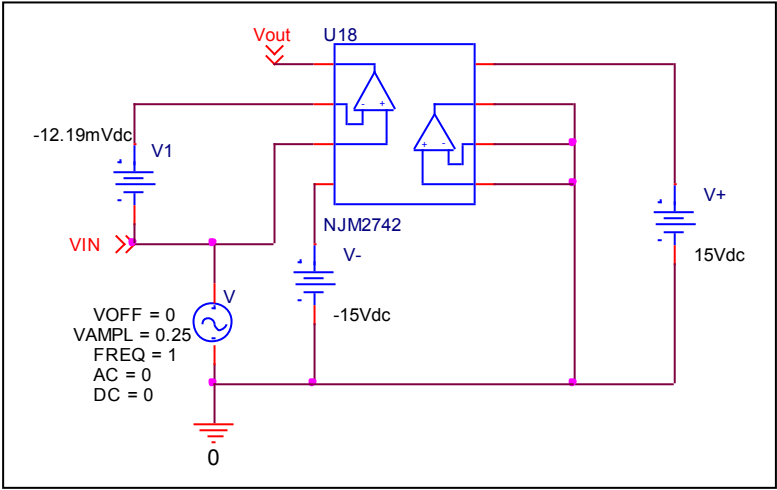
	Data sheet	Simulation	%Error
f-0dB(MHz)	2.000	1.950	2.500
Av-dc(dB)	110.000	110.710	0.645

Common-Mode Rejection Voltage gain

Simulation result



Evaluation circuit



Common Mode Reject Ratio= $343162/56.676=6054.802$

CMRR	Data sheet	Simulation	%Error
	75.000	75.641	0.854