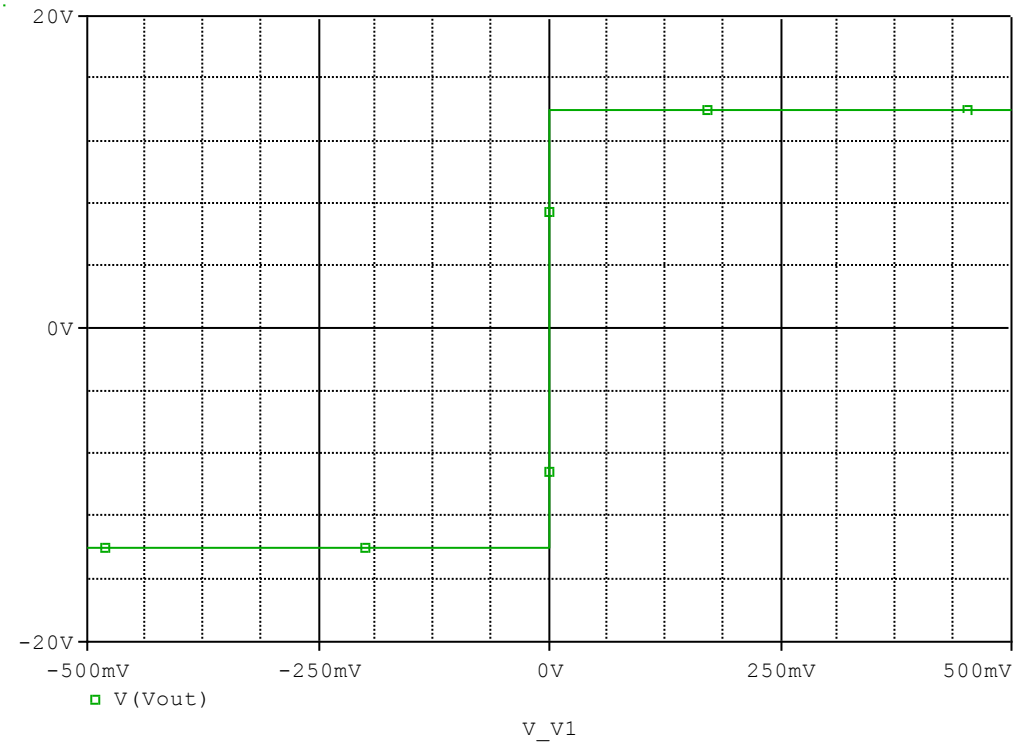
Device Modeling Report

COMPONENTS: OPERATIONAL AMPLIFIER
PART NUMBER: HA17558
MANUFACTURER: RENESAS

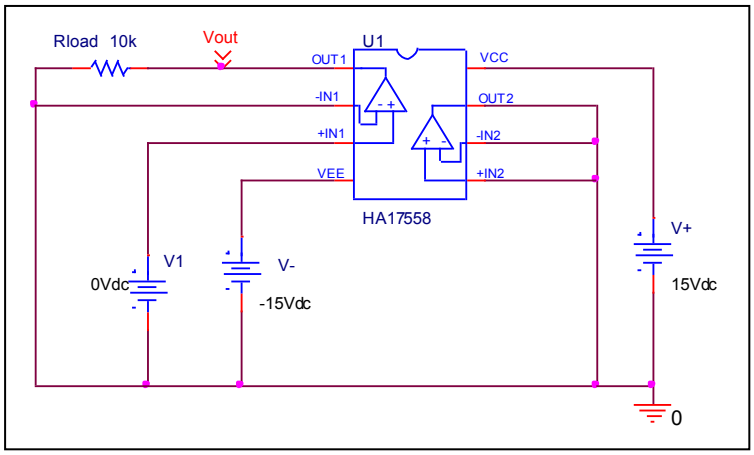
Bee Technologies Inc.

Output Voltage Swing

Simulation result



Evaluation circuit

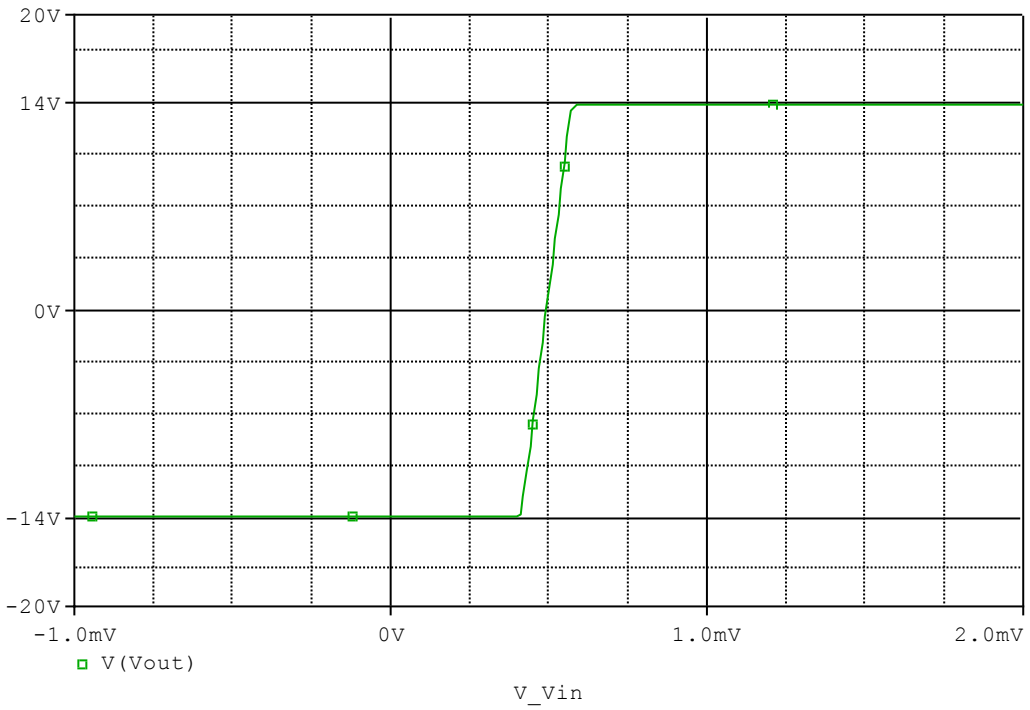


Comparison table

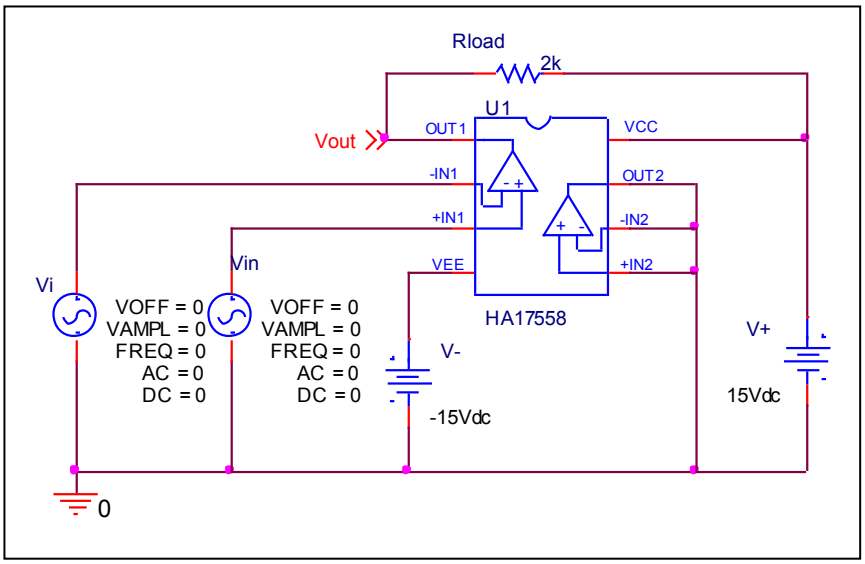
Output Voltage Swing	Measurement	Simulation	%Error
+Vout(V)	14.000	13.999	-0.007
-Vout(V)	-14.000	-13.999	-0.007

Input Offset Voltage

Simulation result



Evaluation circuit

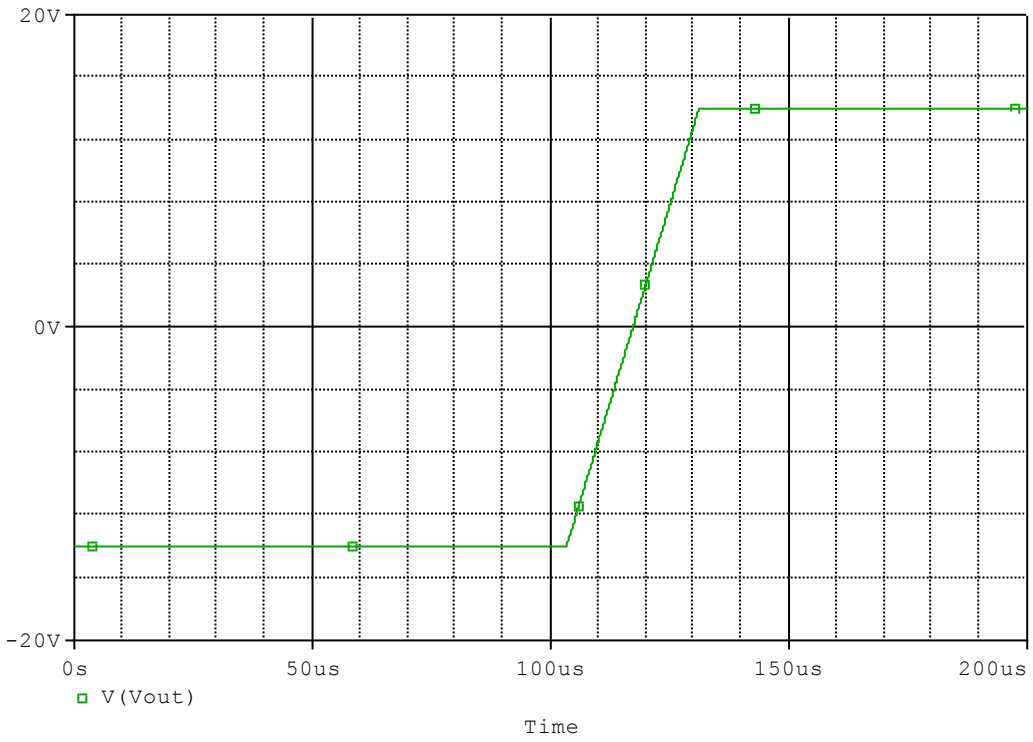


Comparison table

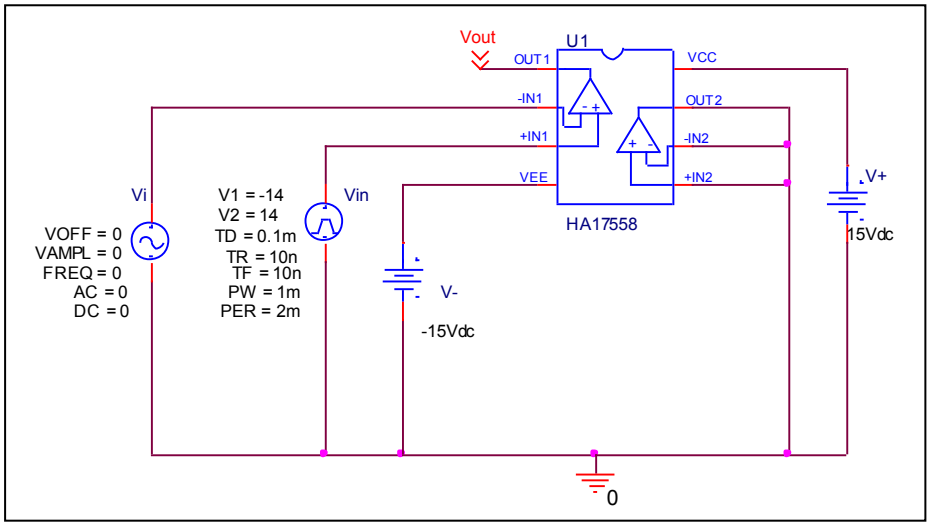
Vos(mV)	Measurement	Simulation	%Error
	0.500	0.492	-1.600

Slew Rate

Simulation result



Evaluation circuit

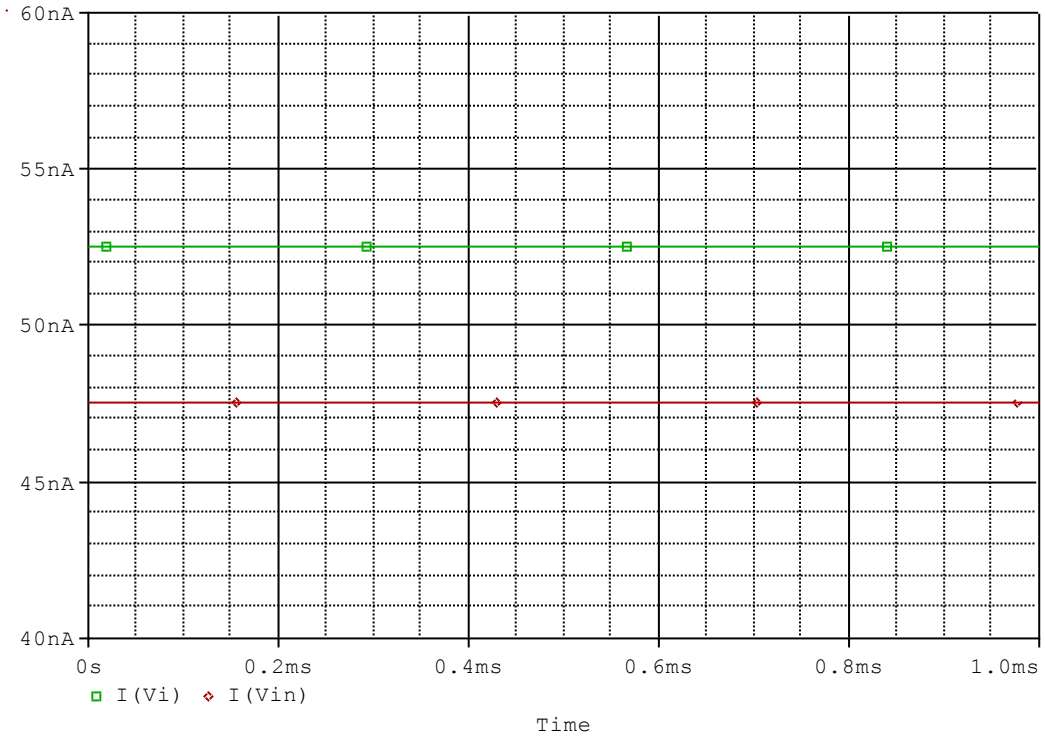


Comparison table

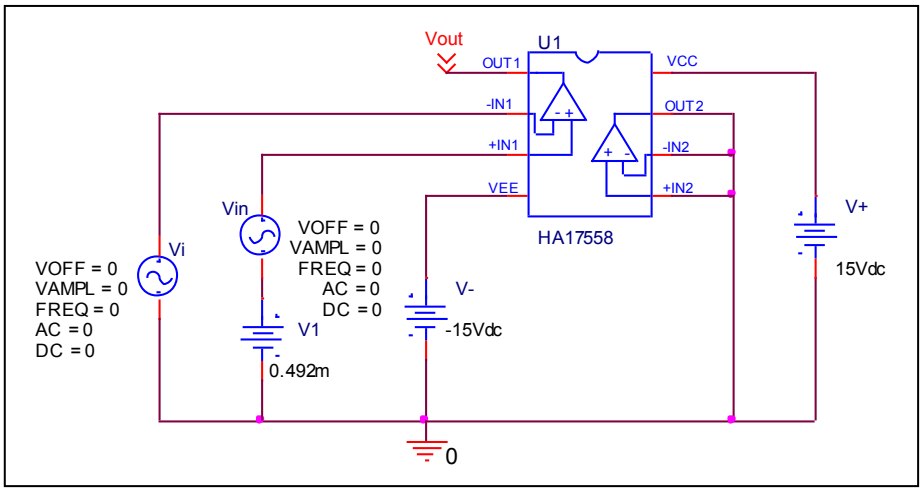
Slew Rate(v/us)	Measurement	Simulation	%Error
	1.000	1.018	1.800

Input current Ib, Ibos

Simulation result



Evaluation circuit

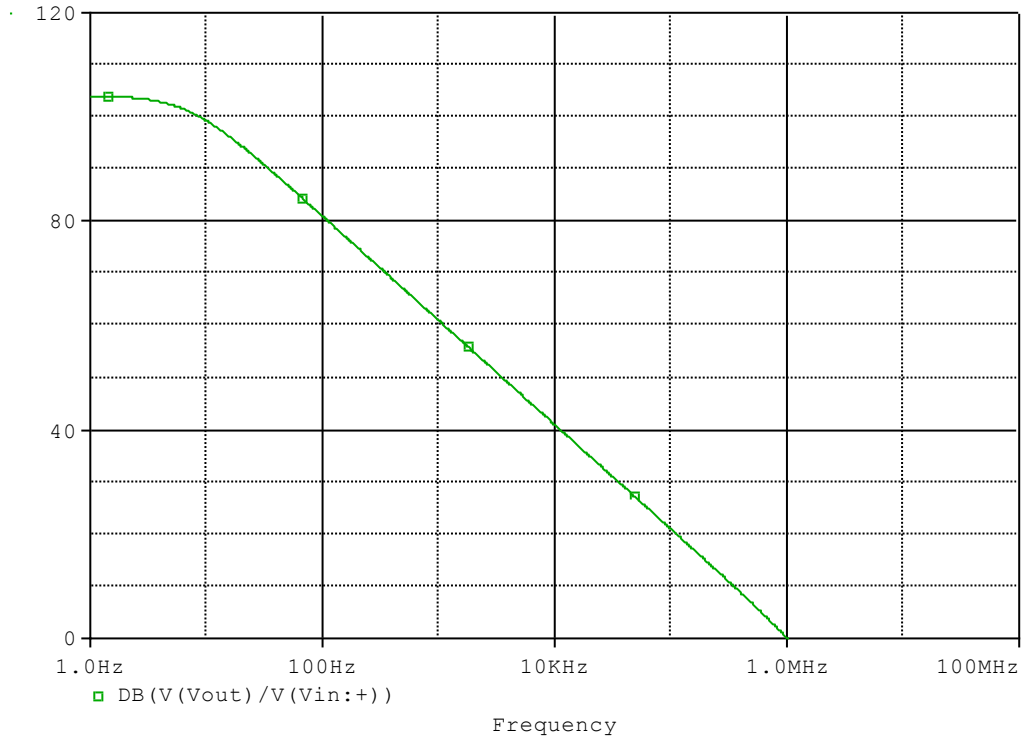


Comparison table

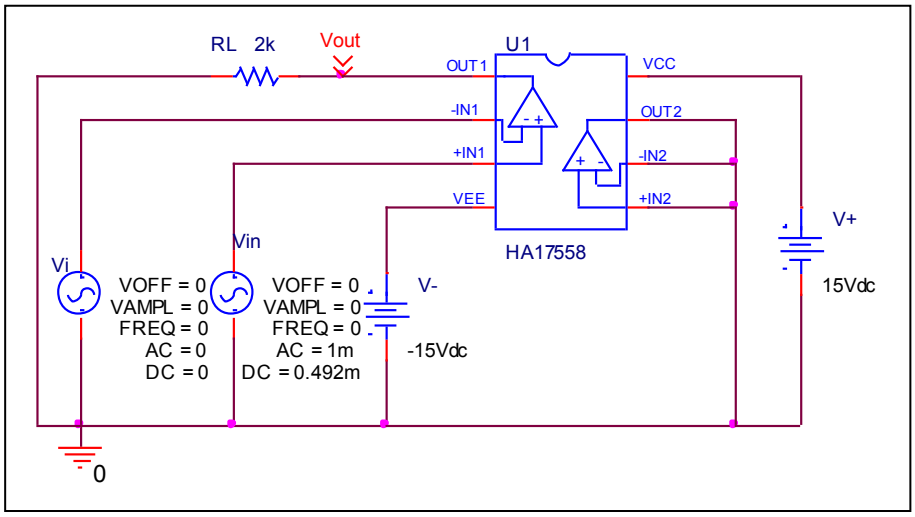
	Measurement	Simulation	%Error
Ib(nA)	50.000	50.020	0.040
Ibos(nA)	5.000	5.016	0.318

Open Loop Voltage Gain vs. Frequency , Av-dc, f-0dB

Simulation result



Evaluation circuit

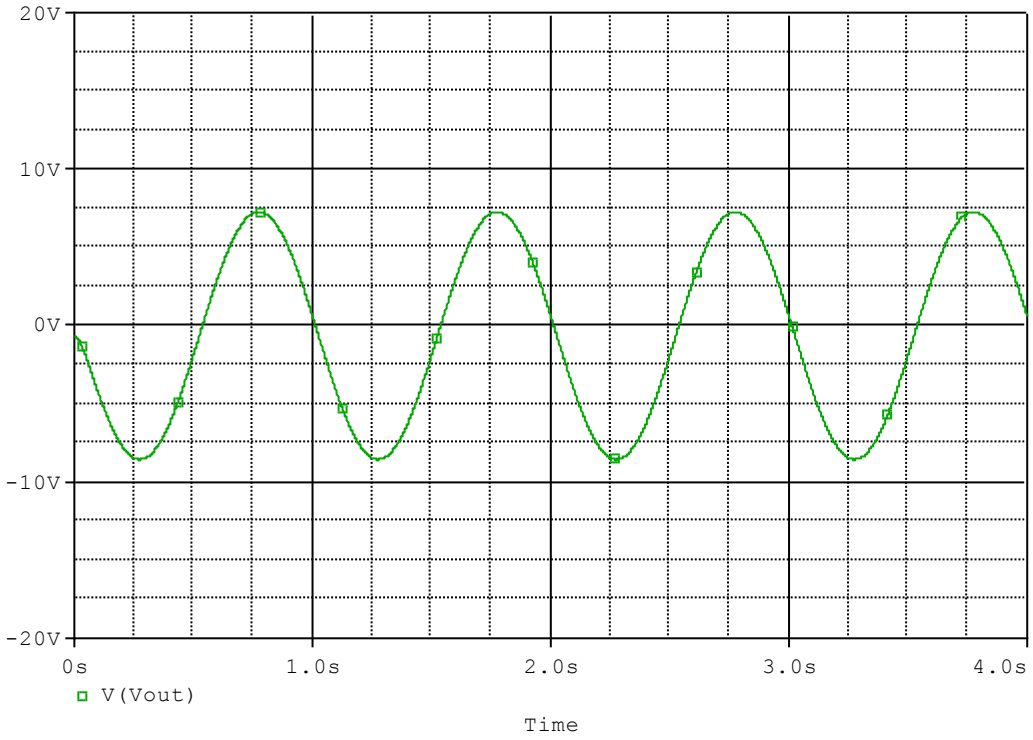


Comparison table

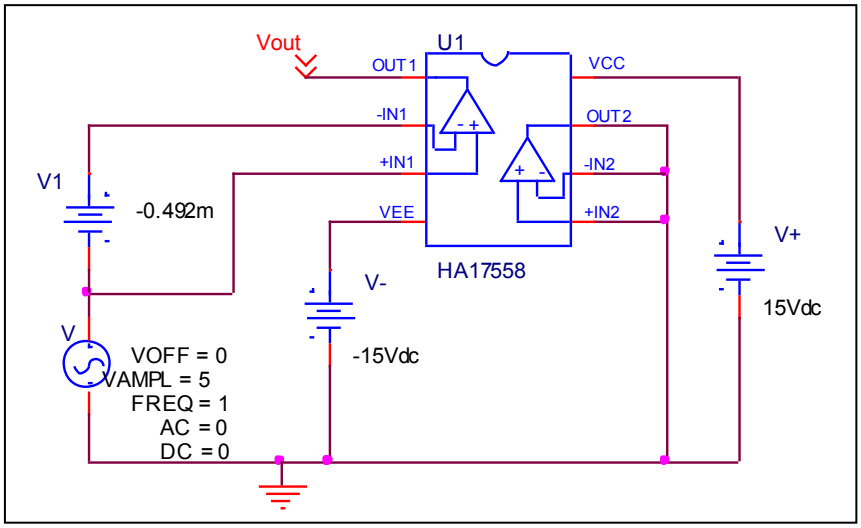
	Measurement	Simulation	%Error
f-0dB(MHz)	1.000	1.000	0.000
Av-dc(dB)	104.000	104.069	0.066

Common-Mode Rejection Voltage gain

Simulation result



Evaluation circuit



Common Mode Reject Ratio=20*LOG(159753.3596/(15.835/10))
= 100.0766 dB

CMRR (dB)	Measurement	Simulation	%Error
	100.000	100.077	0.077