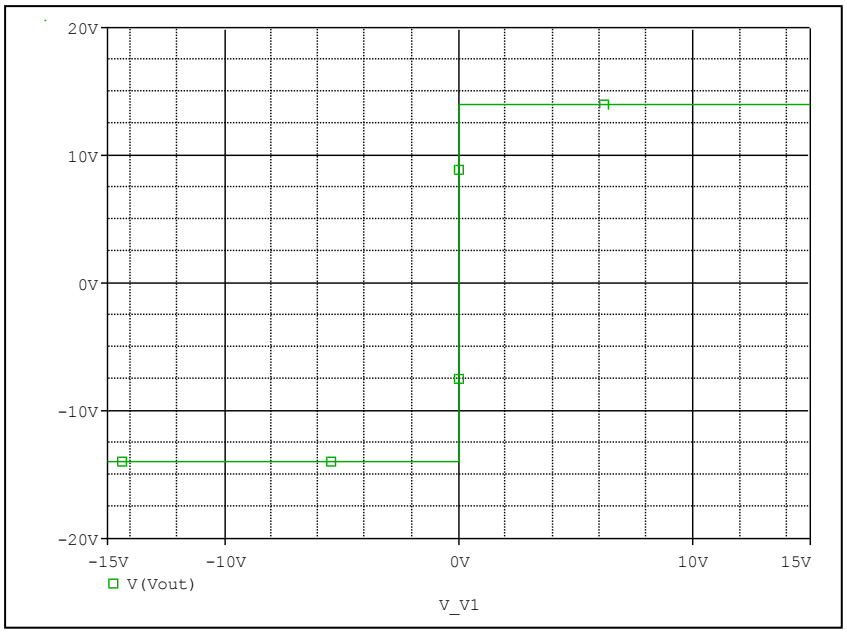
Device Modeling Report

COMPONENTS:MOSFET: OPERATIONAL AMPLIFIER
PART NUMBER: TA75558P
MANUFACTURER: TOSHIBA

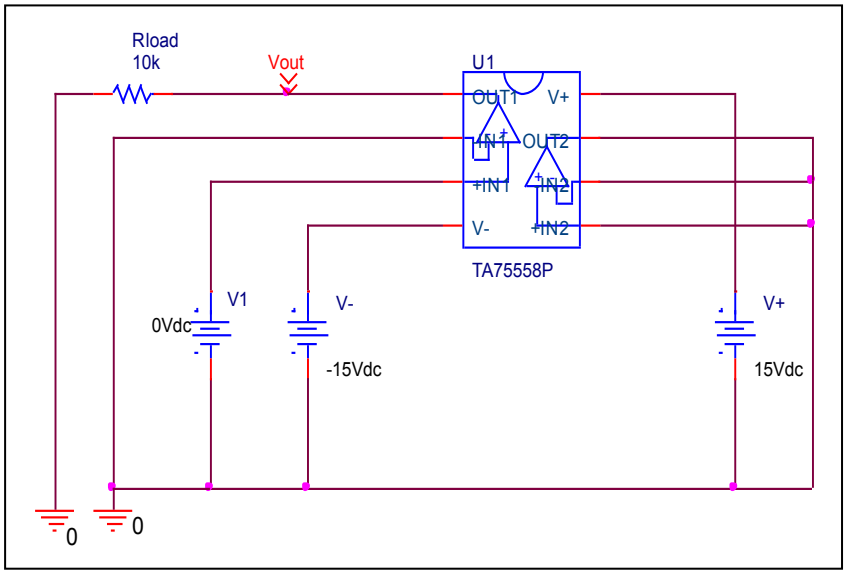
Bee Technologies Inc.

Output Voltage Swing

Simulation result



Evaluation circuit

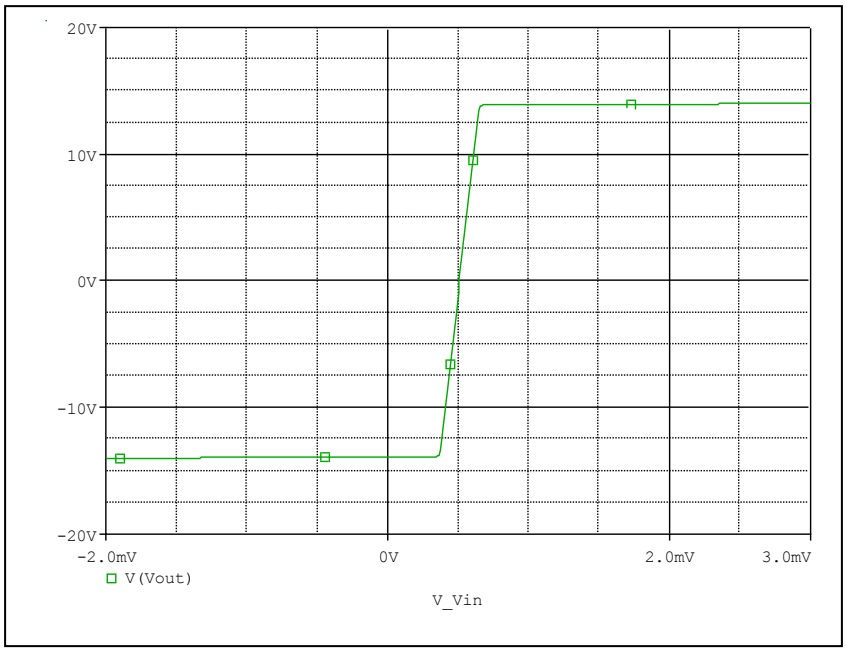


Comparison table

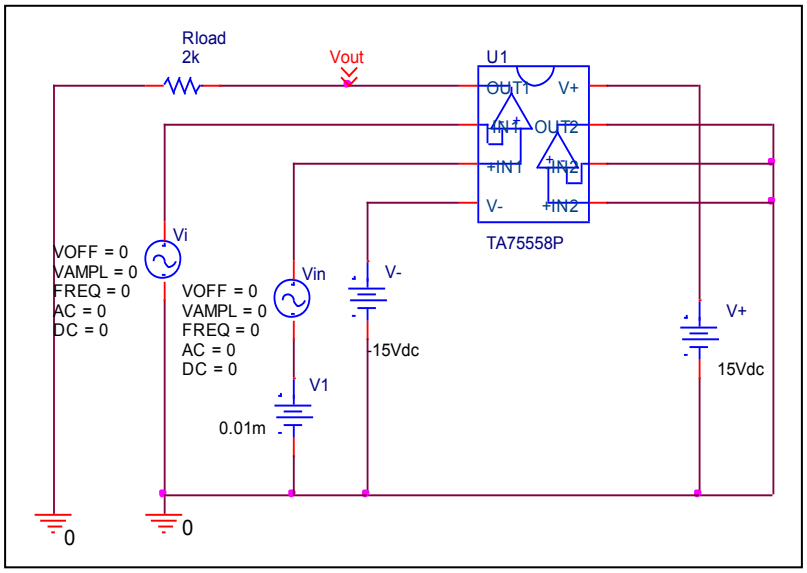
	Measurement	Simulation	%Error
+Vout(V)	14.000	13.999	-0.007
-Vout(V)	14.000	13.999	-0.007

Input Offset Voltage

Simulation result



Evaluation circuit

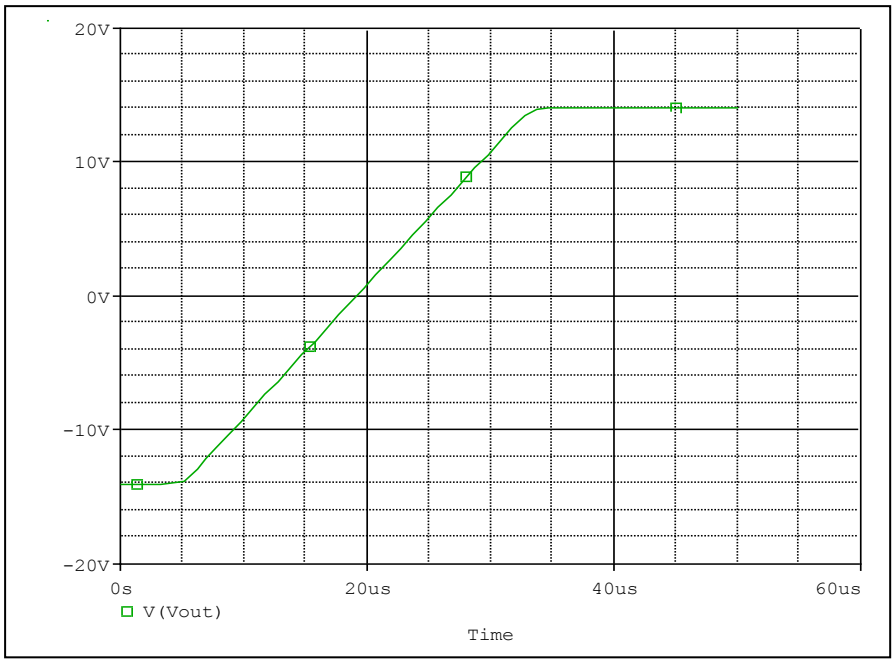


Comparison table

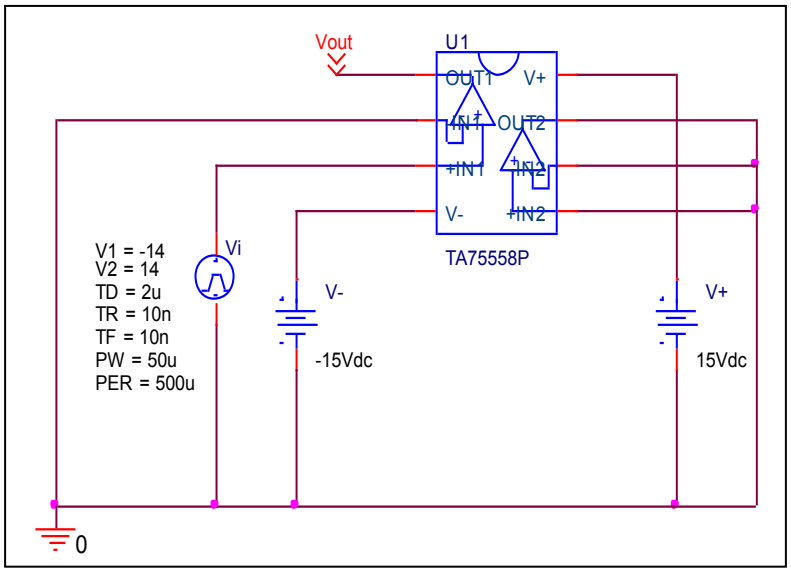
	Measurement	Simulation	%Error
Vos (mV)	0.500	0.509	1.800

Slew Rate

Simulation result



Evaluation circuit

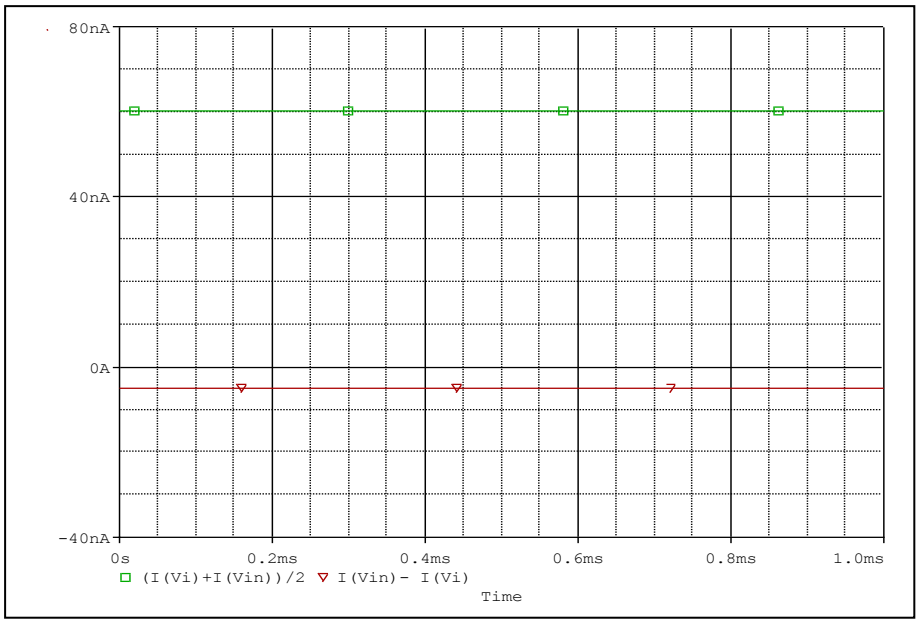


Comparison table

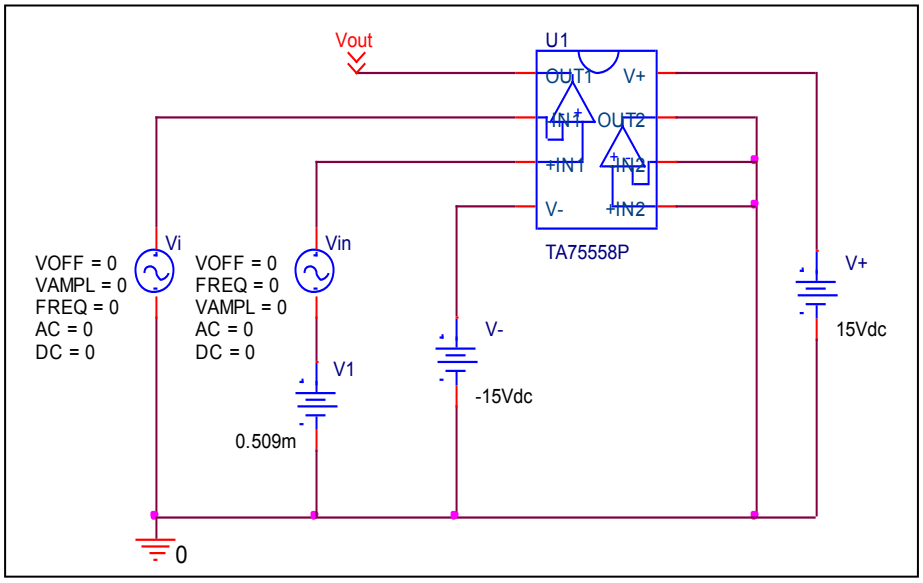
	Measurement	Simulation	%Error
Slew Rate(v/us)	1.000	0.996	-0.400

Input current

Simulation result



Evaluation circuit

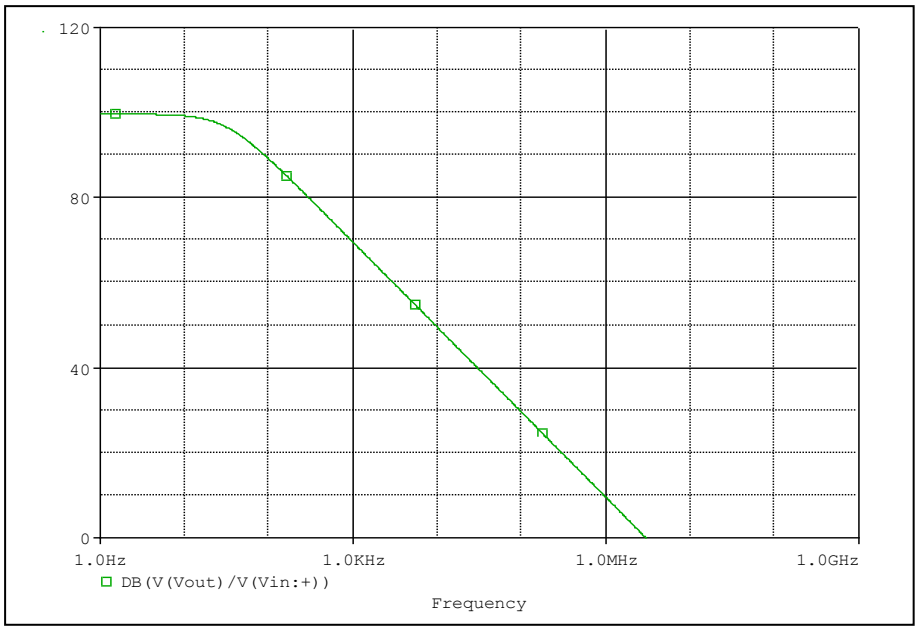


Comparison table

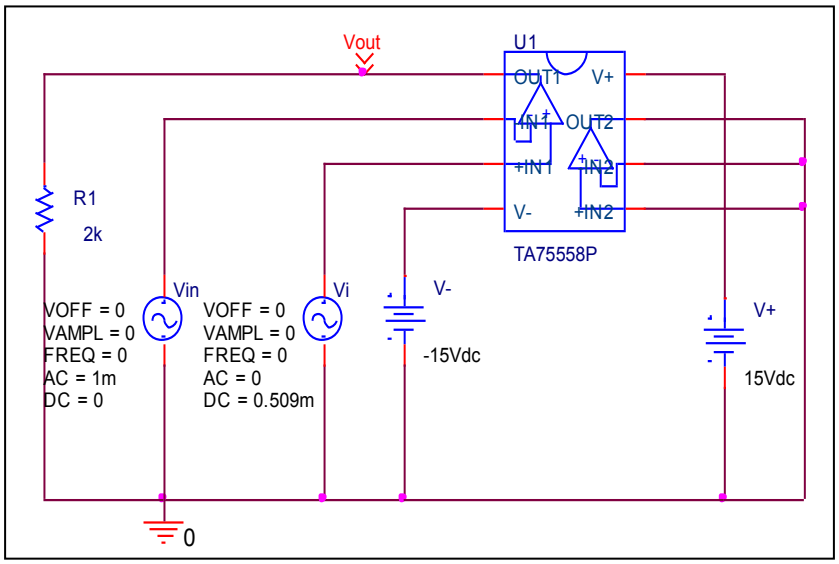
	Measurement	Simulation	%Error
Ib (nA)	60.000	60.300	0.500
Ibos (nA)	5.000	5.004	0.080

Open Loop Voltage Gain vs. Frequency

Simulation result



Evaluation circuit

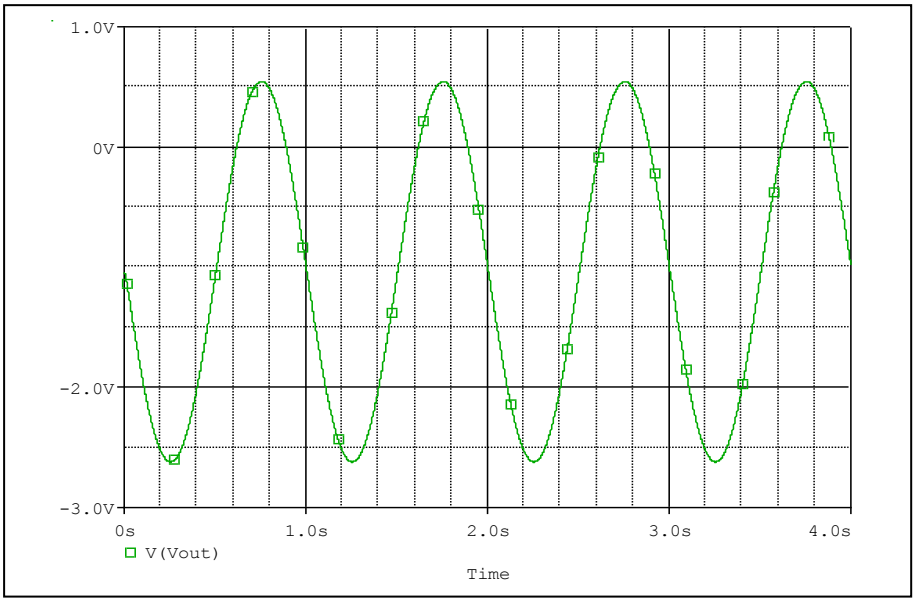


Comparison table

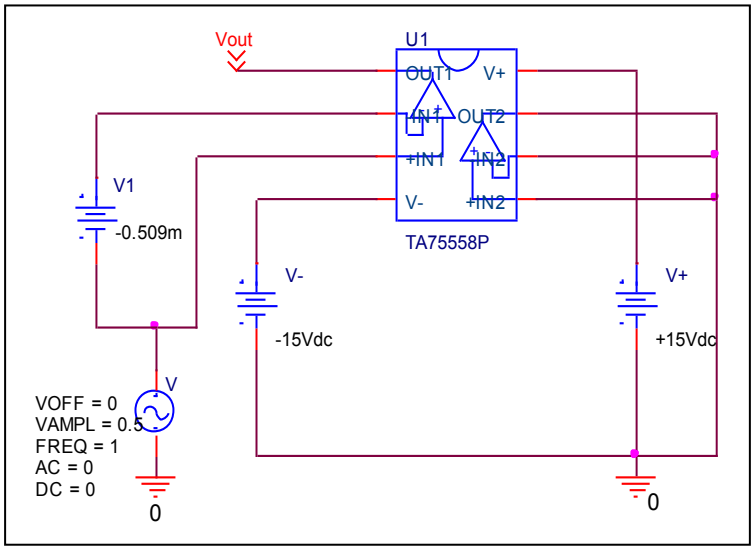
	Measurement	Simulation	%Error
f-0dB(MHz)	3.000	2.967	-1.100
Av-dc(dB)	100.000	99.648	-0.352

Common-Mode Rejection Voltage gain

Simulation result



Evaluation circuit



CMRR=20*LOG(96028.46792/3.1646) = 89.642 dB

Comparison table

	Measurement	Simulation	%Error
CMRR(dB)	90.000	89.642	-0.398