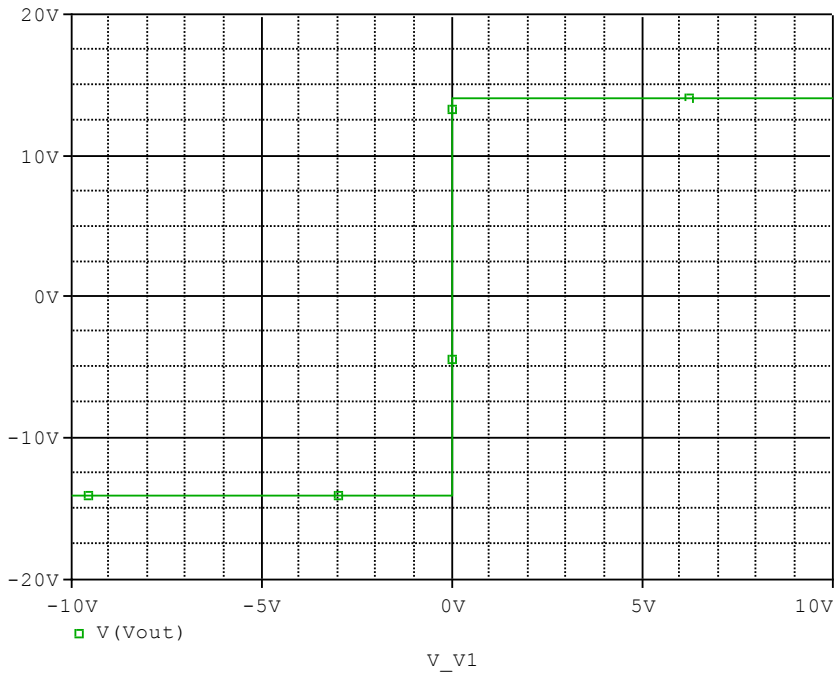
Device Modeling Report

COMPONENTS: MOSFET: OPERATIONAL AMPLIFIER
PART NUMBER: TA75W558FU
MANUFACTURER: TOSHIBA

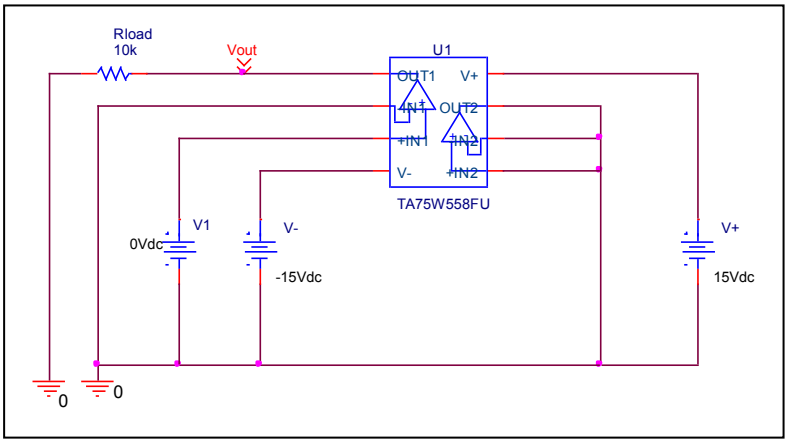
Bee Technologies Inc.

Output Voltage Swing

Simulation result



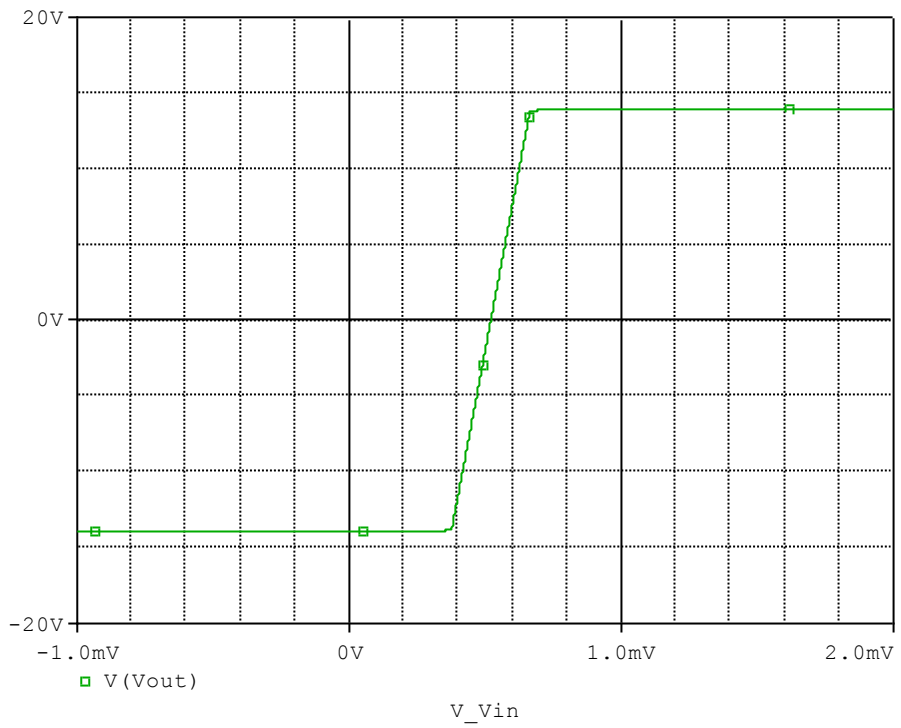
Evaluation circuit



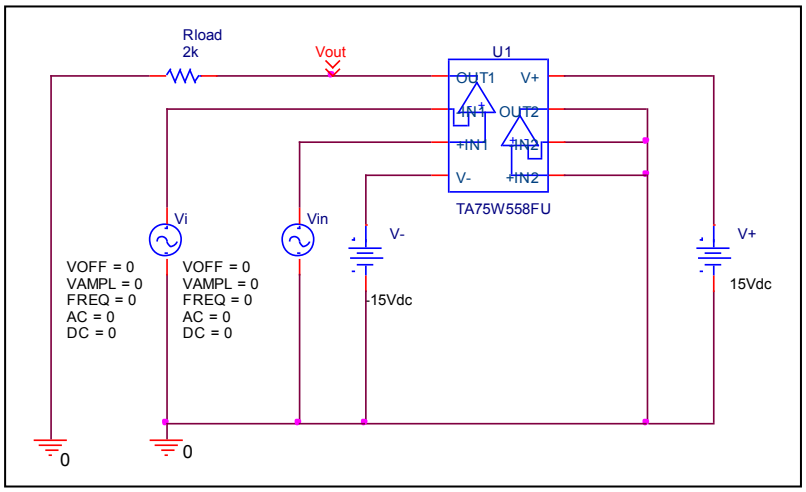
Output Voltage Swing	Measurement	Simulation	%Error
+Vout(V)	+14.000	13.999	-0.010
-Vout(V)	-14.000	-13.999	-0.010

Input Offset Voltage

Simulation result



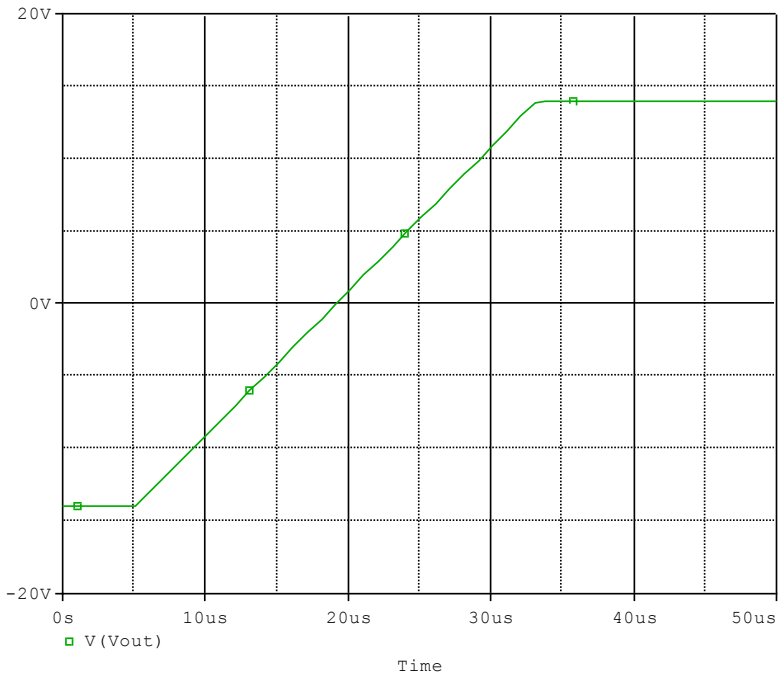
Evaluation circuit



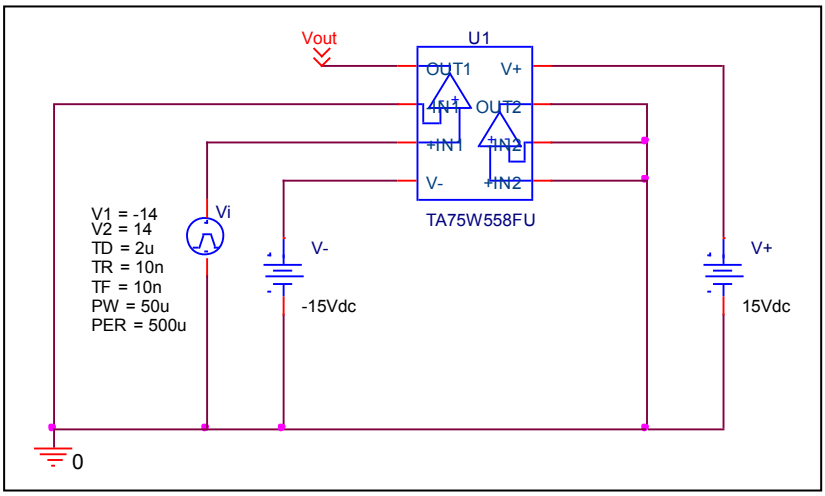
Vos	Measurement		Simulation		Error	
	0.500	mV	0.501	mV	0.200	%

Slew Rate

Simulation result



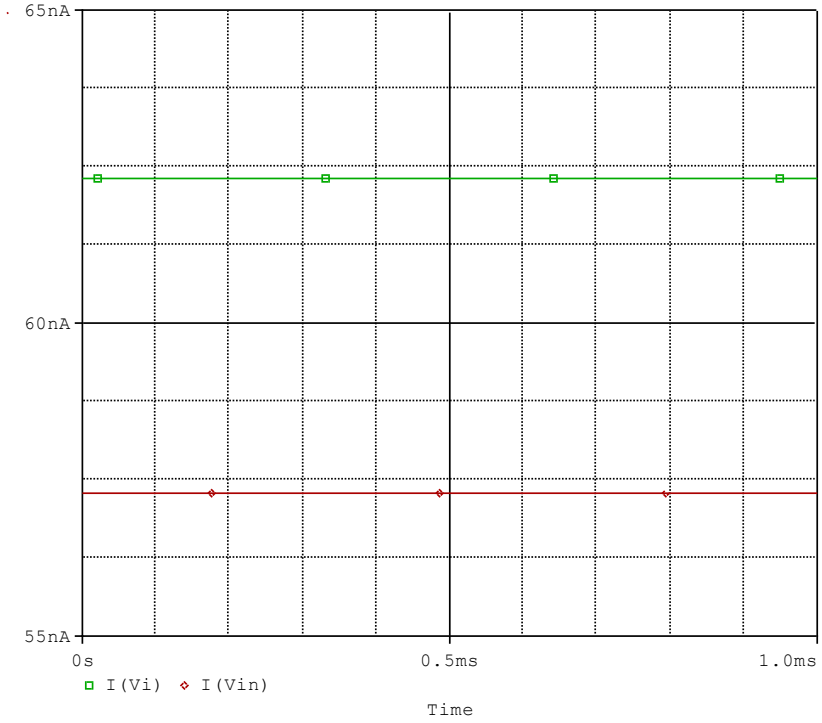
Evaluation circuit



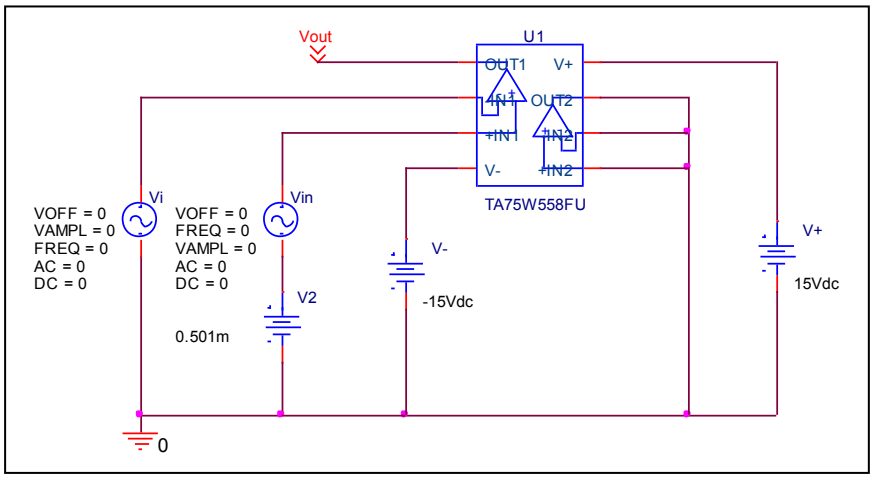
Slew Rate(v/us)	Measurement	Simulation	%Error
	1.000	0.996	-0.400

Input current Ib, Ibos

Simulation result



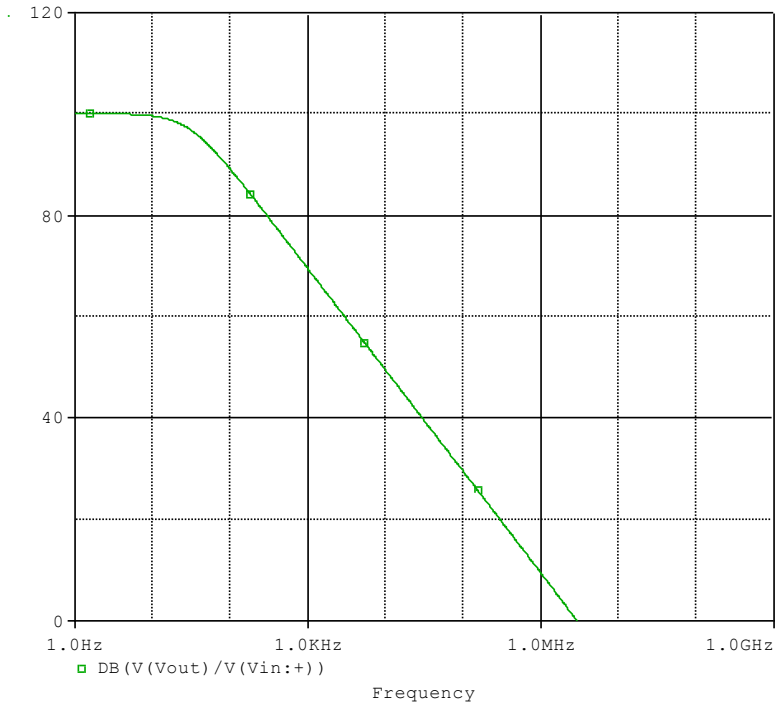
Evaluation circuit



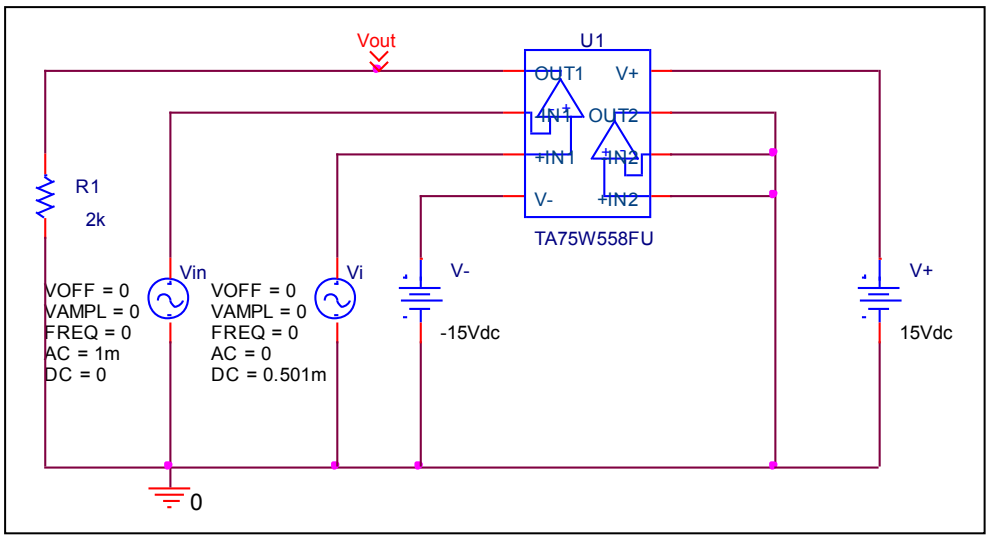
	Measurement	Simulation	%Error
Ib(nA)	60.000	59.802	-0.330
Ibos(nA)	5.000	5.030	0.600

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

Simulation result



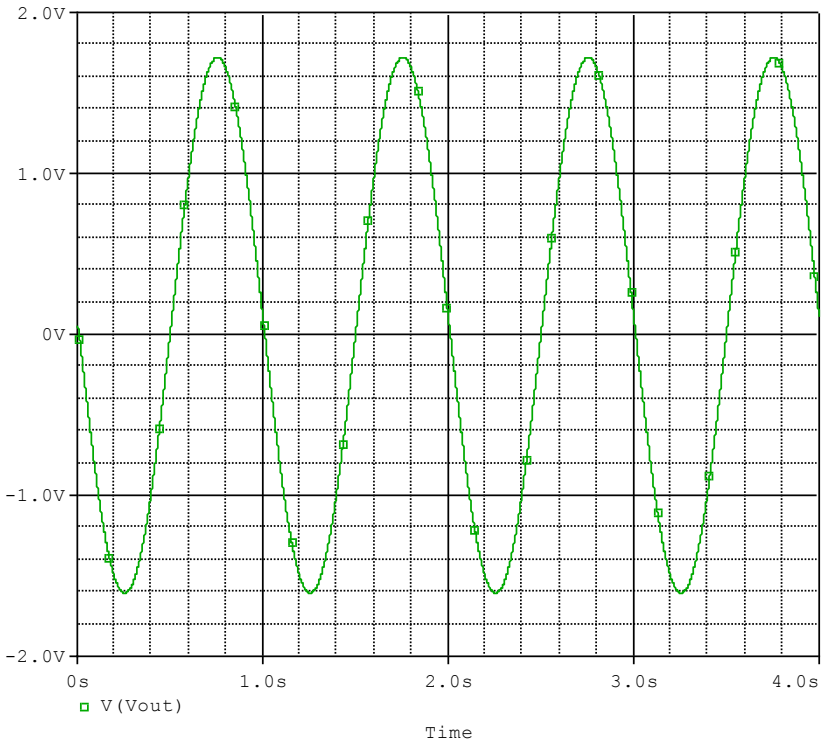
Evaluation circuit



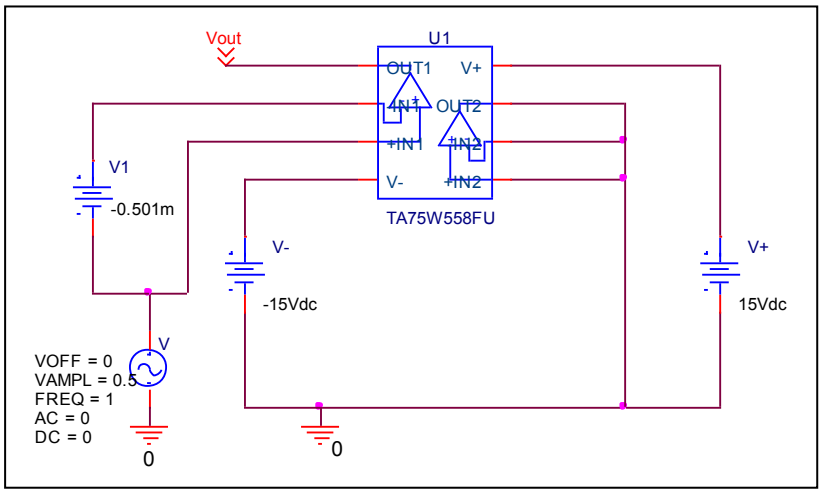
	Measurement	Simulation	%Error
f-0dB(MHz)	3.000	2.884	-3.870
Av-dc(dB)	100.000	100.071	0.070

Common-Mode Rejection Voltage gain

Simulation result



Evaluation circuit



CMRR=20*LOG(100820.768/3.3283) = 89.627 dB

CMRR (dB)	Measurement	Simulation	%Error
	90.000	89.627	-0.410