

Device Modeling Report

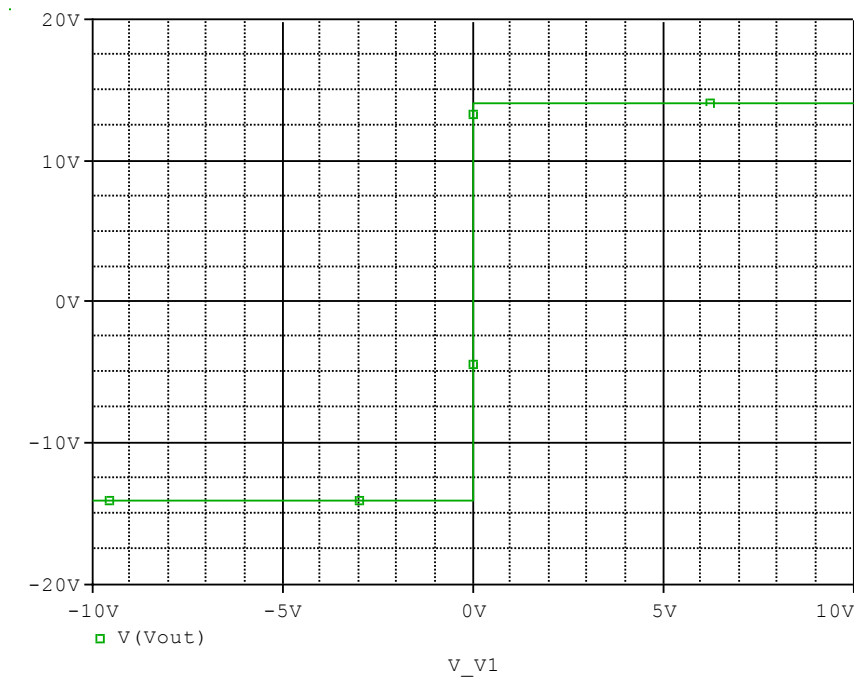
COMPONENTS:MOSFET: OPERATIONAL AMPLIFIER
PART NUMBER: TA75559F
MANUFACTURER: TOSHIBA



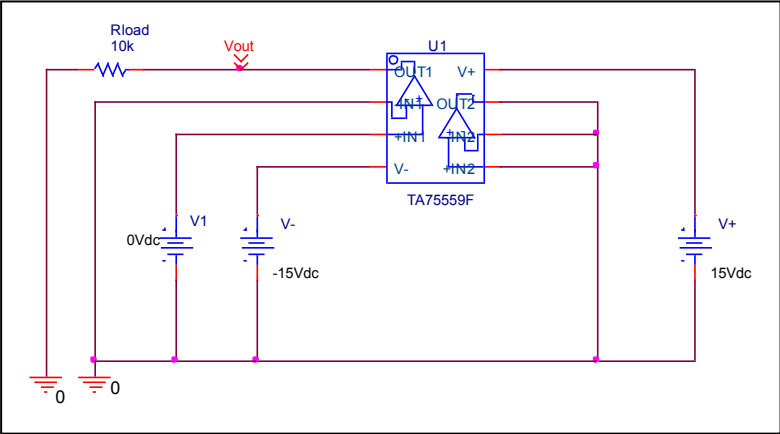
Bee Technologies Inc.

Output Voltage Swing

Simulation result



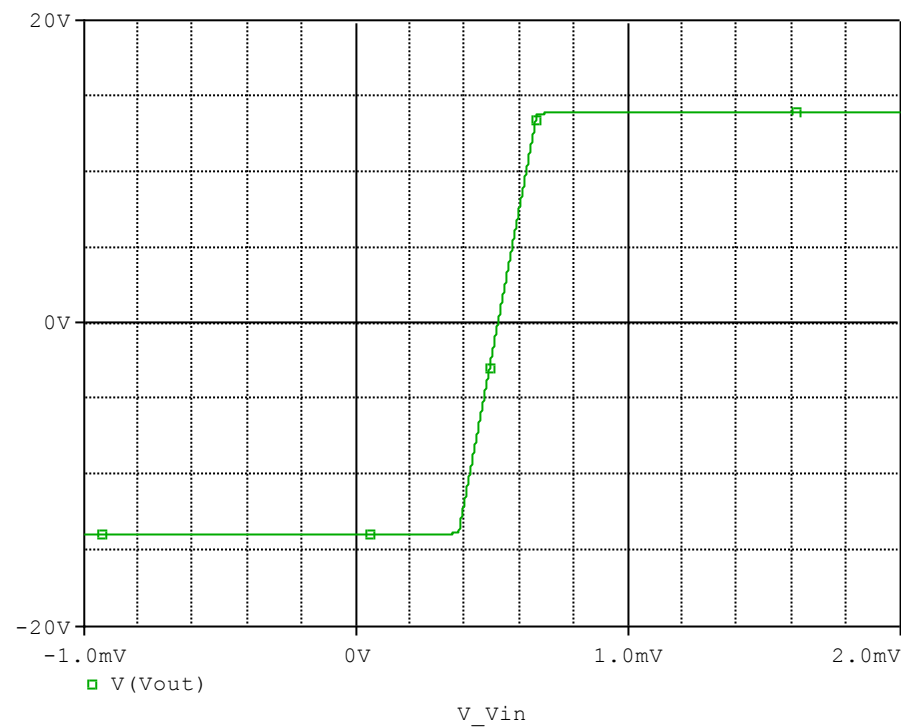
Evaluation circuit



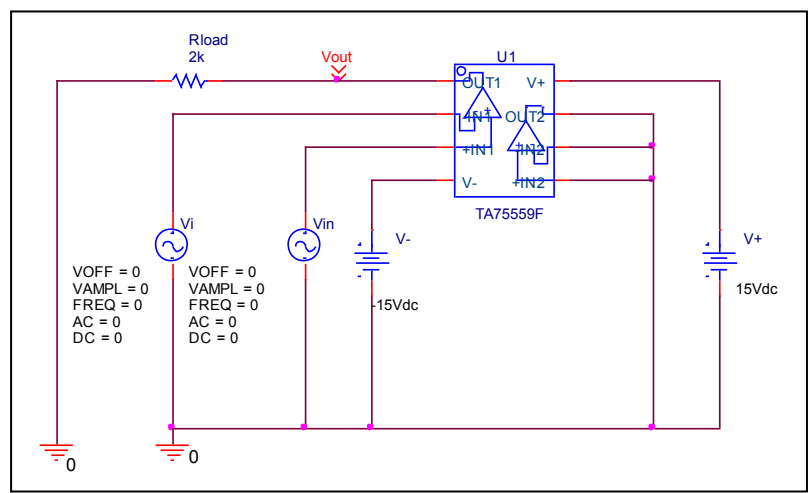
Output Voltage Swing	Measurement	Simulation	%Error
+Vout(V)	+14.000	13.999	-0.010
-Vout(V)	-14.000	-13.999	-0.010

Input Offset Voltage

Simulation result



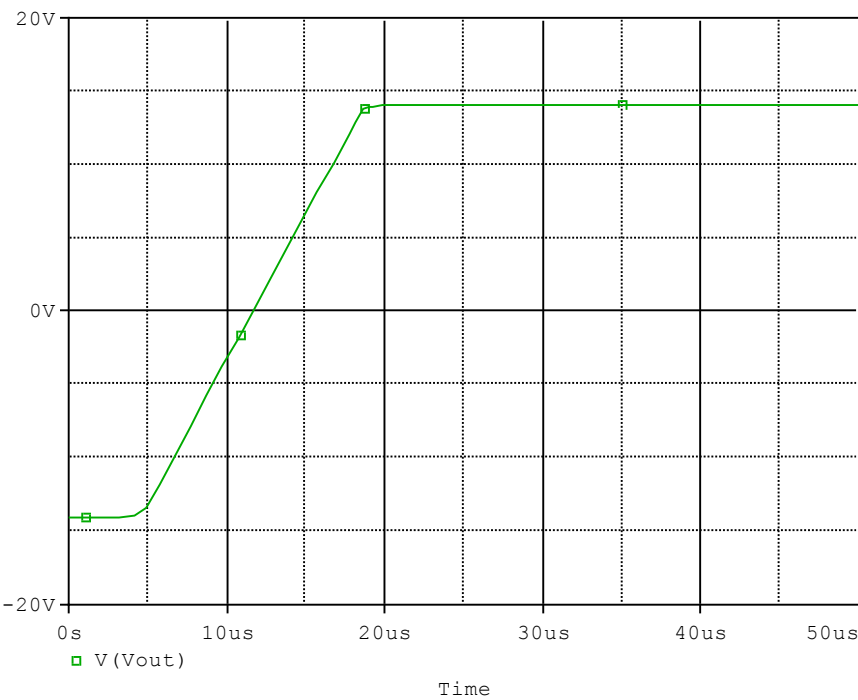
Evaluation circuit



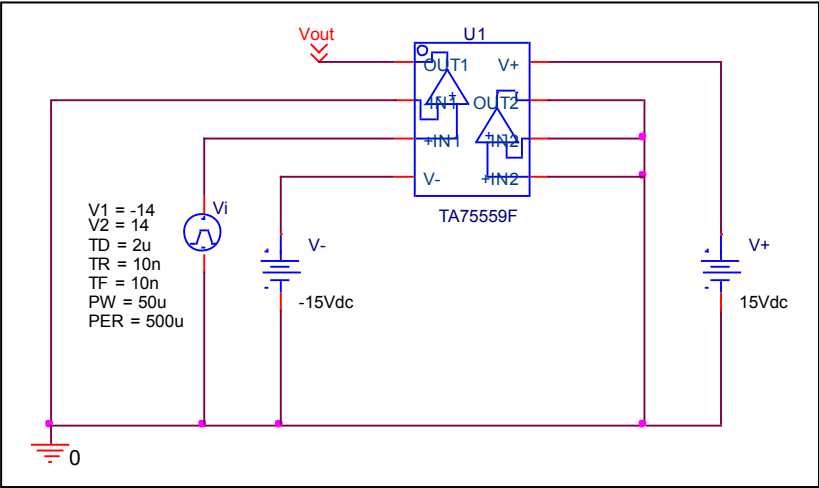
Vos	Measurement		Simulation		Error	
	0.500	mV	0.500	mV	0.000	%

Slew Rate

Simulation result



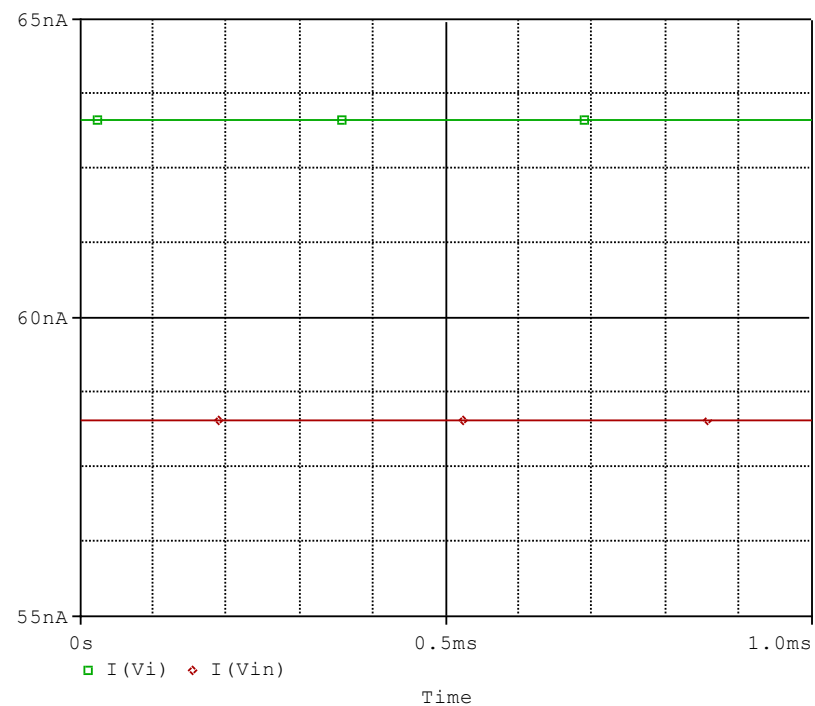
Evaluation circuit



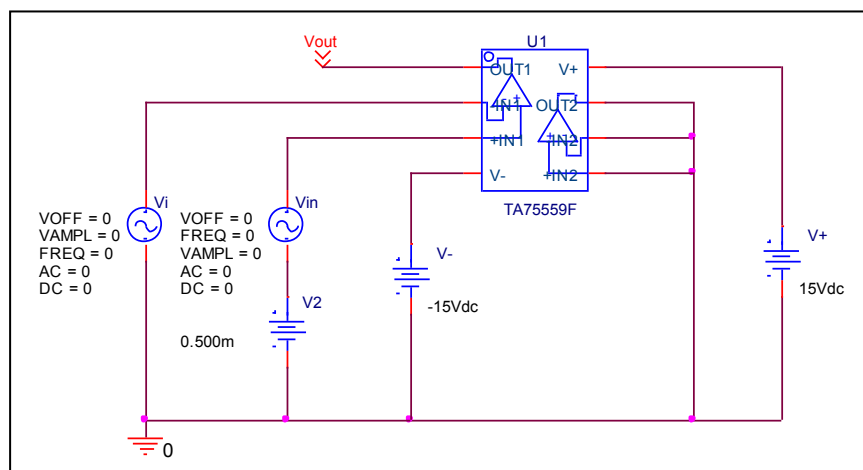
Slew Rate(v/us)	Measurement	Simulation	%Error
	2.000	1.991	-0.450

Input current I_b , I_{bos}

Simulation result



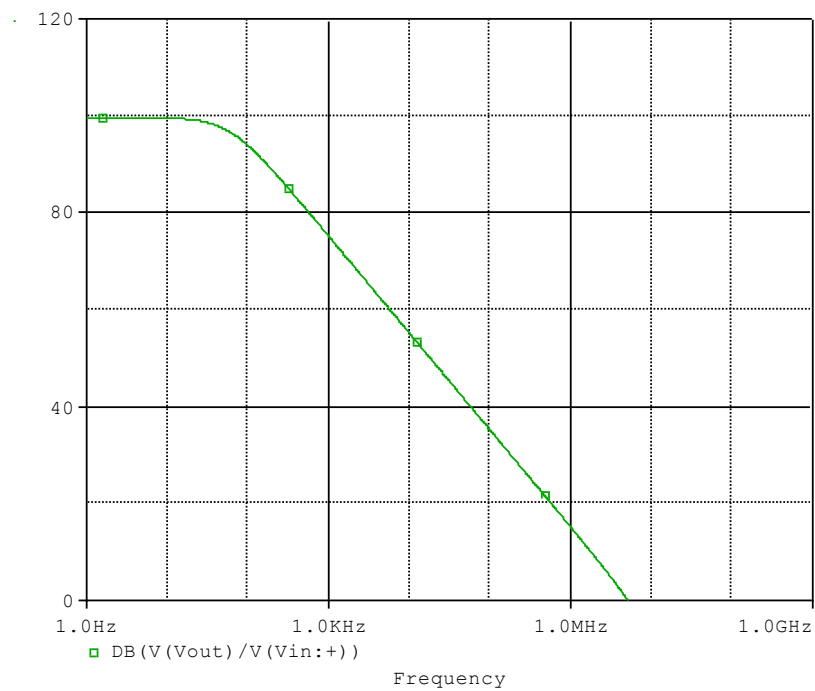
Evaluation circuit



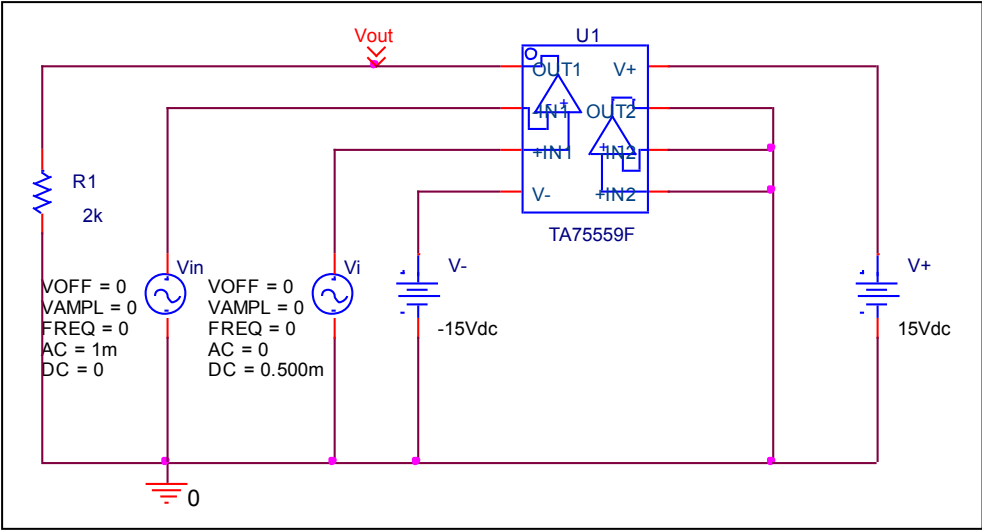
	Measurement	Simulation	%Error
Ib(nA)	60.000	60.794	1.320
Ibos(nA)	5.000	5.029	0.580

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

Simulation result



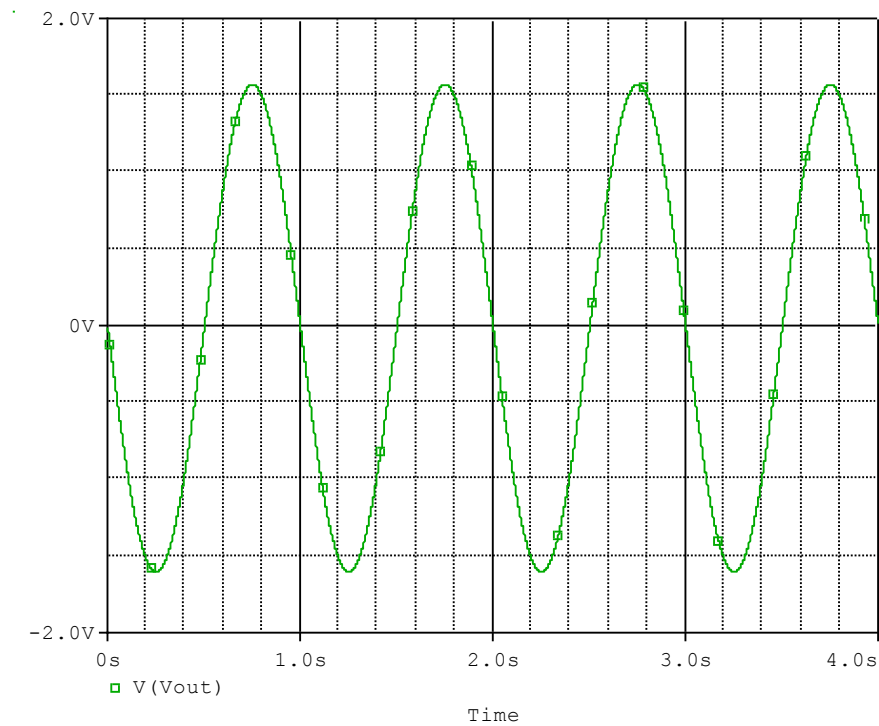
Evaluation circuit



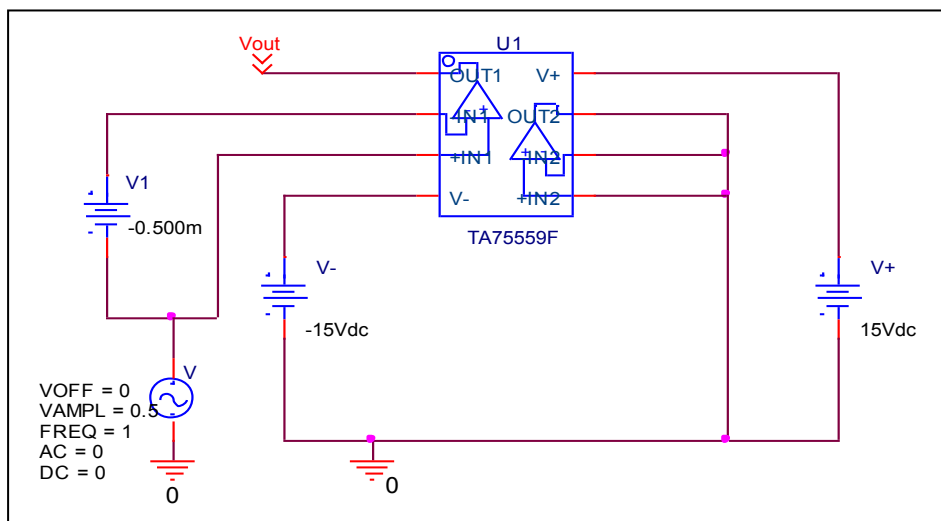
	Measurement	Simulation	%Error
f-0dB(MHz)	5.000	5.125	2.500
Av-dc(dB)	100.000	99.652	-0.350

Common-Mode Rejection Voltage gain

Simulation result



Evaluation circuit



$$CMRR=20*LOG(96072.701/3.171) = 89.628 \text{ dB}$$

CMRR (dB)	Measurement	Simulation	%Error
	90.000	89.628	-0.410