Device Modeling Report

COMPONENTS: MOSFET: OPERATIONAL AMPLIFIER
PART NUMBER: TA75559S
MANUFACTURER: TOSHIBA

Bee Technologies Inc.

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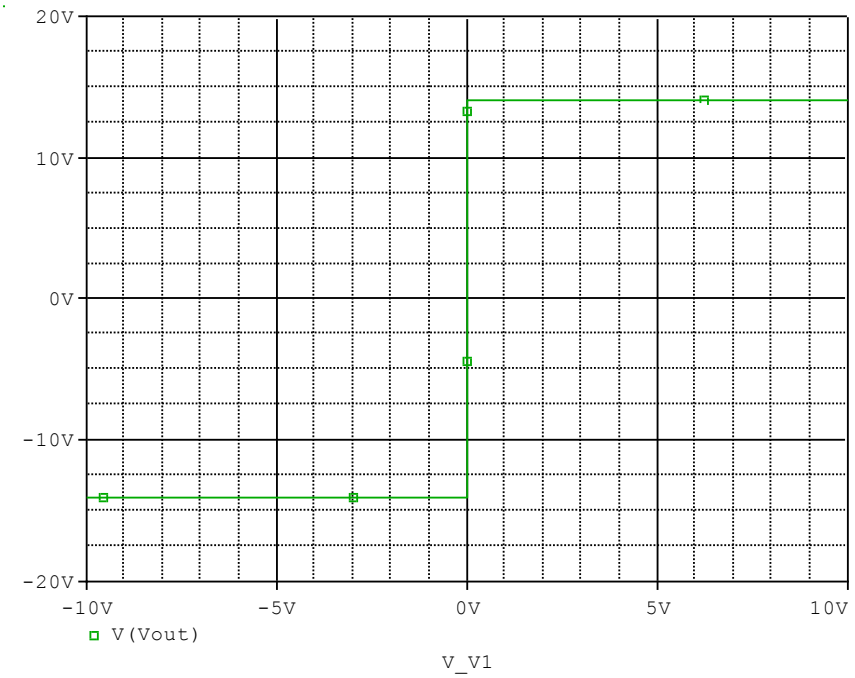
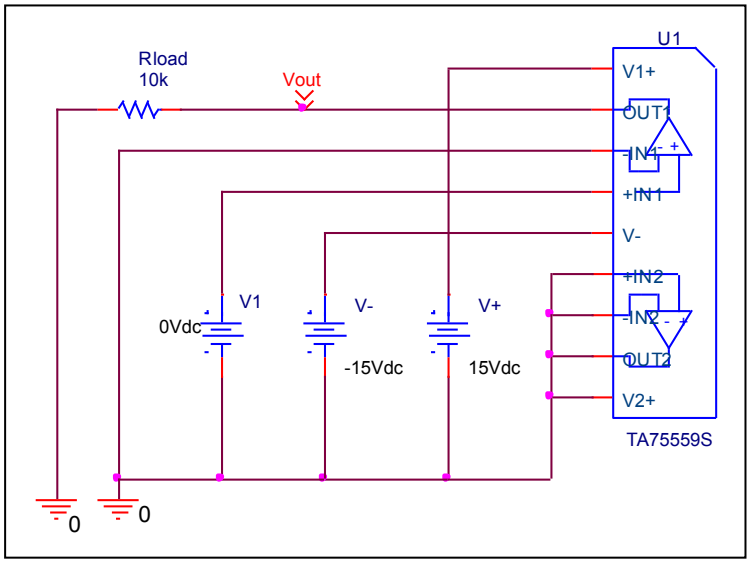
Output Voltage Swing

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

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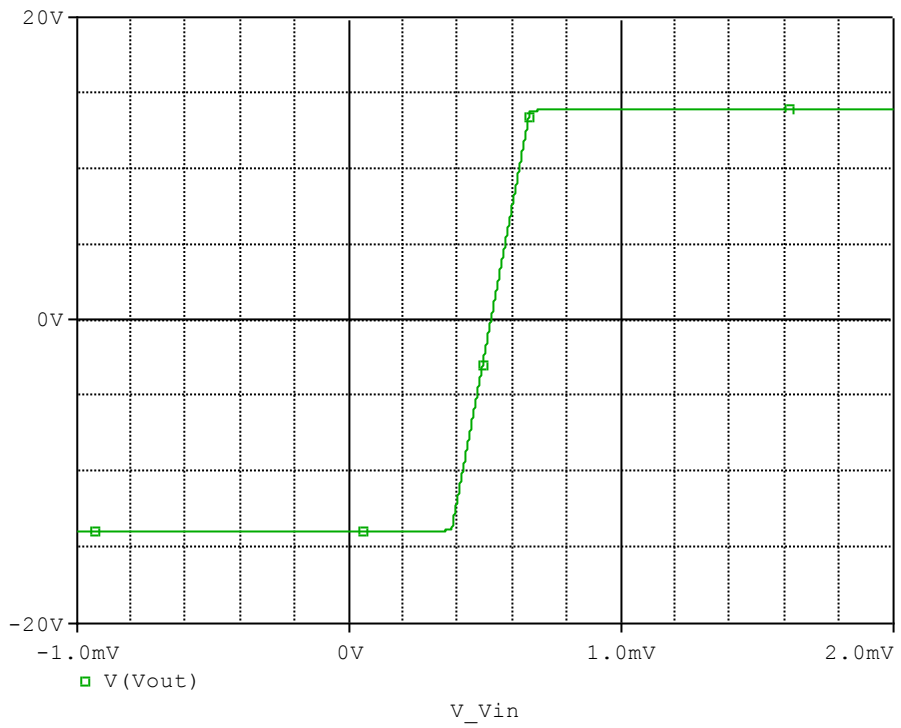
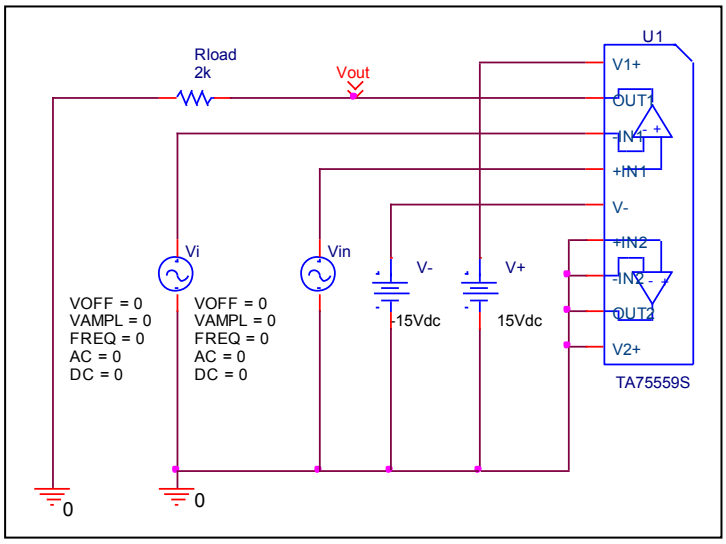
Input Offset Voltage

Simulation result



Evaluation circuit



Vos	Measurement		Simulation		Error	
	0.500	mV	0.520	mV	4.000	%

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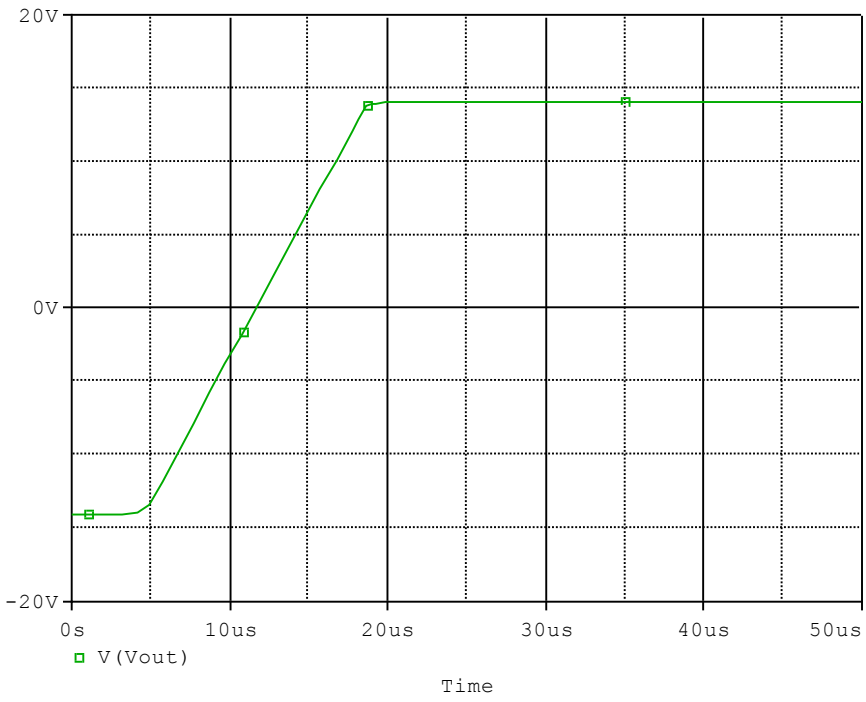
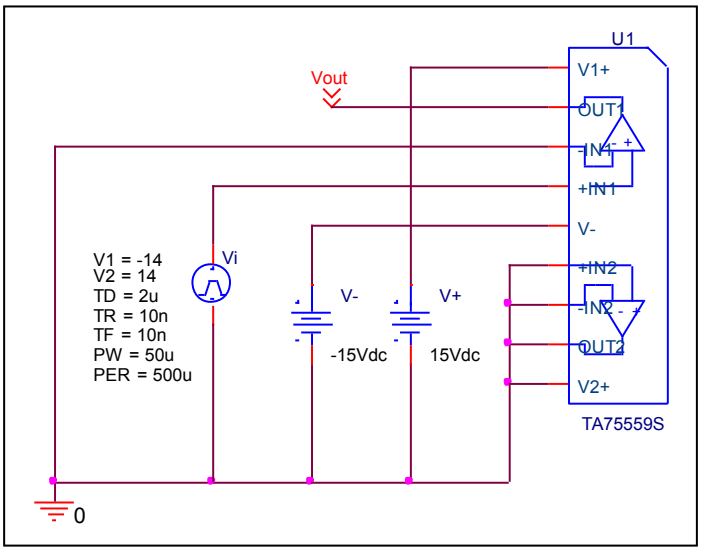
Slew Rate

Simulation result



Evaluation circuit



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

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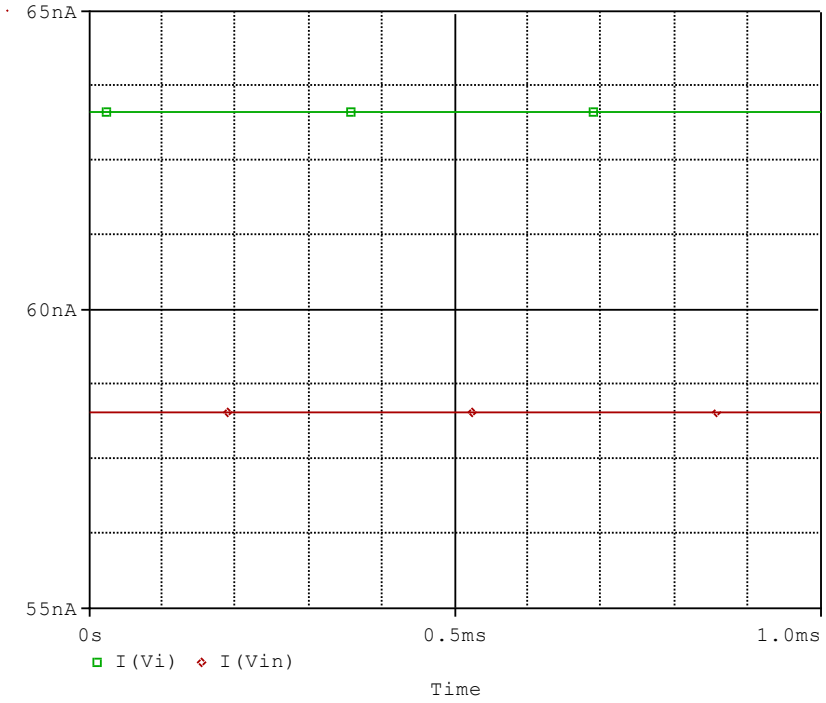
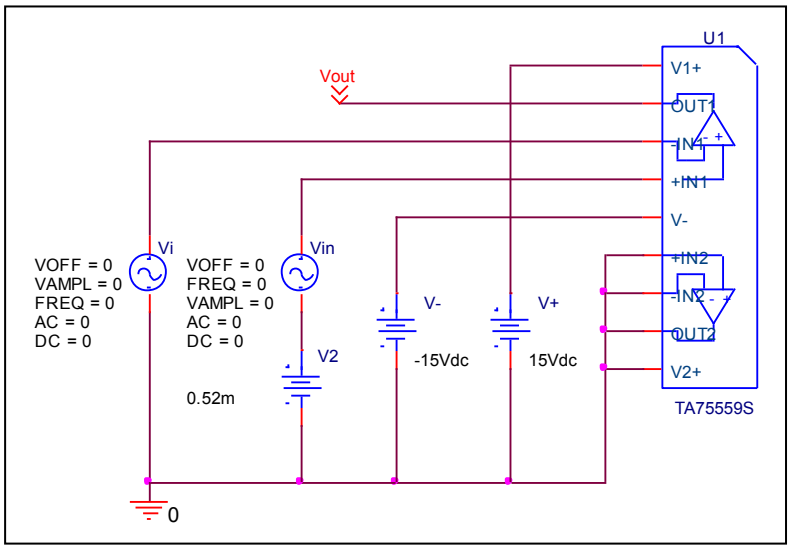
Input current Ib, Ibos

Simulation result



Evaluation circuit



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

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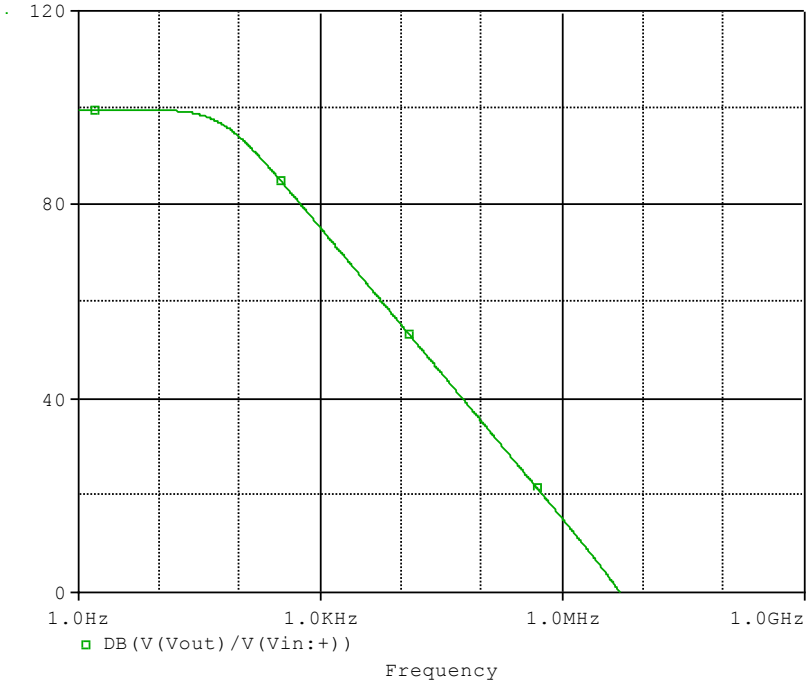
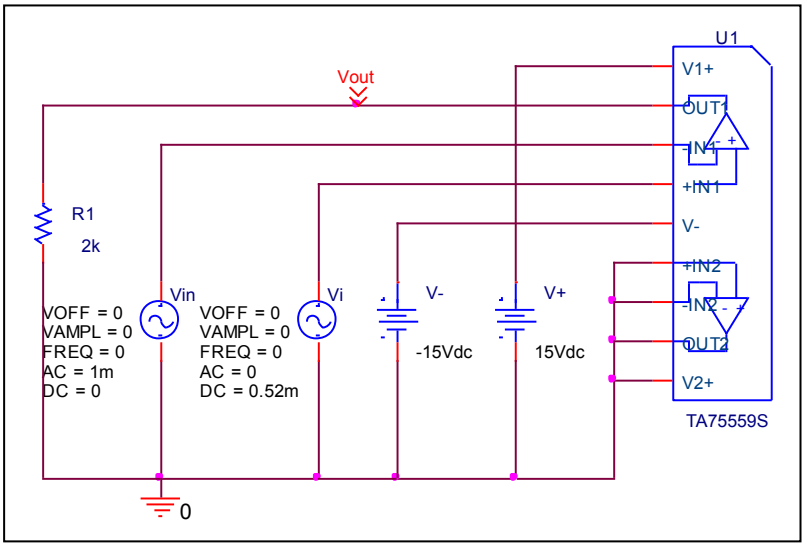
Open Loop Voltage Gain vs. Frequency , Av-dc, f-0dB

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

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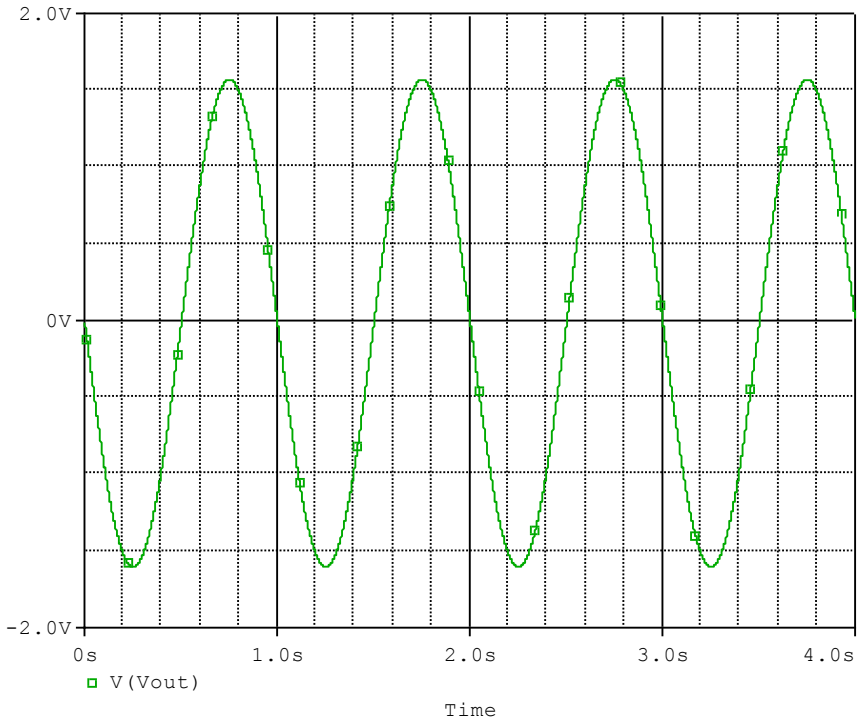
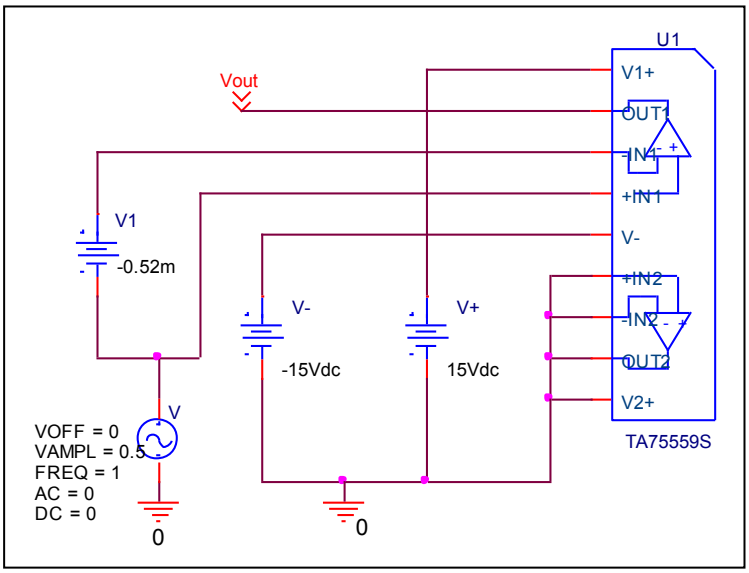
Common-Mode Rejection Voltage gain

Simulation result



Evaluation circuit



CMRR=20*LOG(96072.701/3.171) = 89.628 dB

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

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