

Device Modeling Report

COMPONENTS:MOSFET: OPERATIONAL AMPLIFIER
PART NUMBER: TA75S558F
MANUFACTURER: TOSHIBA

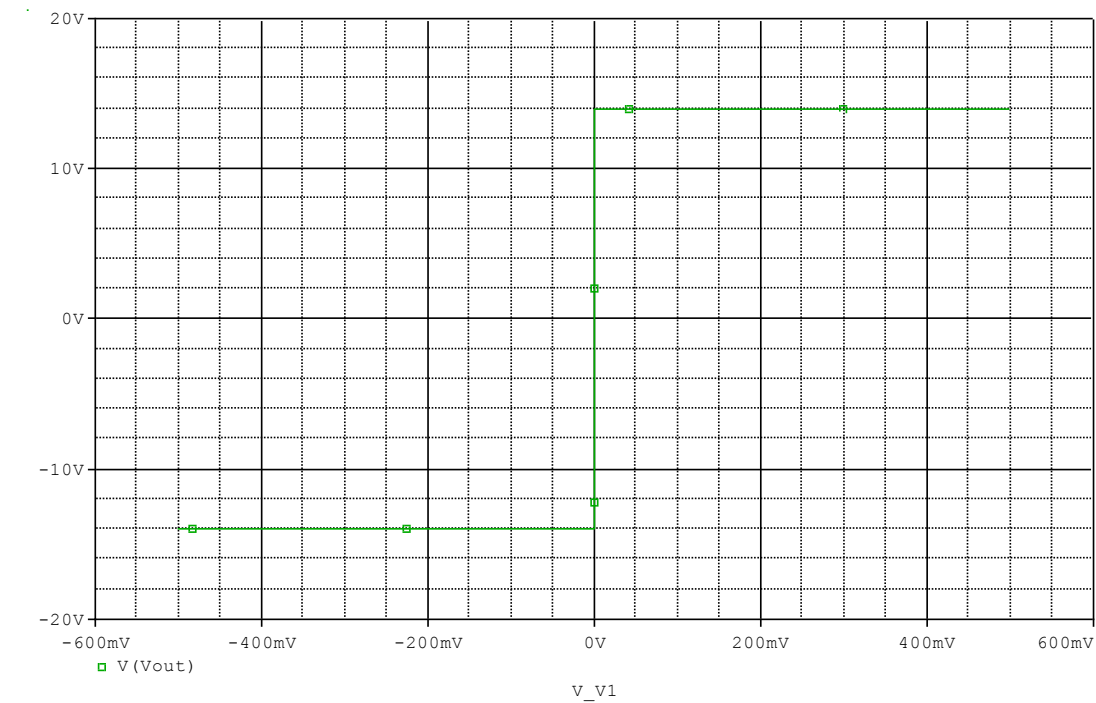


Bee Technologies Inc.

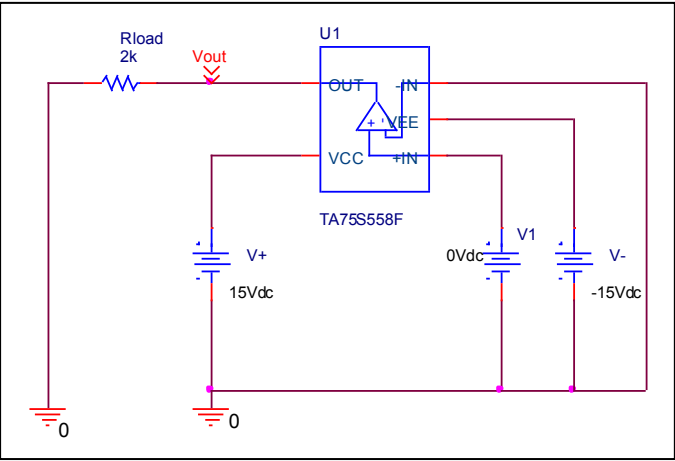
Spice Model

Output Voltage Swing

Simulation result



Evaluation circuit

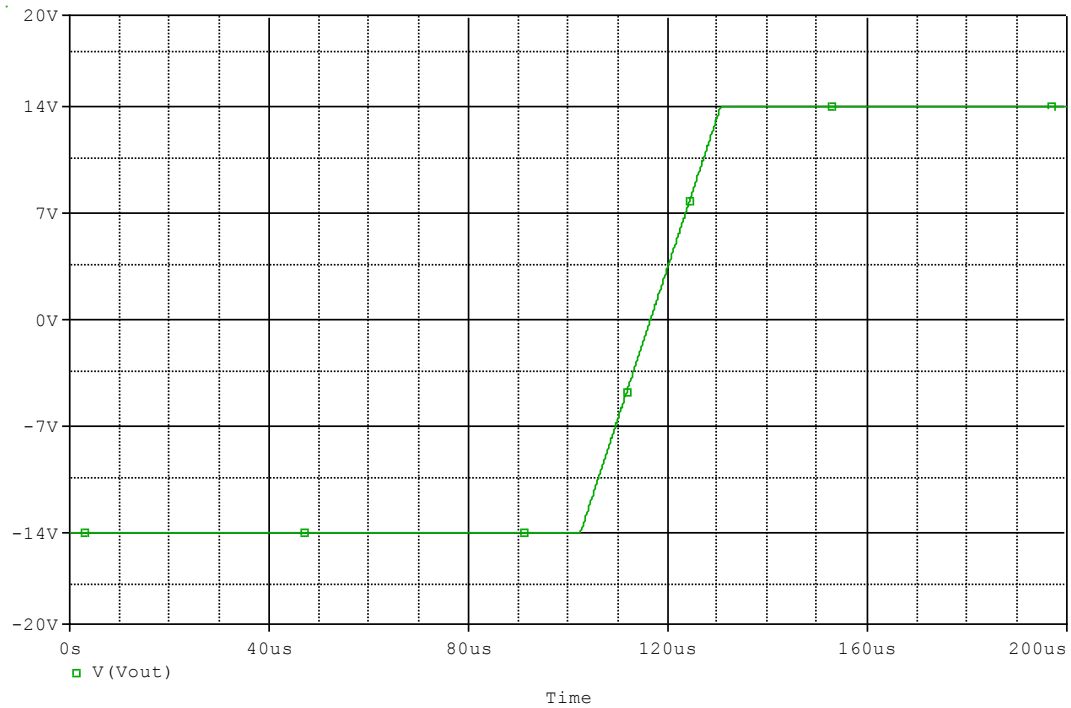


Comparison table

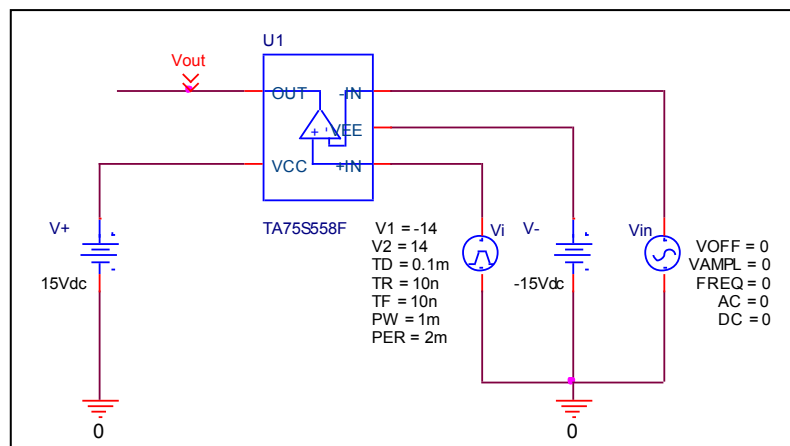
Output Voltage Swing	Measurement	Simulation	%Error
+Vout(V)	14.000	13.990	-0.071
-Vout(V)	-14.000	-13.990	-0.071

Slew Rate

Simulation result



Evaluation circuit

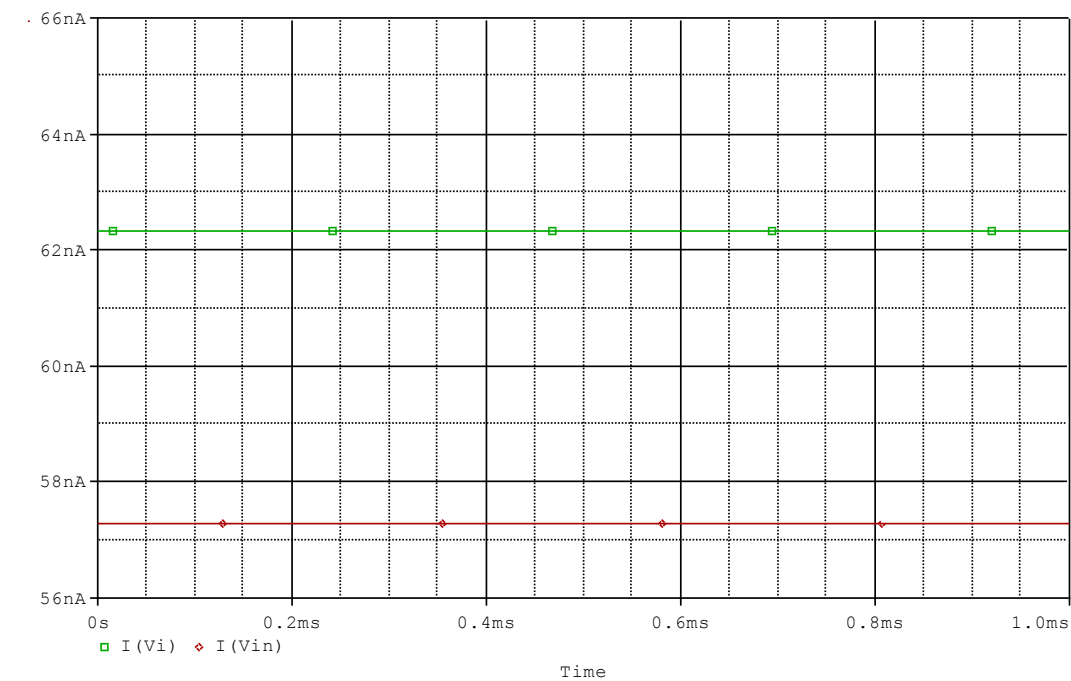


Comparison table

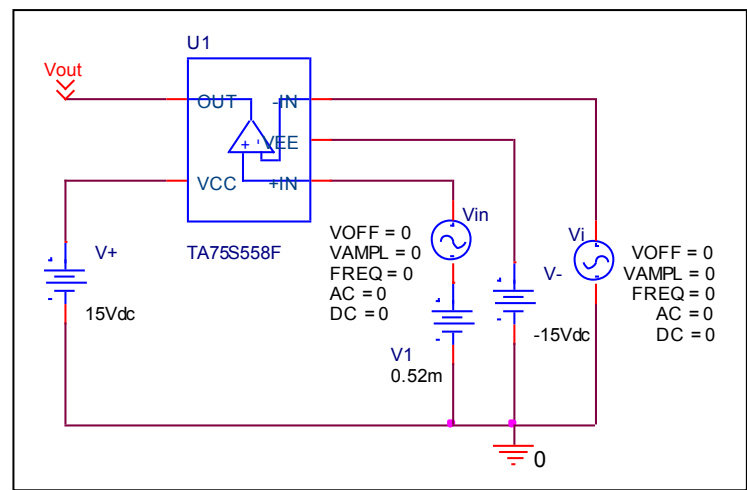
Slew Rate(v/us)	Measurement	Simulation	%Error
	1.000	1.000	0.00

Input current Ib, Ibos

Simulation result



Evaluation circuit

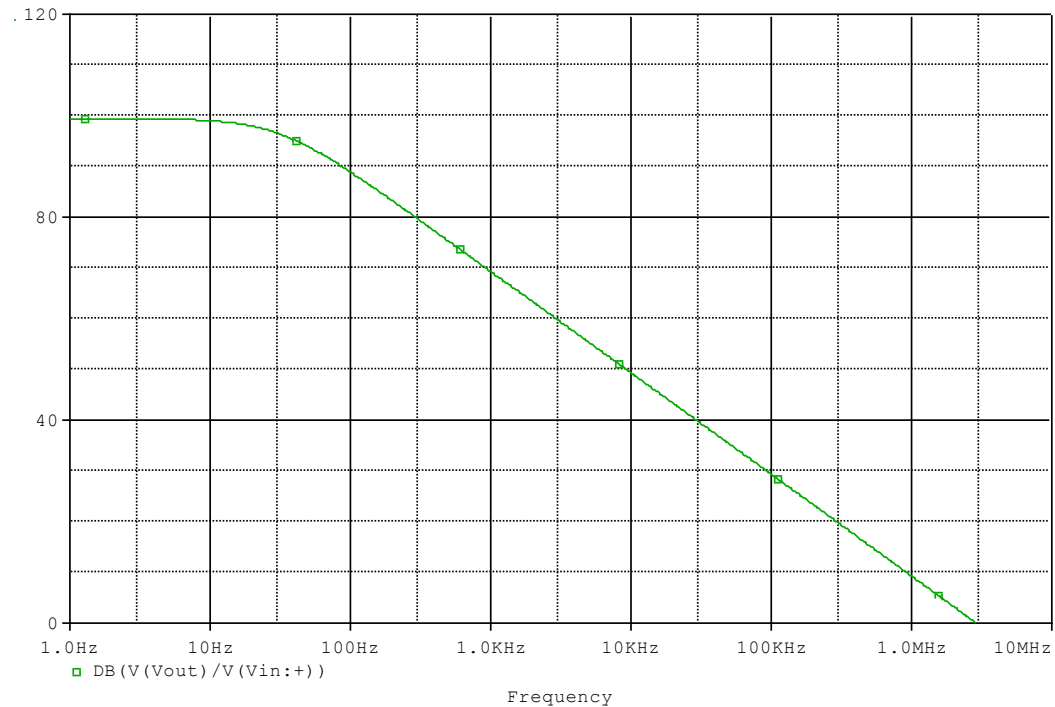


Comparison table

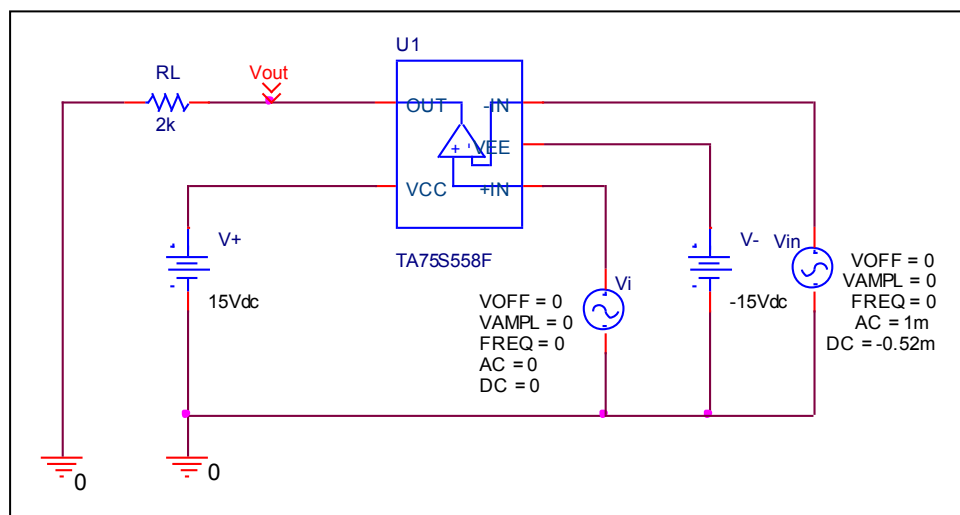
	Measurement	Simulation	%Error
Ib(nA)	60.000	59.806	-0.323
Ibos(nA)	5.000	5.028	0.560

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

Simulation result



Evaluation circuit

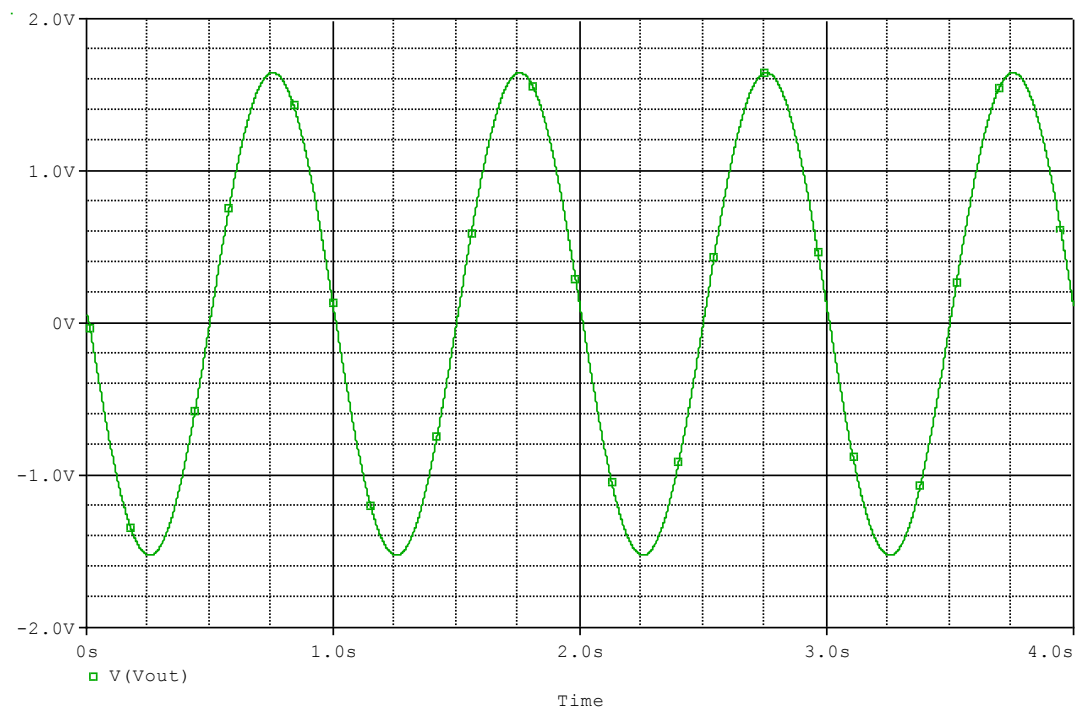


Comparison table

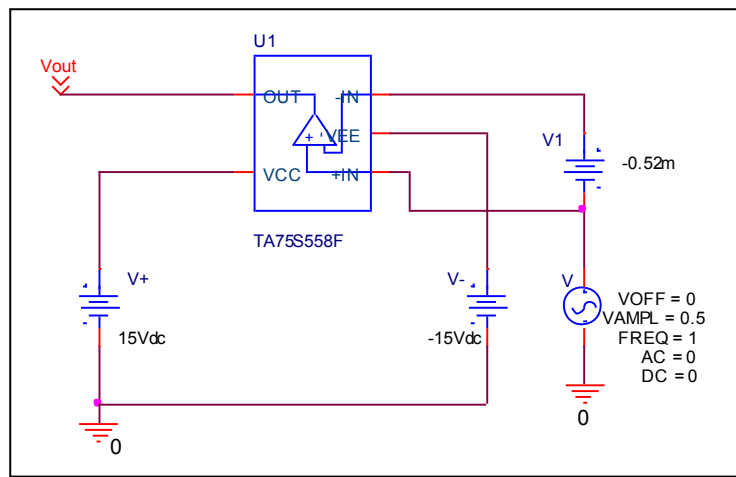
	Measurement	Simulation	%Error
f-0dB(MHz)	3.000	2.877	-4.100
Av-dc(dB)	100.000	99.424	-0.576

Common-Mode Rejection Voltage gain

Simulation result



Evaluation circuit



Common Mode Reject Ratio= $20 \times \text{LOG}(99.424/3.1693)=89.4047\text{dB}$

Comparison table

CMRR (dB)	Measurement	Simulation	%Error
	90.000	89.405	-0.661