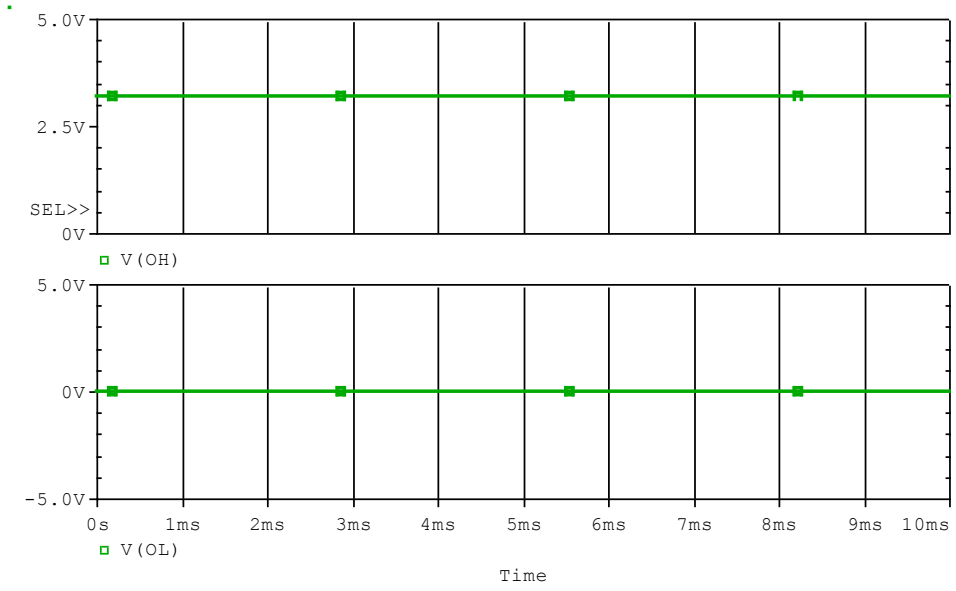
Device Modeling Report

COMPONENTS: OPERATIONAL AMPLIFIER
PART NUMBER: LA6358AM
MANUFACTURER: SANYO Semiconductors

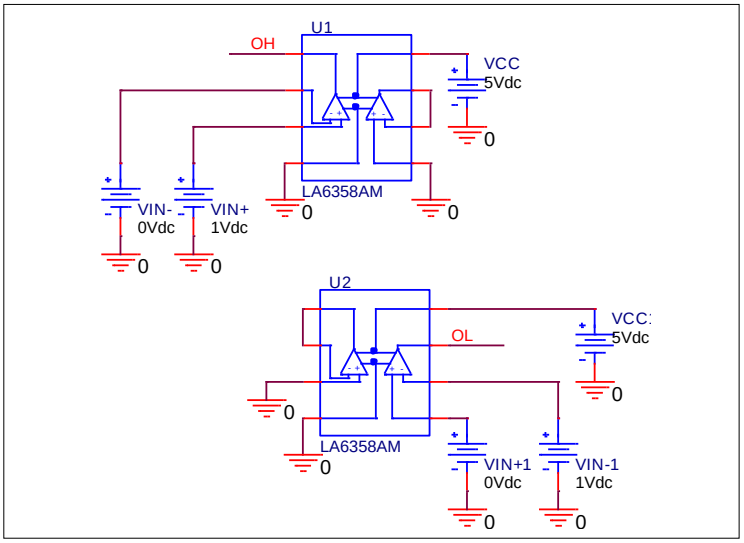
Bee Technologies Inc.

Output Voltage Swing

Simulation result



Evaluation circuit

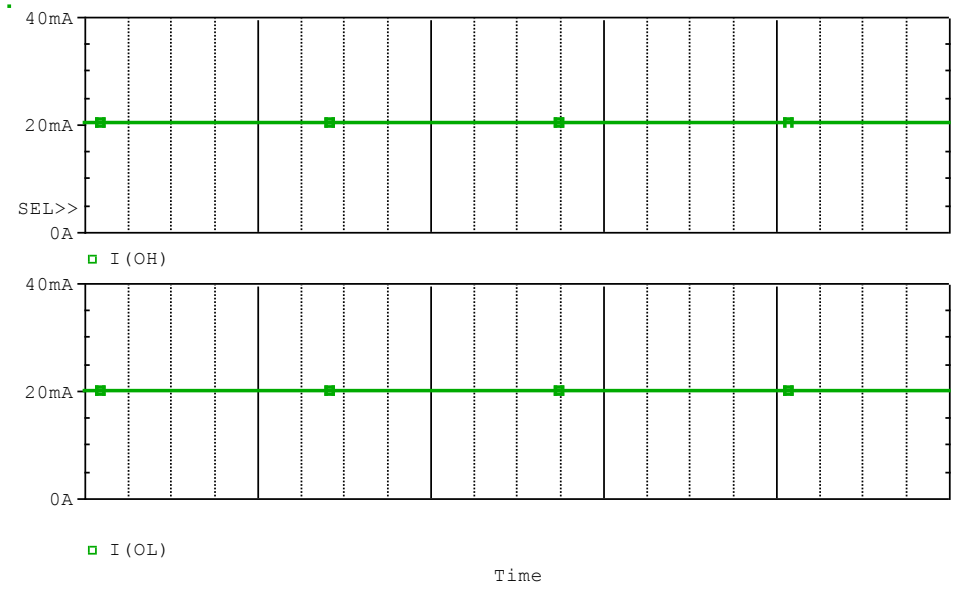


Comparison table

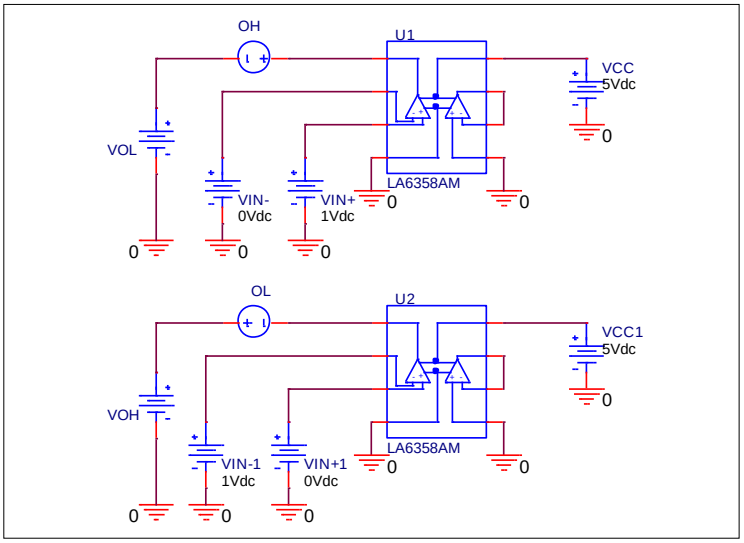
Parameter	Measurement	Simulation	%Error
VOH (V)	3.200	3.201	0.03
VOL (V)	0.000	0.000	0.00

Output Short Circuit Current

Simulation result



Evaluation circuit

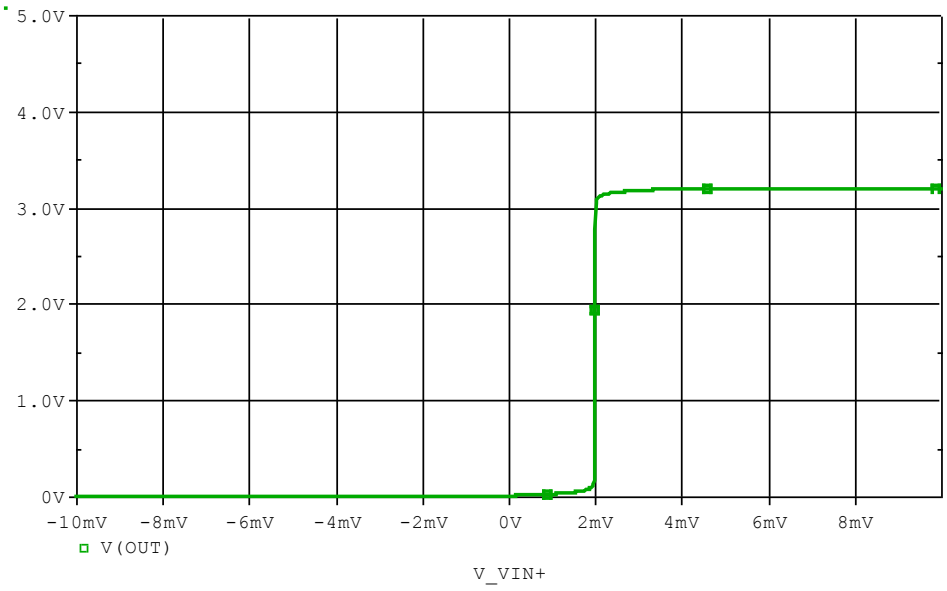


Comparison table

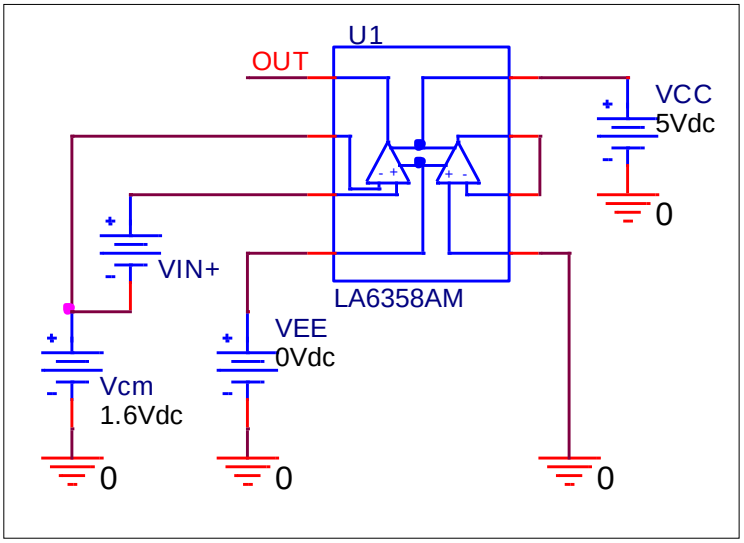
Parameter	Measurement	Simulation	%Error
IOH (mA)	20.000	20.392	1.96
IOL (mA)	20.000	19.839	-0.81

Input Offset Voltage

Simulation result



Evaluation circuit

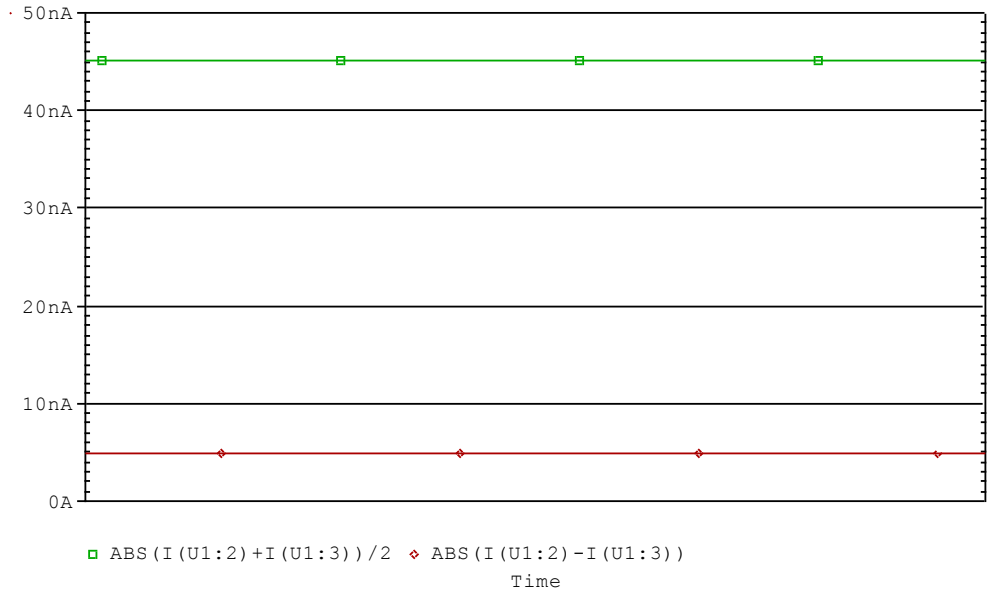


Comparison table

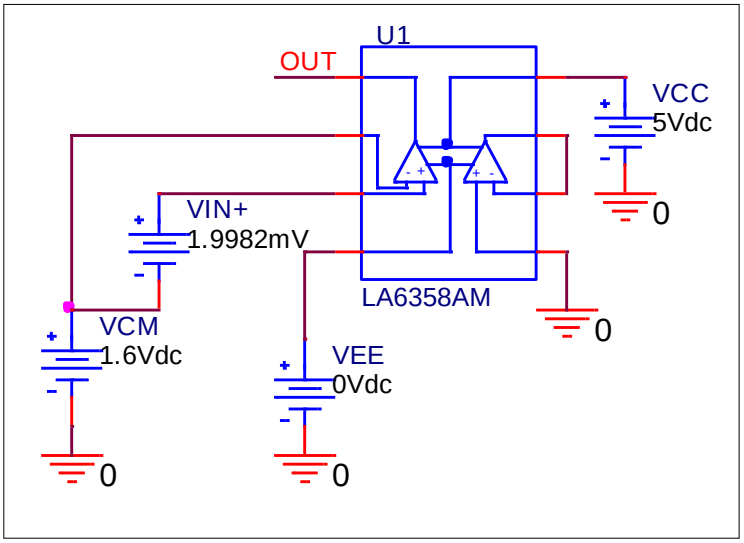
Parameter	Measurement	Simulation	%Error
Vio (mV)	**2.000**	**1.998**	**-0.09**

Input Current Ib, Ibos

Simulation result



Evaluation circuit

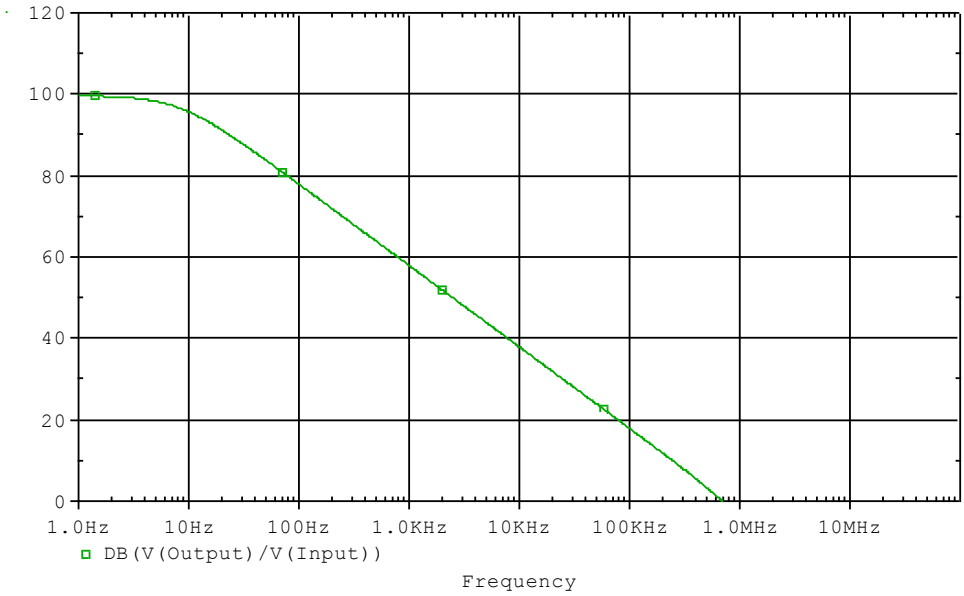


Comparison table

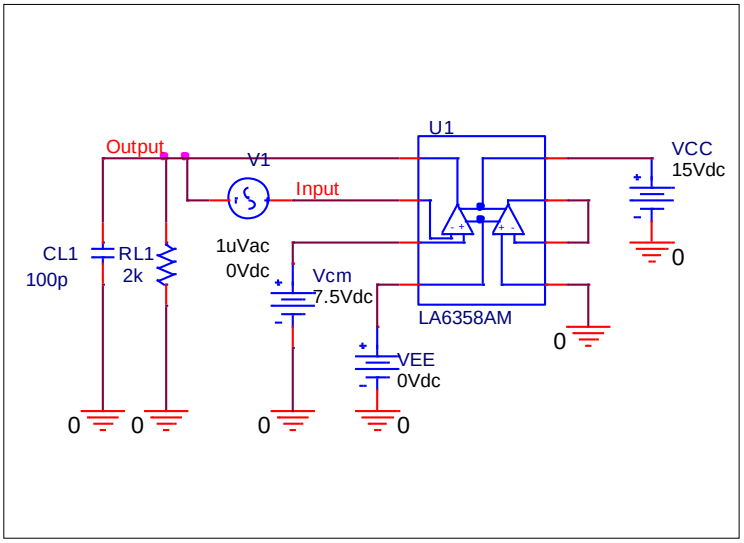
Parameter	Measurement	Simulation	%Error
Iio (nA)	5.000	4.951	-0.97
Ib (nA)	45.000	45.068	0.15

Open loop voltage gain

Simulation result



Evaluation circuit

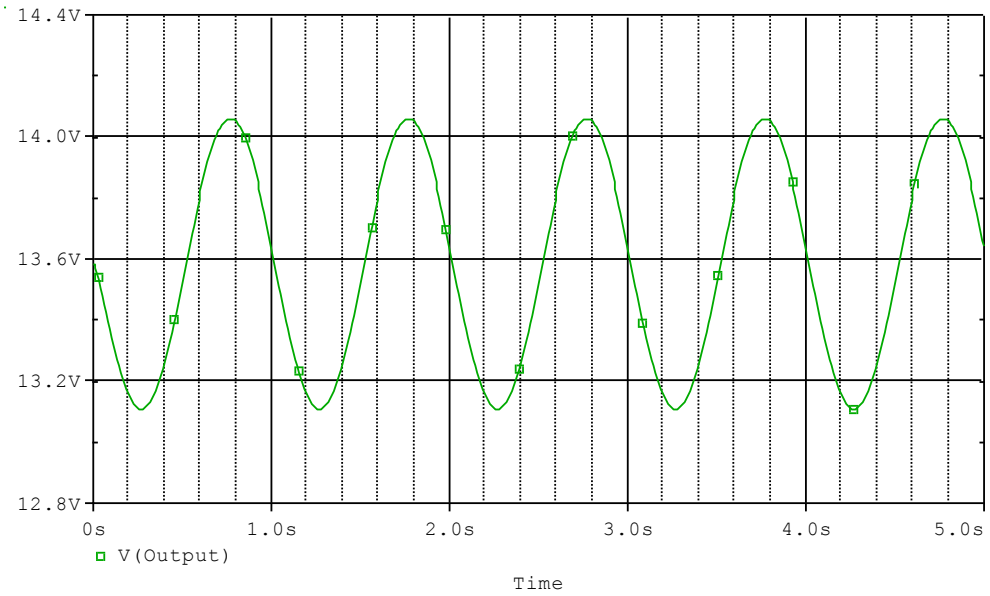


Comparison table

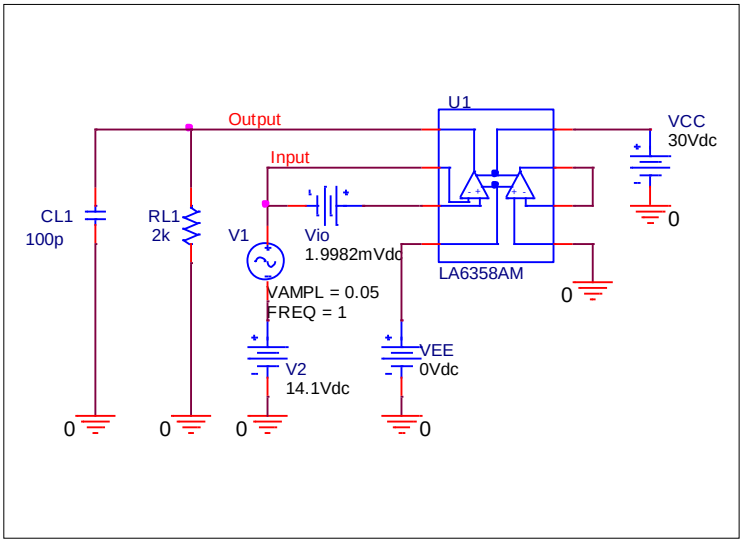
Parameter	Measurement	Simulation	%Error
Ft (MHz)	**0.700**	**0.701**	**0.12**
AV (db)	**100.000**	**99.590**	**-0.41**

Common-mode rejection voltage gain

Simulation result



Evaluation circuit



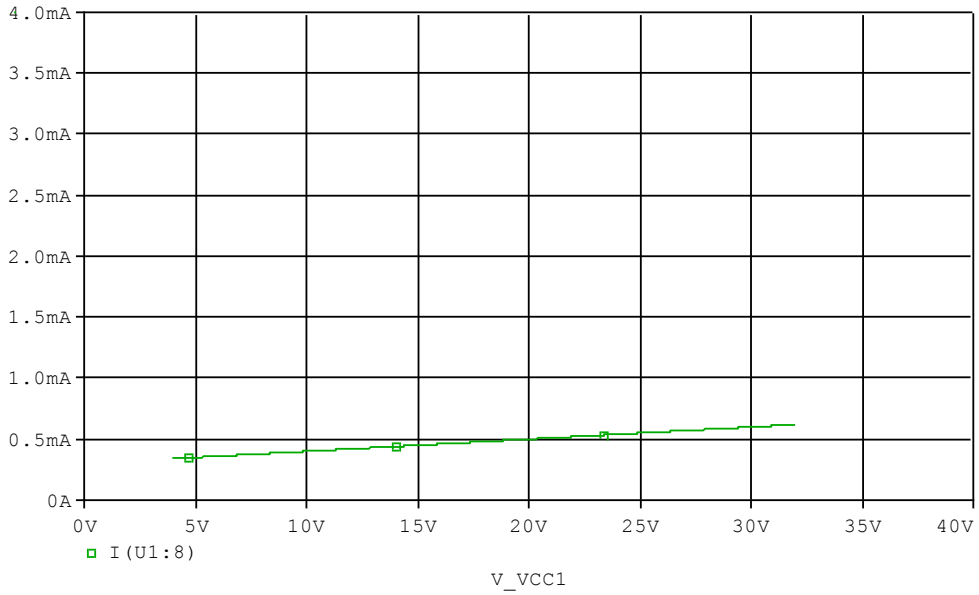
Comparison table

Common mode gain = 0.00954 V/mV
CMRR = 20log(100/0.00954) = 80.410

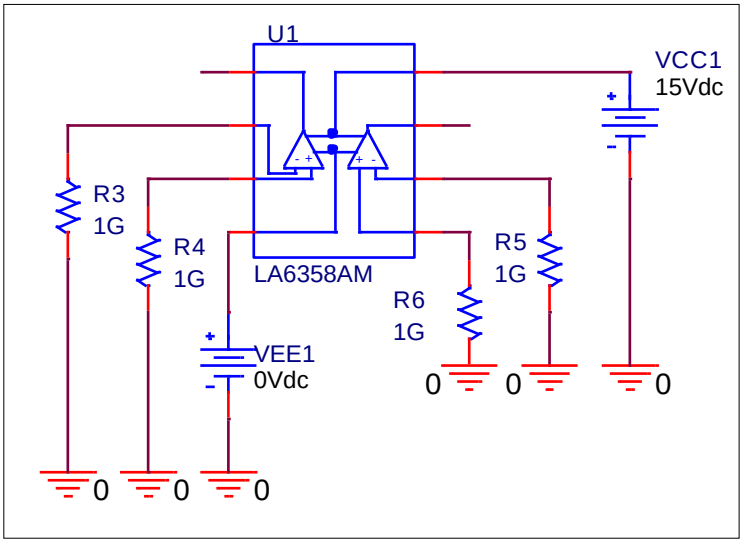
Parameter	Measurement	Simulation	%Error
CMRR(dB)	**80.000**	**80.410**	**0.51**

Supply Current

Simulation result



Evaluation circuit

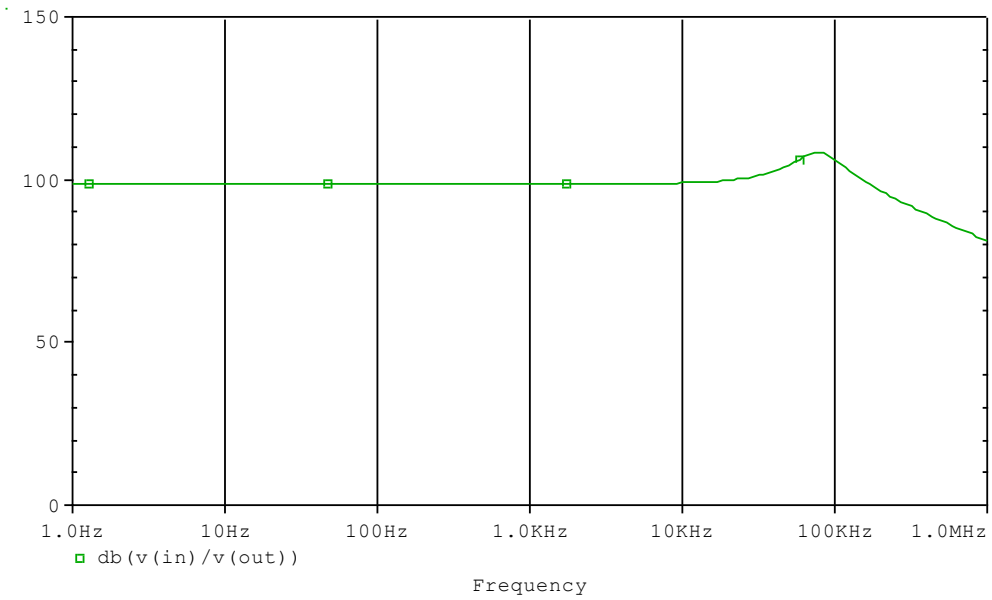


Comparison table

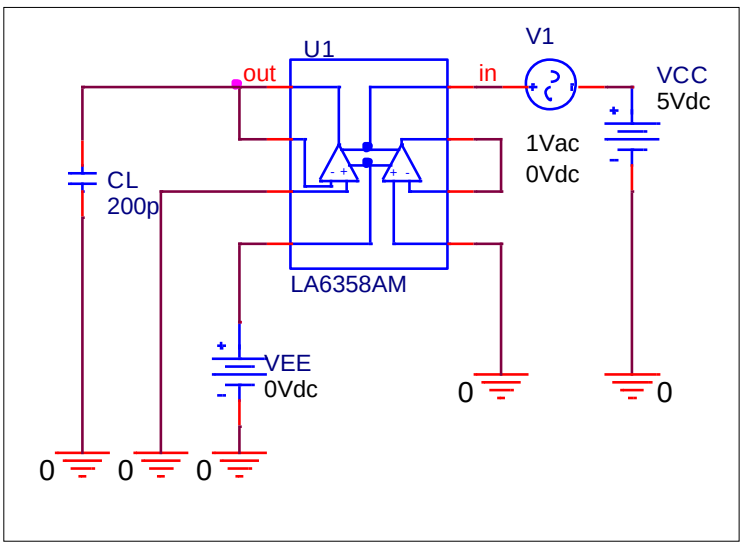
Parameter	Measurement	Simulation	%Error
ICC (mA)	0.600	0.600	0.00

Power supply rejection ration

Simulation result



Evaluation circuit

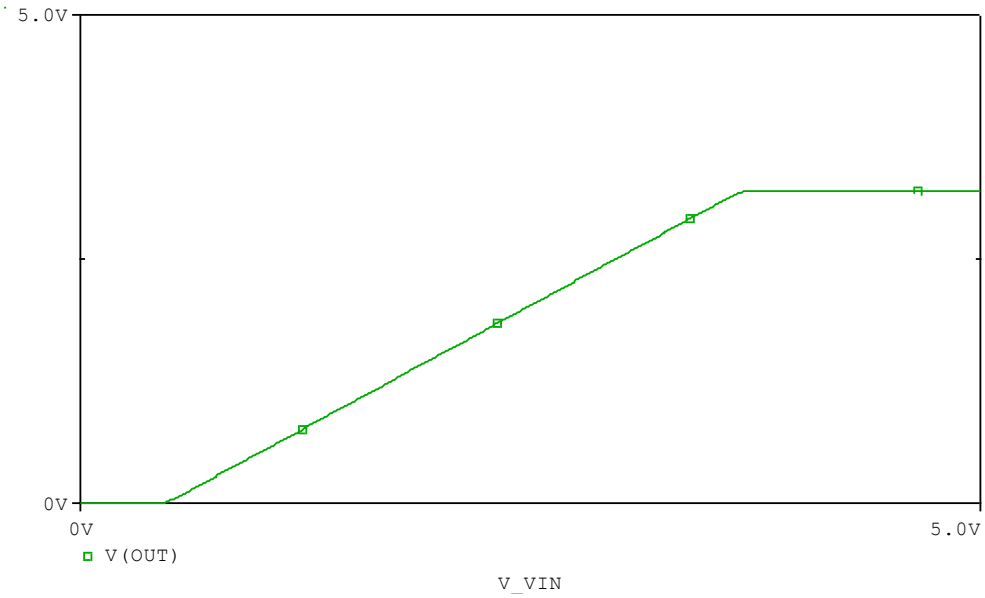


Comparison table

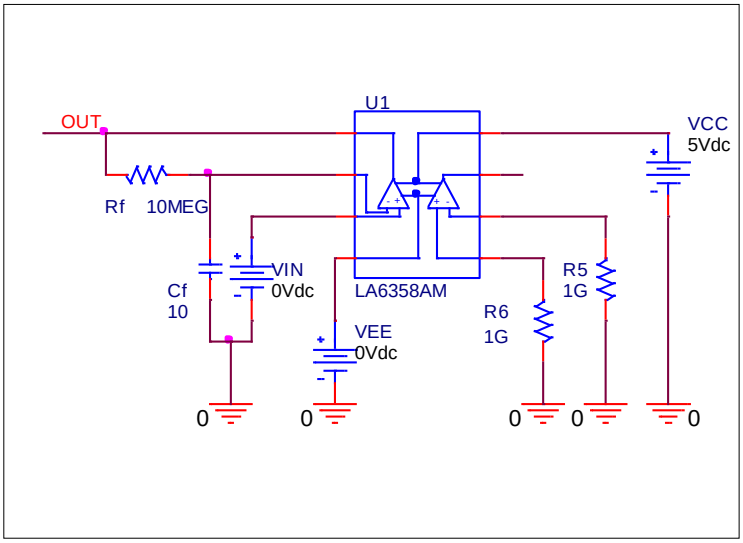
Parameter	Measurement	Simulation	%Error
PSRR (dB)	**100.000**	**98.695**	**-1.31**

Input common-mode voltage range

Simulation result



Evaluation circuit



Comparison table

Parameter	Measurement	Simulation	%Error
Vicm (V)	3.200	3.224	0.75