

# Device Modeling Report

COMPONENTS : 2-Input 1-Output Stereo Audio Selector

PART NUMBER : NJM2752

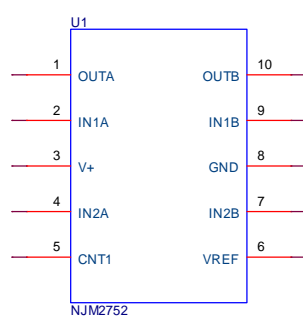
MANUFACTURE : NEW JAPAN RADIO CO.,LTD

TARGET : PSPICE

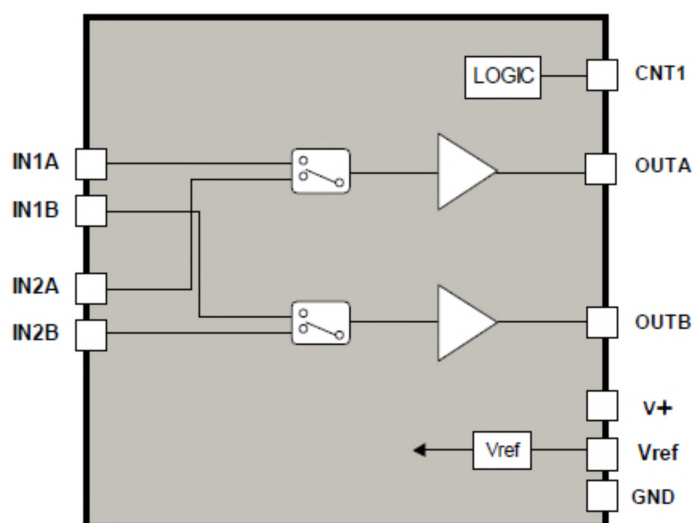


*New Japan Radio Co.,Ltd.*

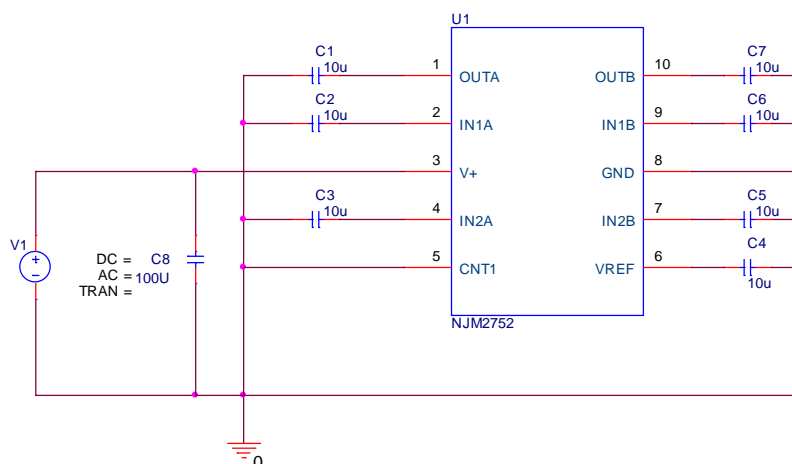
## Symbol



## Simple Equivalent Circuit



## ■Operating Current

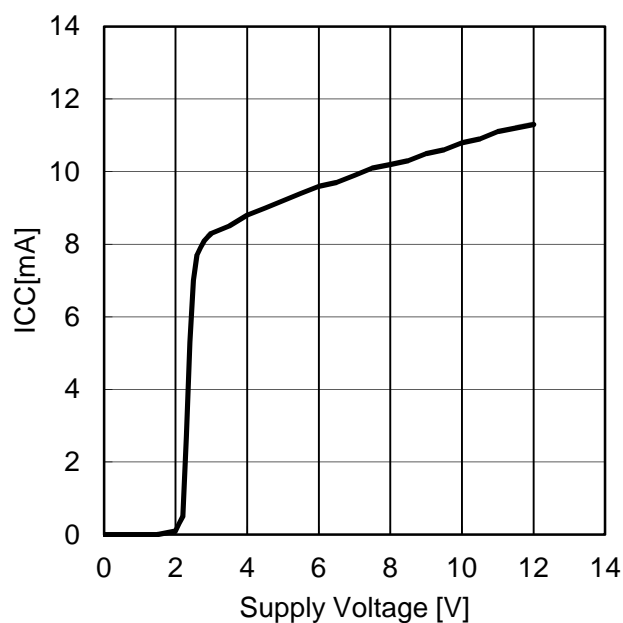


Simulation Circuit

Comparison Table

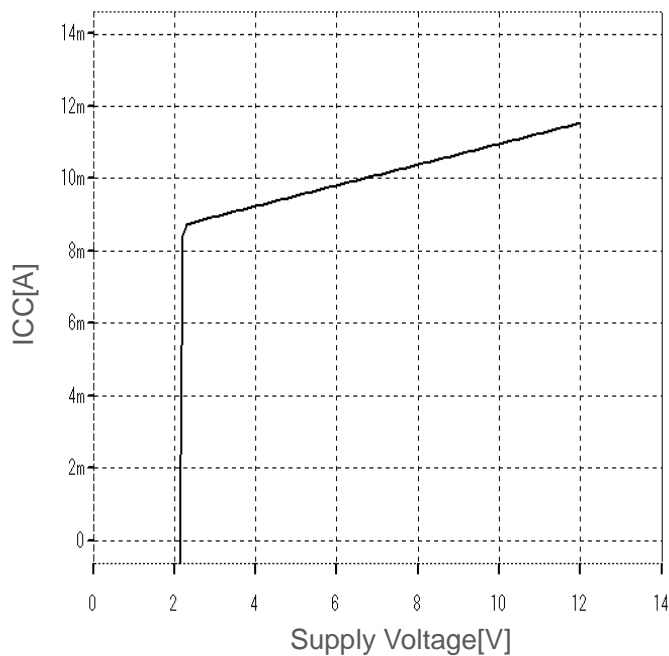
Operating Current [mA]	Condition	Data Sheet			Evaluation	Simulation	Error to Evaluation
		min	typ	max			
		-	10	15			
	No Signal	-	10	15	10.68	10.67	-0.1%

ICC vs Supply Voltage  
No signal



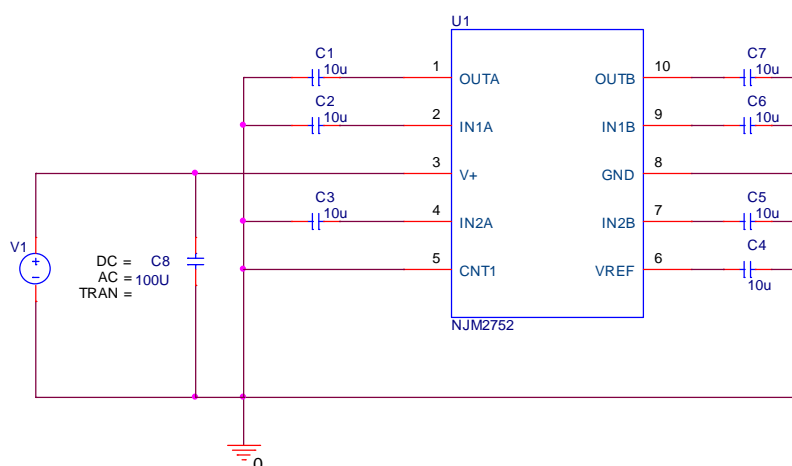
Evaluation Wave

ICC vs Supply Voltage  
No signal



Simulation Wave

## ■Reference Voltage



Simulation Circuit

Comparison Table

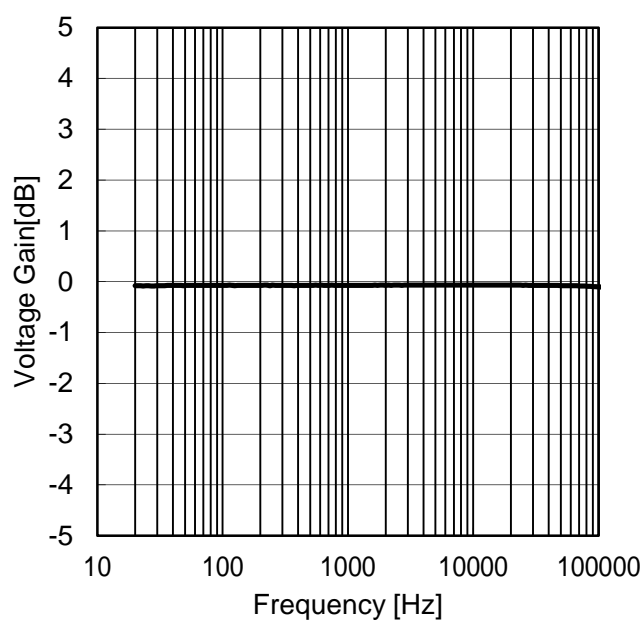
Reference Voltage [V]	Condition	Data Sheet			Evaluation	Simulation	Error to Evaluation
		min	typ	max			
		-	4.5	-	4.53	4.50	-0.6%



## Comparison Table

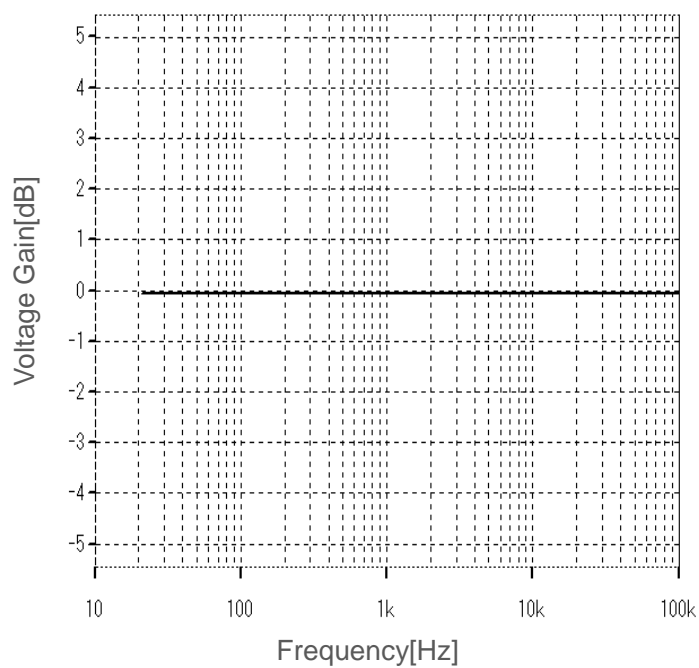
Date:2015-9-30

Gain vs Frequency  
V+=9V, I/O:INA1-OUTA



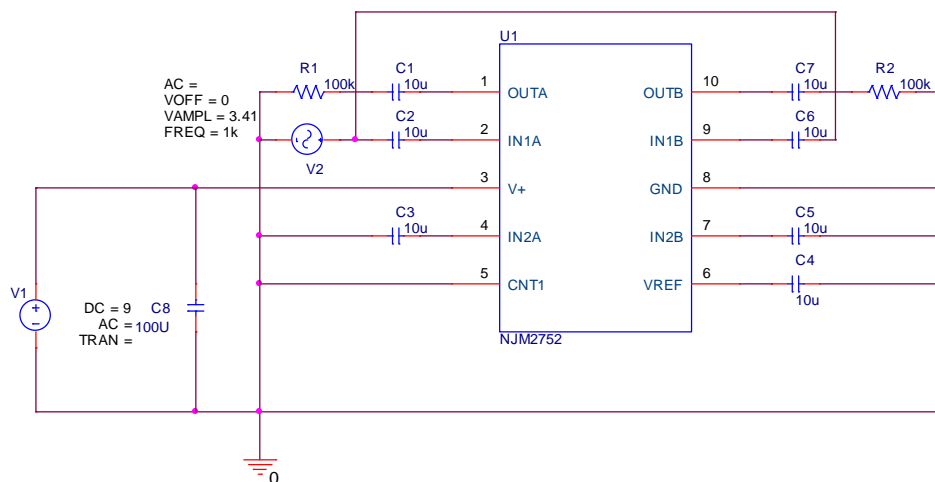
**Evaluation Wave**

Gain vs Frequency  
V+=9V, I/O:INA1-OUTA

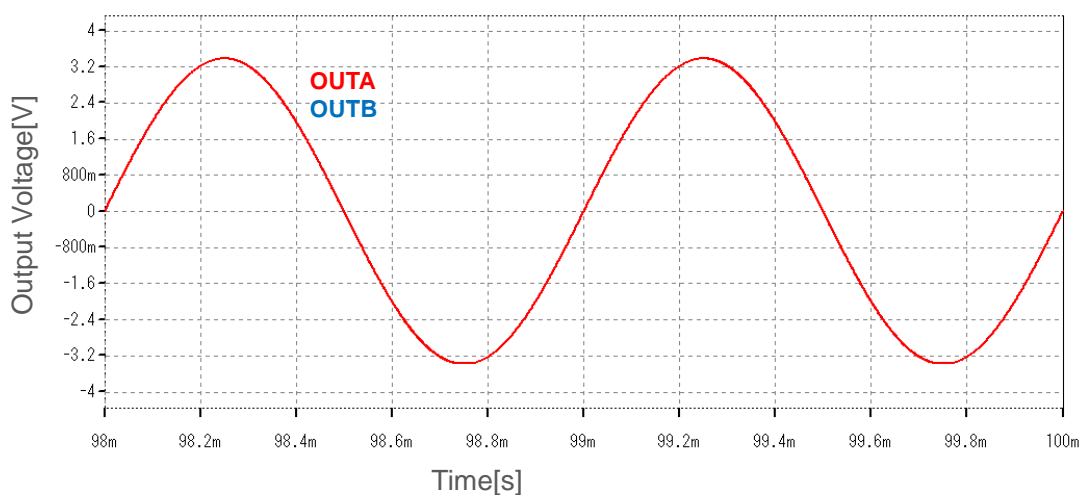


**Simulation Wave**

## ■Maximum Output Voltage



Simulation Circuit

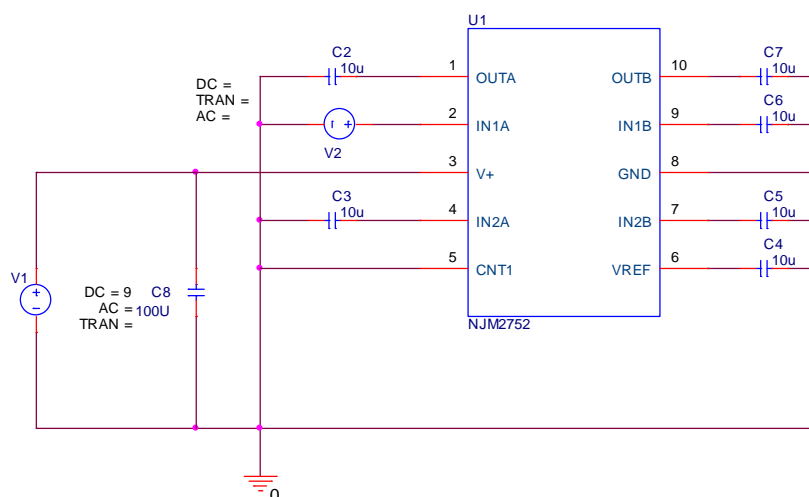


Simulation Wave

Comparison Table

Maximum output voltage [Vrms]	Condition	Data Sheet			Evaluation	Simulation	Error to Evaluation
		min	typ	max			
	f=1kHz THD=1%	2.0	2.5	-	2.49	2.39	-3.7%

## ■Input Impedance

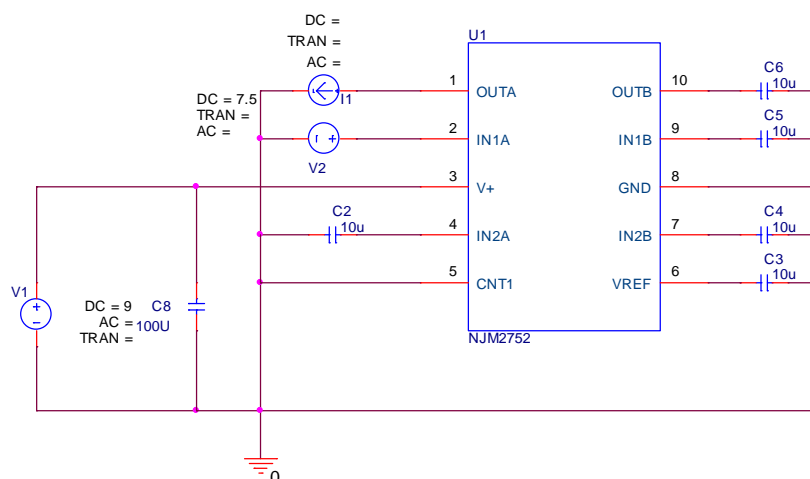


Simulation Circuit

Comparison Table

Input Impedance [kΩ]	Condition	Design	Evaluation	Simulation	Error to Evaluation
	-	100.6	100.4	100.6	0.3%

## ■Output Impedance



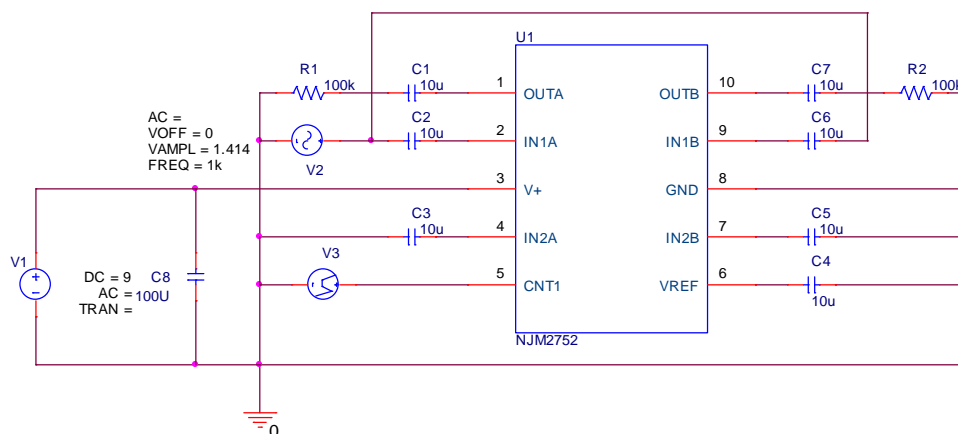
Simulation Circuit

Comparison Table

Output Impedance [kΩ]	Condition	Design	Evaluation	Simulation	Error to Evaluation
	-	45.0	49.1	45.0	-8.4%



## ■Switch On Level

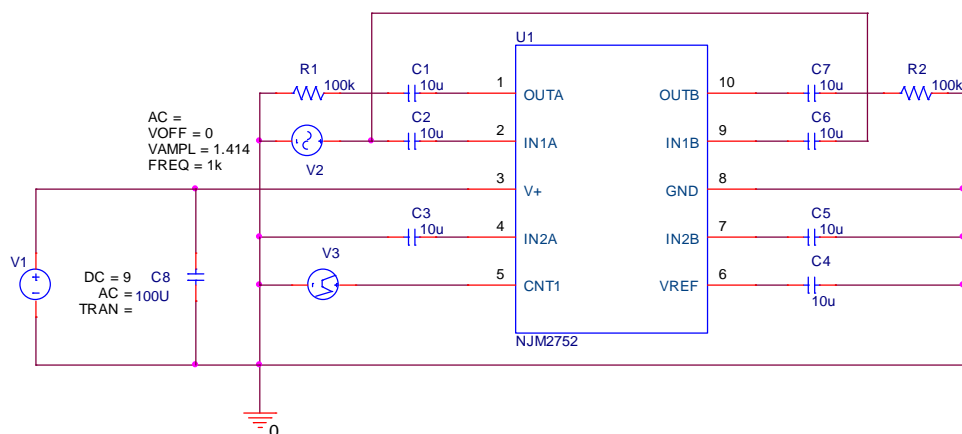


Simulation Circuit

Comparison Table

Switch On level [V]	Condition	Data Sheet			Evaluation	Simulation	Error to Evaluation
		min	typ	max			
-	-	2.4	-	-	1.82	1.83	0.7%

## ■Switch OFF Level



Simulation Circuit

Comparison Table

Switch Off Level [V]	Condition	Data Sheet			Evaluation	Simulation	Error to Evaluation
		min	typ	max			
-	-	-	-	0.5	1.13	1.13	0.6%