

Device Modeling Report

COMPONENTS:

ADJUSTABLE LOW DROPOUT VOLTAGE REGULATOR

PART NUMBER: NJM2887

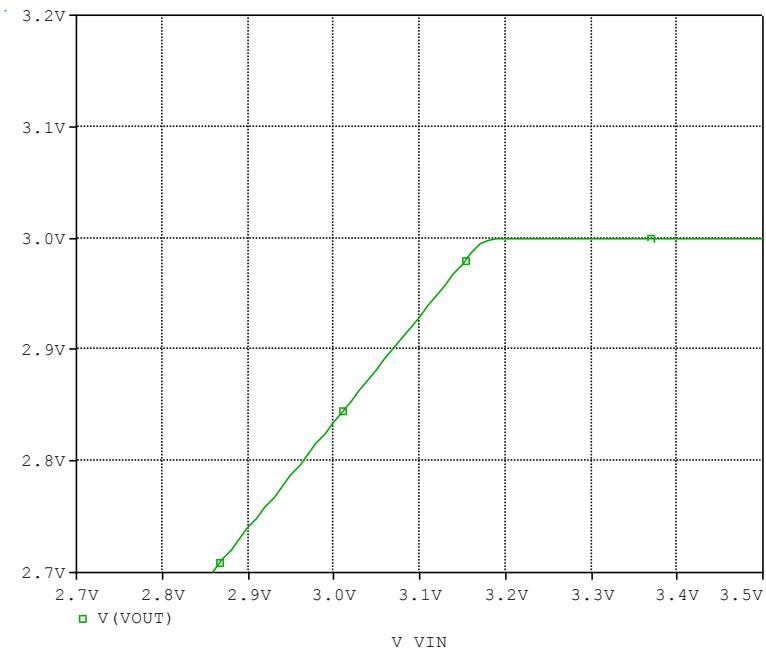
MANUFACTURER: NEW JAPAN RADIO



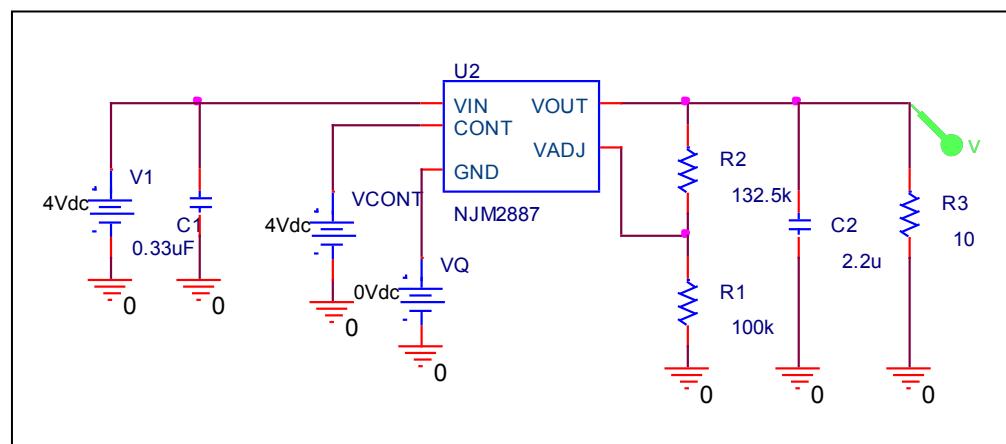
Bee Technologies Inc.

Dropout Voltage Characteristics

Circuit Simulation result



Evaluation circuit



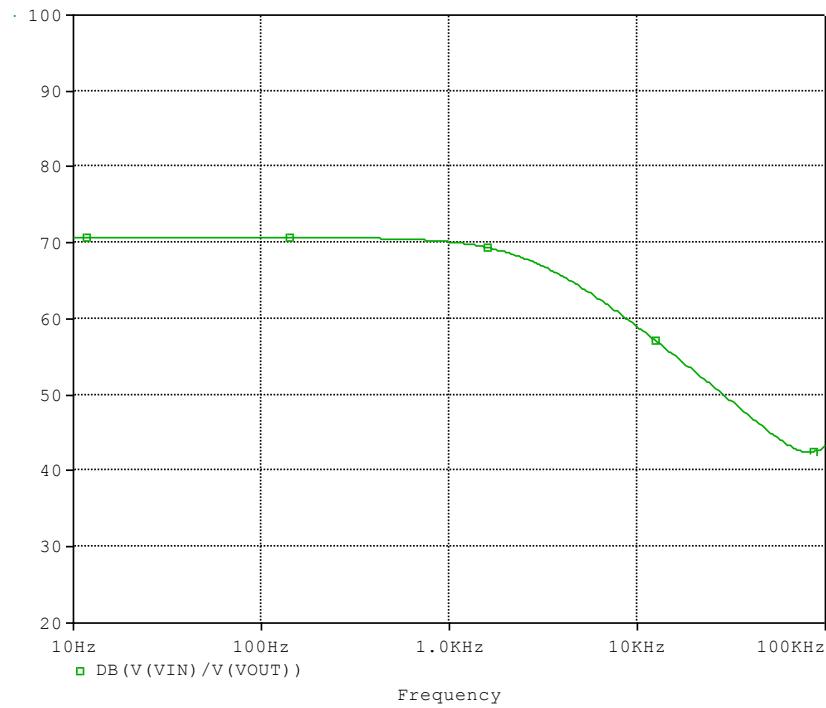
Simulation Result

Condition: R₁=100kΩ, R₂=132.5kΩ, C_o=2.2uF

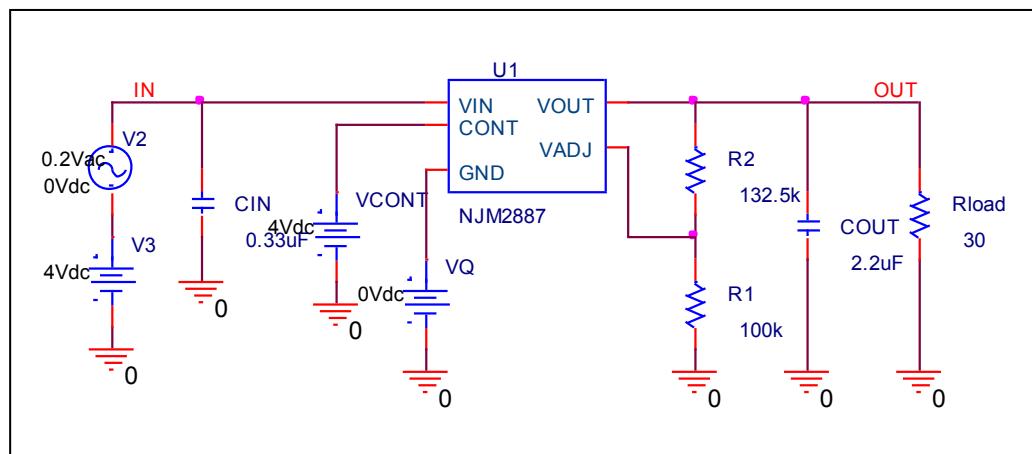
Condition: I _O =1mA	Measurement		Simulation		Error (%)
ΔV _{I-O}	180.000	mV	180.000	mV	0.000

Ripple Rejection (R•R) Characteristic

Circuit Simulation result



Evaluation circuit



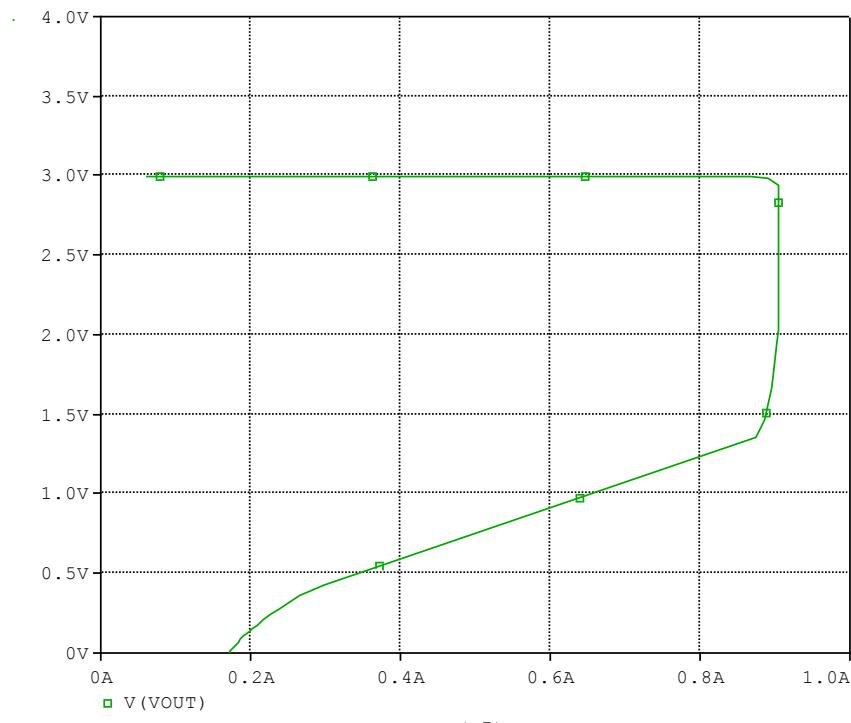
Simulation Result

Condition: f=1KHz, ein=200mVrms, io=10mA, VO=3.00V Version

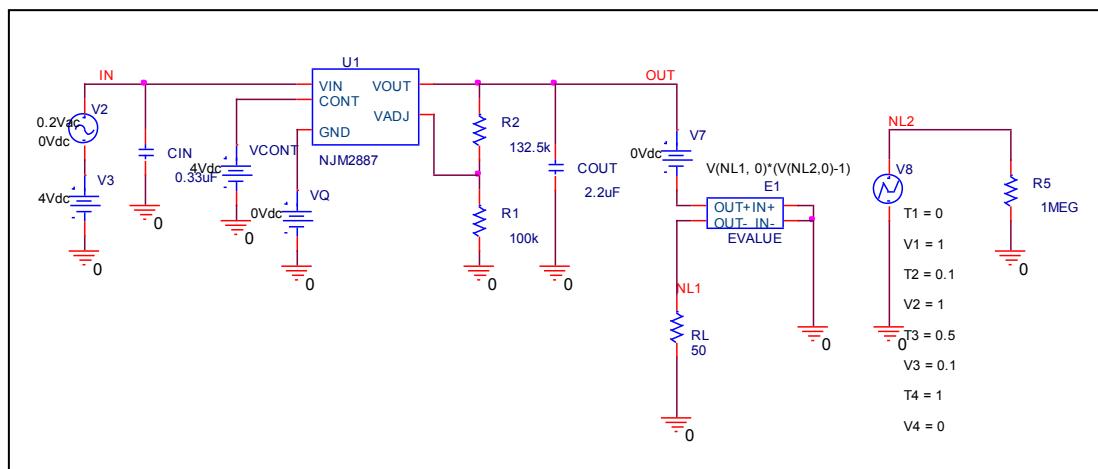
	Measurement	Simulation		Error (%)
R•R	70.000 dB	70.145 dB		0.207

Output Voltage vs. Output Current Characteristics

Circuit Simulation result



Evaluation circuit



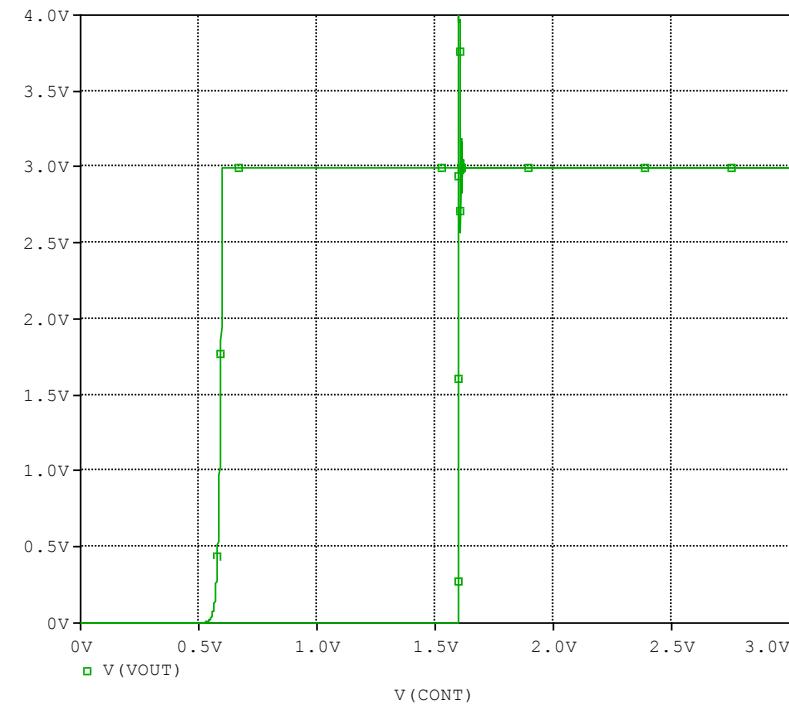
Simulation Result

Condition: $R_1=100\text{k}\Omega$, $R_2=132.5\text{k}\Omega$, $C_o=2.2\mu\text{F}$

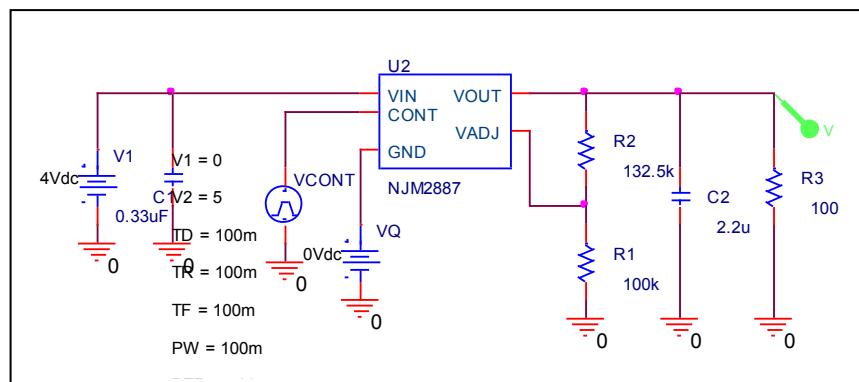
Condition: $V_{IN}=4\text{V}$	Measurement	Simulation	Error (%)
I_{osc}	170.000 mA	171.075 m Ω	0.632

Output Voltage vs. Control Voltage

Circuit Simulation result



Evaluation circuit



Simulation Result

Condition: $R_1=100k\Omega$, $R_2=132.5k\Omega$, $C_2=2.2\mu F$

	Measurement		Simulation		Error (%)
VCONT(ON)	1.600	V	1.600	V	0
VCONT(OFF)	0.600	V	0.600	V	0