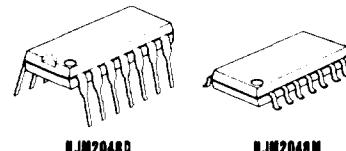


NJM2048

The NJM2048 is a two output switching circuit with oscillator, reference voltage, protection circuit and soft start function. The two outputs are well tracking and, 4.8V system is finely adjustable.

■ Package Outline**■ Absolute Maximum Ratings (Ta=25°C)**

Supply Voltage	V ⁺	20V
Power Dissipation	P _D (D-Type) (M-Type)	700mW 300mW
Operating Temperature Range	T _{opr}	-20~+75°C
Storage Temperature Range	T _{stg}	-40~+125°C

**■ Electrical Characteristics (Ta=25°C, V⁺=12V)**

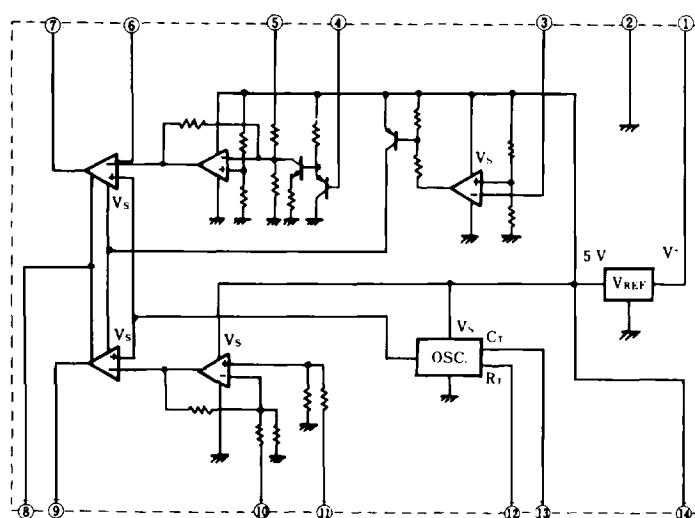
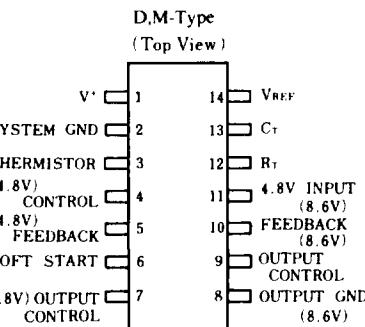
Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Supply Current	I _{CC}	Note 1	—	2.0	2.4	mA
Reference Voltage	V _{REF}		4.75	5.00	5.25	V
Average Temperature Coefficient of Reference Voltage	ΔV _{REF} /ΔT	Ta = -20~+75°C	—	—	80	ppm/°C
Reference Voltage Deviation	ΔV _{REF} -V _{CC}	V ⁺ =9~20V	—	—	30	mV
Oscillator Frequency	f _{osc}	R _T = 36kΩ, C _T = 1000pF	45	50	55	kHz
Protection Circuit Sensing Voltage	V _{SENSE}		180	200	220	mV
Soft Start	S.S.	C _S = 0.047μF	28	35	70	mSec
Output Voltage Adjustable Range	V _{adj}	V _{O1} =4.8V, I _{O1} =250mA	0.2	0.6	1.1	V
Output Voltage (8.6V System)	V _{O2}	V _{11PIN} = 4.8V, I _{O2} = 300mA	8.47	8.60	8.73	V

Note 1: Connected reference voltage to 3, 6, and 12 terminal

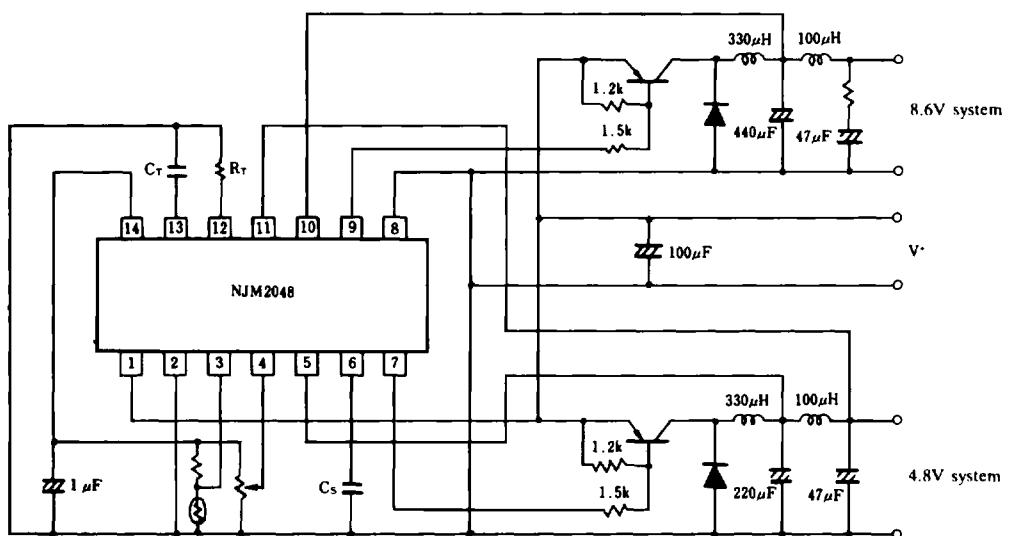
Connected GND to 2 and 8 terminal

Other terminal are open.

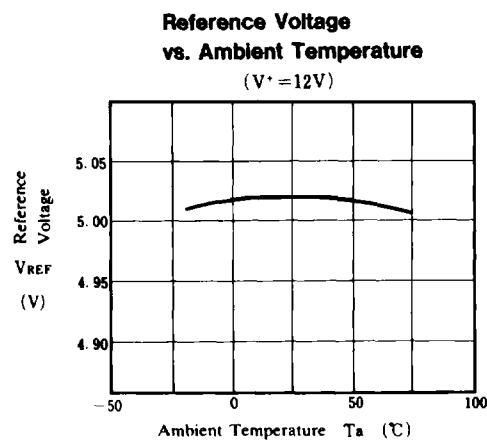
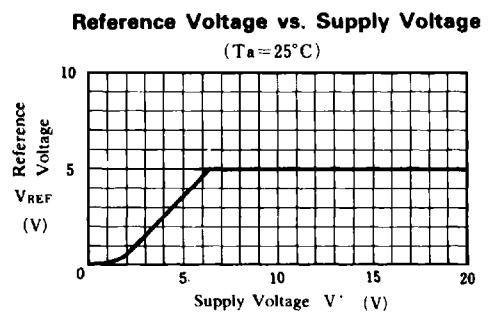
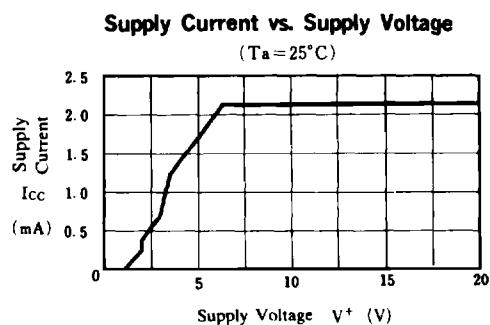
Note 2: The specified item shows the circuit shown in the measuring circuit.

■ Block Diagram**■ Connection Diagram**

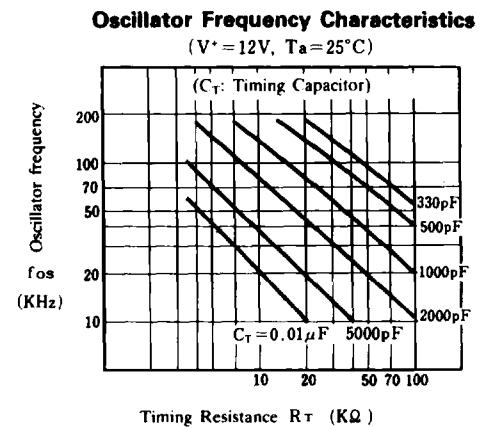
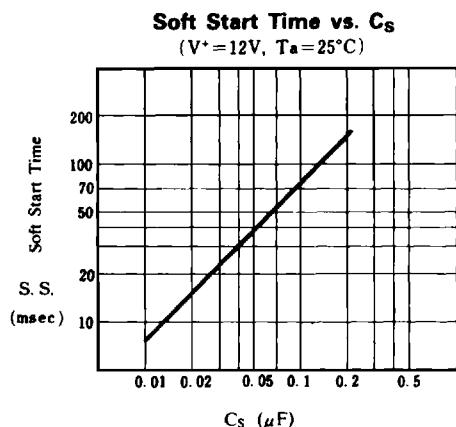
■ Typical Application



■ Typical Characteristics



■ Typical Characteristics



■ Test Circuit

