

## Simple Toaster Controller

### Features

- Operating voltage : 3.5~5.5V
- Few external components
- No start to turn on Relay without oscillation.
- TO94-4 package

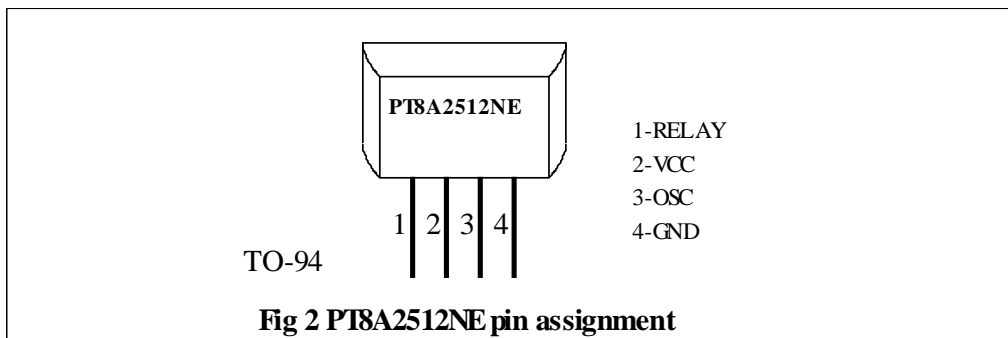
### Description

The PT8A2512 is a CMOS LSI chip designed for simple toaster. It provides low cost solution for toaster. The chip is enclosed in a 4 pin TO-94.

### Applications

- Toaster.

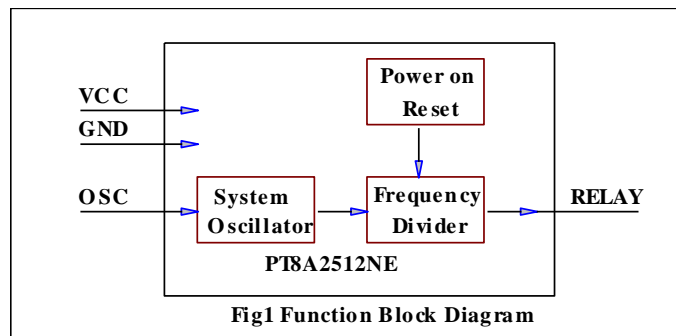
### Pin Assignment



### Pin Description

Name	Pin No.	Type	Description
RELAY	1	O	Relay control output, high active
VCC	2	-	Power supply
OSC	3	I/O	Input/output of RC oscillator
GND	4	-	GND

### Block Diagram



## Maximum Rating

Storage Temperature.....	- 25°C to +85°C
Supply Voltage to Ground Potential (Inputs & V <sub>CC</sub> only).....	- 0.5 to +5.5V
Supply Voltage to Ground Potential (Outputs only) .....	- 0.5 to +5.5V
DC Input Voltage .....	- 0.5V to +5.5V
Output Current .....	20mA
Power Dissipation.....	500mW

**Note:**

Stresses greater than those listed under AXIMUM RATINGS may cause permanent damage to the device. This is a stress rating only and functional operation of the device at these or any other conditions above those indicated in the operational sections of this specification is not implied. Exposure to absolute maximum rating conditions for extended periods may affect reliability.

## Recommended Operating Conditions

Symbol	Pin	Description	Min	Typical	Max	Unit
V <sub>CC</sub>	V <sub>CC</sub>	Supply voltage	3.5	4	5.5	V
T <sub>A</sub>	-	Operation Temperature	0	25	85	°C

## DC Electrical Characteristics

(T<sub>A</sub> = 0 ~ 85 °C, unless otherwise noted)

Symbol	Description	Test Conditions	Min	Typical	Max	Unit
I <sub>OH</sub>	Output source current	V <sub>CC</sub> = 3.5V, V <sub>OH</sub> = 2.0V	-12	-	-	mA
I <sub>OL</sub>	Output sink current	V <sub>CC</sub> = 3.5V, V <sub>OL</sub> = 0.5V	0.5	-	-	mA
F <sub>OSC</sub>	Frequency of oscillator	V <sub>CC</sub> = 4.0V R <sub>osc</sub> = 56K, C <sub>osc</sub> = 223	952	1024	1096	Hz

## AC Electrical Characteristics

(T<sub>A</sub> = 0 ~ 85 °C, unless otherwise noted)

Symbol	Description	Test Conditions	Min	Typical	Max	Unit
I <sub>CC</sub>	Current consumption	V <sub>CC</sub> = 4.0V R <sub>osc</sub> = 56K, C <sub>osc</sub> = 223	-	-	100	uA

## Function Description

### System oscillator and Frequency divider

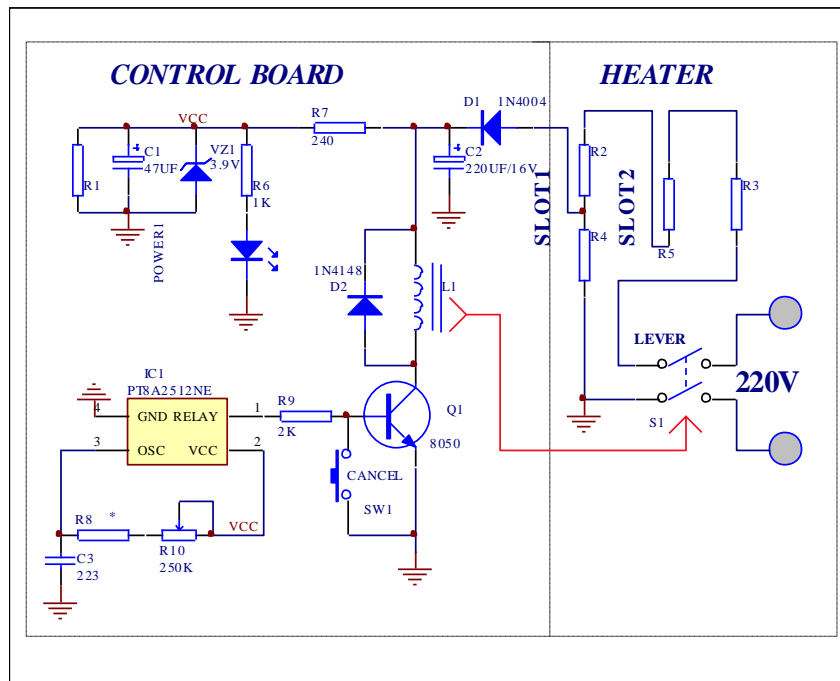
It provides one-stop timer for Toaster after power on.

In general,  $F_{osc}=1\text{KHz}$ , RELAY will shut down after 30s.

### Power on reset

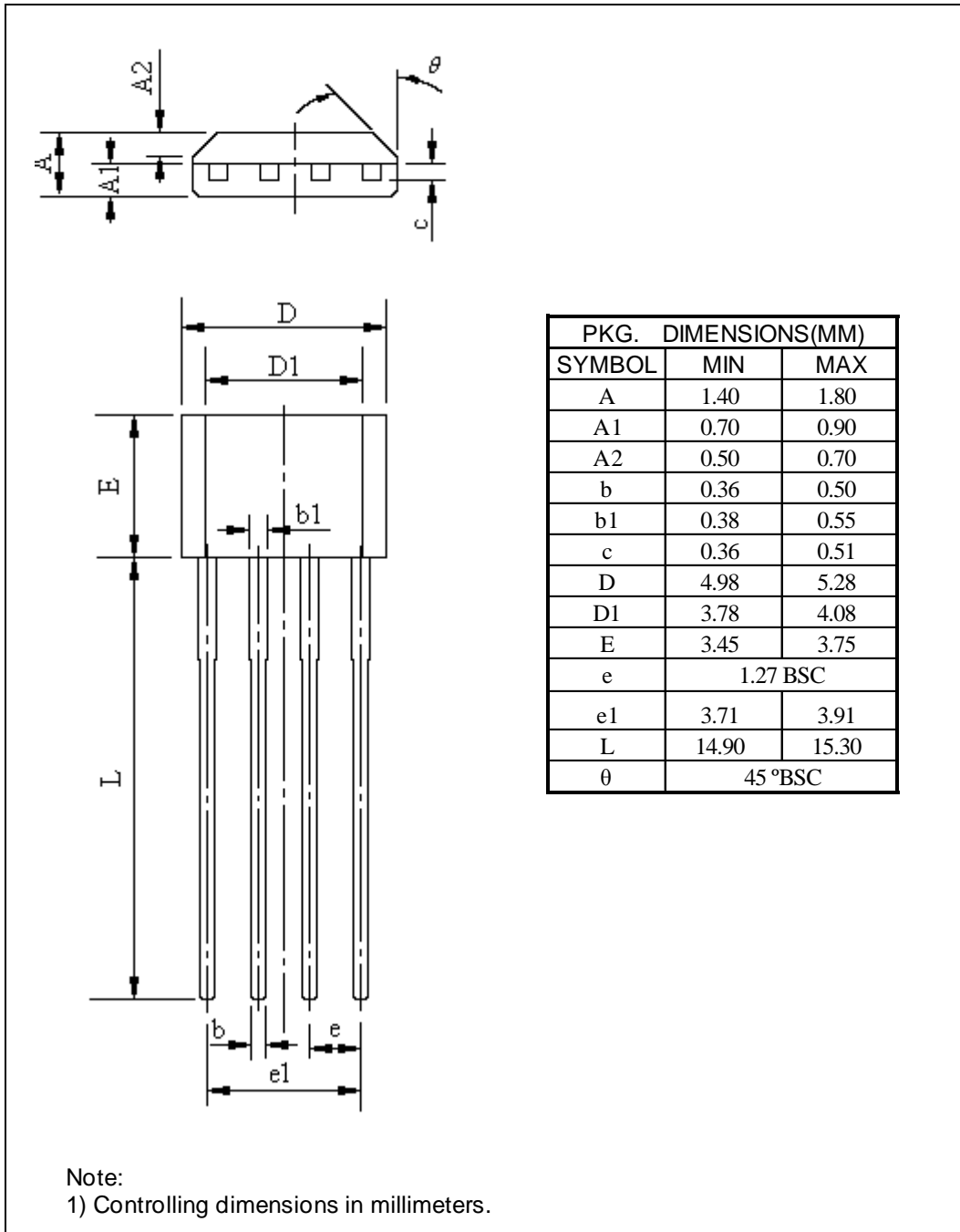
Used to reset internal logic

## Application Circuit



## Mechanical Information

TO94-4



## Ordering Information

Part Number	Package Code	Package
PT8A2512NE	N	Lead free TO94-4

**Note:**

- E = Pb-free
- Adding X Suffix= Tape/Reel

Pericom Semiconductor Corporation • 1-800-435-2336 • [www.pericom.com](http://www.pericom.com)

Pericom Technology Incorporation reserves the right to make changes to its products or specifications at any time, without notice, in order to improve design or performance and to supply the best possible product. Pericom Technology does not assume any responsibility for use of any circuitry described other than the circuitry embodied in Pericom Technology product. The company makes no representations that circuitry described herein is free from patent infringement or other rights, of Pericom.