

Simple Universal Timer

Features

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

Description

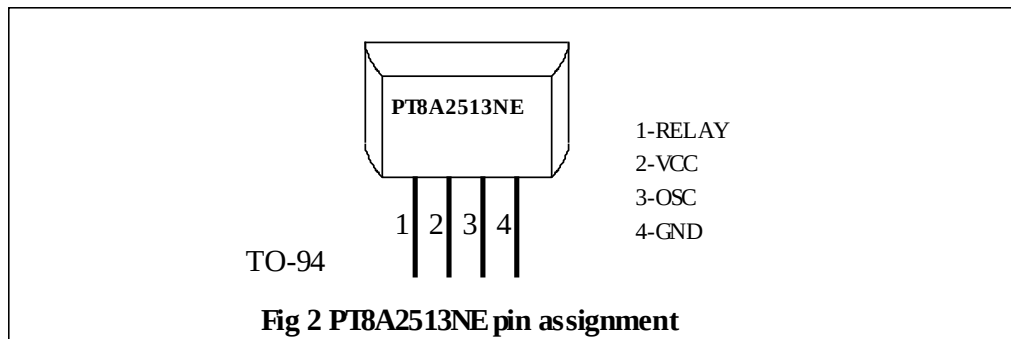
PT8A2513 is CMOS LSI chip designed as a universal timer. It can handle normal timing control.

PT8A2513NE provides simple universal timer for various equipments, the chip is enclosed in a 4-pin TO-94

Applications

- Electronic Iron, Cooker, Oven, Fryer and others.

Pin Configuration



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

Maximum Rating

Storage Temperature.....	- 25°C to +85°C
Supply Voltage to Ground Potential (Inputs & V _{CC} 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 _{CC}	V _{CC}	Supply voltage	3.5	4	5.5	V
T _A	-	Operation Temperature	0	25	85	°C

DC Electrical Characteristics

(T_A = 0 ~ 85°C, unless otherwise noted)

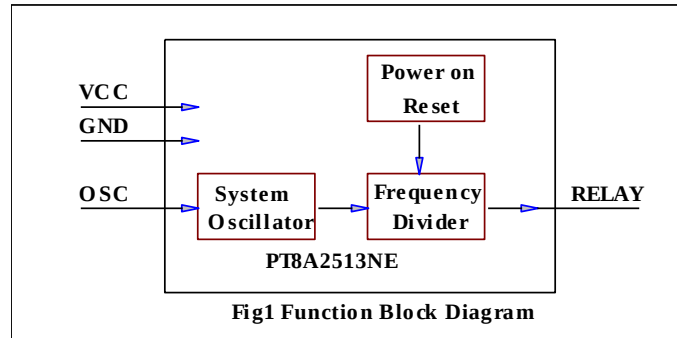
Symbol	Description	Test Conditions	Min	Typical	Max	Unit
IOH	Output source current	V _{CC} = 3.5V, VOH=2.0V	-12	-	-	mA
IOL	Output sink current	V _{CC} = 3.5V, VOL=0.5V	0.5	-	-	mA
FOSC	Frequency of oscillator	V _{CC} = 4.0V R _{osc} =56K, C _{osc} =223	952	1024	1096	Hz

AC Electrical Characteristics

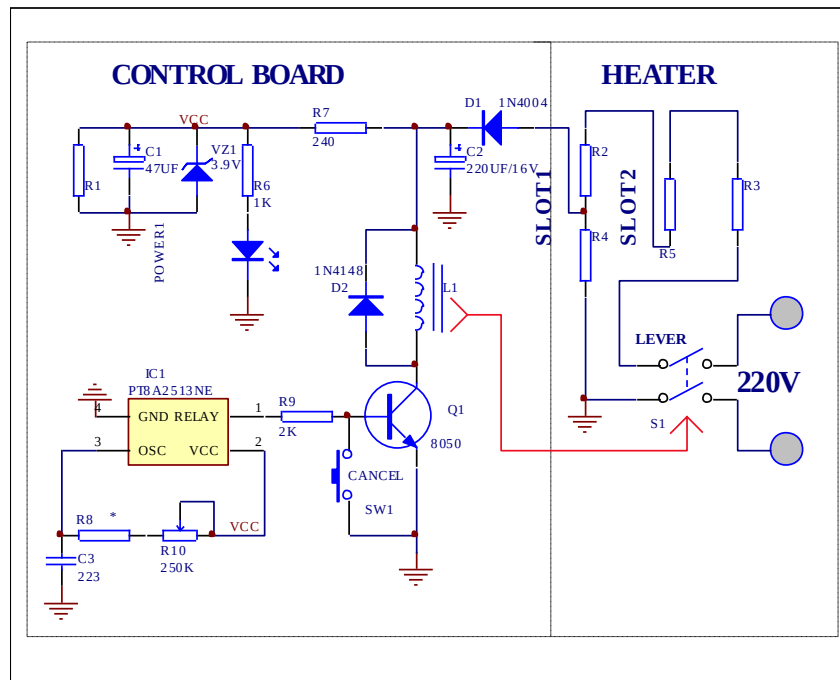
(T_A = 0 ~ 85°C, unless otherwise noted)

Symbol	Description	Test Conditions	Min	Typical	Max	Unit
I _{CC}	Current consumption	V _{CC} = 4.0V R _{osc} =56K, C _{osc} =223	-	-	100	μA

Block Diagram

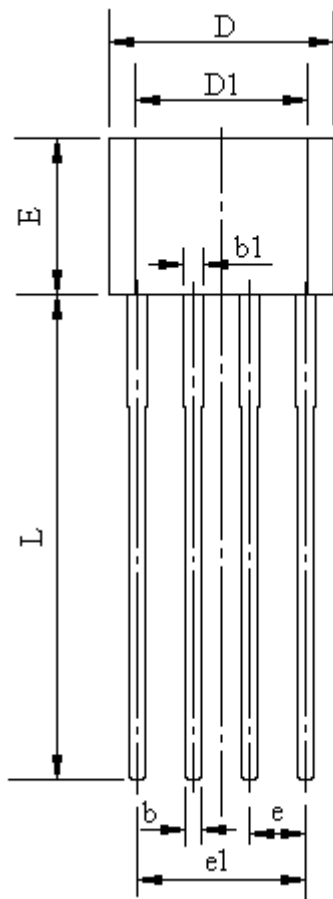
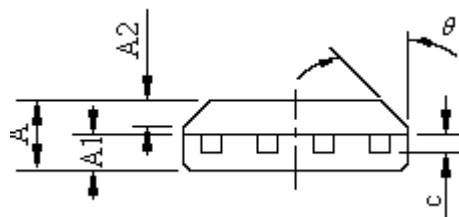


Application Circuit



Mechanical Information

TO94-4



PKG. DIMENSIONS(MM)		
SYMBOL	MIN	MAX
A	1.40	1.80
A1	0.70	0.90
A2	0.50	0.70
b	0.36	0.50
b1	0.38	0.55
c	0.36	0.51
D	4.98	5.28
D1	3.78	4.08
E	3.45	3.75
e	1.27 BSC	
e1	3.71	3.91
L	14.90	15.30
θ	45° BSC	

Note:
 1) Controlling dimensions in millimeters.

Ordering Information

Part Number	Package Code	Package
PT8A2513NE	N	Lead free TO94-4

Note:

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

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