

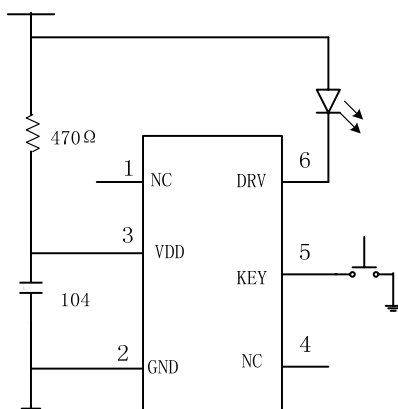
Features

- ◆ 3 Functions: 100% Brightness, 25% Brightness, 8Hz Twinkling
- ◆ Supply Voltage: 2.0V to 5.0V
- ◆ Standby Current: <1uA
- ◆ Twinkling Frequency: 8HZ
- ◆ High Efficiency up to 95%
- ◆ Thermal Protection: 160°C

Application

- ◆ LED Head Lighting
- ◆ LED Torch

Typical Application Circuit



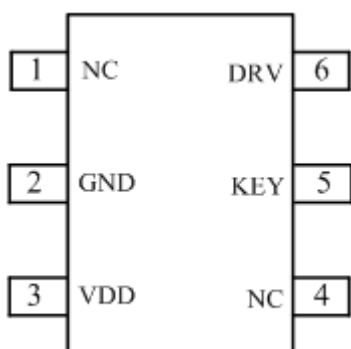
General Description

The PT104 is a high efficiency, 3W white LED Driver. It features 3 functions: 100% brightness, 25% brightness, 8Hz twinkling. It required few external components for operation to save the board space and cost.

The PT104 can operate from 2.0v to 5.5V and can capable of driving 3W white LED. The MA30B has thermal protection circuit.

The PT104 is available in SOT23-6 PB-Free package.

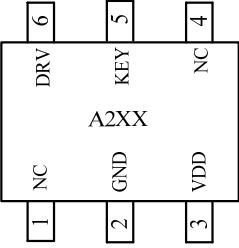
Pin Description



No	Name	Description
1,4	NC	No Connection
2	GND	Power Ground
3	VDD	Power Supply
5	KEY	Key Input
6	DRV	Output

Ordering Information

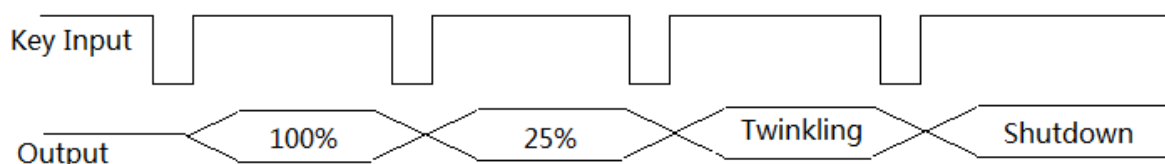
Part ID	Package	Mark	Packing
PT101	SOT23-6L	A2XX	3000PCS /TAPE



Electrical Characteristics (V_{DD} =5V, T =25°C, unless otherwise noted.)

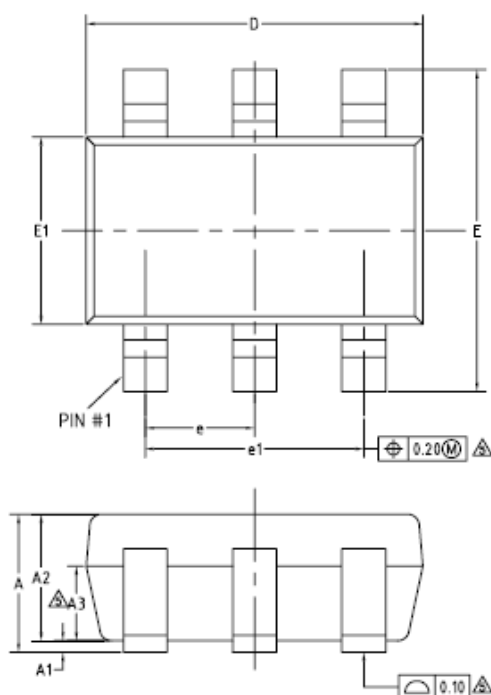
Symbol	Parameter	Test Condition	Min	Typ	Max	Unit
VDD	Supply Voltage	VDD	2.0		5.0	V
VIH	KEY Input High Voltage	VDD =5.0V	2.0			V
VIL	KEY Input Low Voltage	VDD =5.0V			1	V
IO	Output Current		1.5		2	A
IQ	Standby Current				1	uA
Rp	Pull High Resistor	KEY Input		50		KΩ
OTP	Thermal Protection			160		°C
OTH				30		
TD	Key Tingle Time	KEY Input, VDD =5V		50		mS

Output Waveform



Outline Dimension

SOT23-6L



COMMON DIMENSIONS
 (UNITS OF MEASURE=MILLIMETER)

SYMBOL	MIN	NOM	MAX
A	—	—	1.25
A1	0	—	0.15
A2	1.00	1.10	1.20
A3	0.60	0.65	0.70
b	0.36	—	0.50
b1	0.36	0.38	0.45
c	0.14	—	0.20
c1	0.14	0.15	0.16
D	2.826	2.926	3.026
E	2.60	2.80	3.00
E1	1.526	1.626	1.726
e	0.90	0.95	1.00
e1	1.80	1.90	2.00
L	0.35	0.45	0.60
L1	0.59REF		
L2	0.25BSC		
R	0.10	—	—
R1	0.10	—	0.20
θ	0°	—	8°
θ 1	3°	5°	7°
θ 2	6°	—	14°