

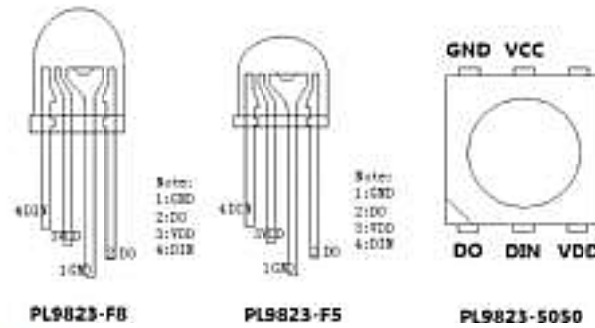
# PL9823

## Shift register programmable RGB Lamp

### Feature

- Power supply:DC4.5V~6V
- Integrate RGB LEDs with Control IC at same body
- Support 256 dimming level for each color
- Internal frequency up to 800KHz
- Single wire signal transmission(clock and Date)
- To be controlled by external MCU to achieve target image
- Available on  $\phi$  5mm,  $\phi$  8mm and SMD5050 Package type
- No external component required

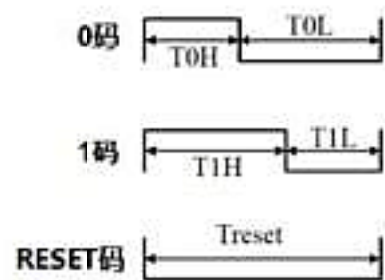
### Package Type



### Package selection

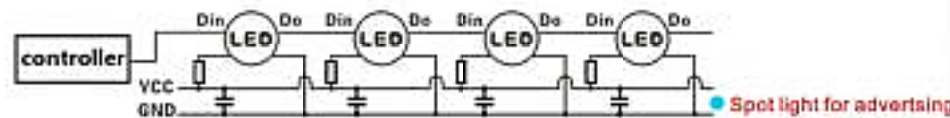
PART NO.	Package
PL9823-F8	$\phi$ 8mm
PL9823-F5	$\phi$ 5mm
PL9823-5050	SMD5050

### Timing waveform



Name	Description	Typically	Allowable error
T0H	0 code,high level time	0.35us	$\pm$ 150ns
T1H	1 code,high level time	1.36us	$\pm$ 150ns
T0L	0 code,low level time	1.36us	$\pm$ 150ns
T1L	1 code,low level time	0.35us	$\pm$ 150ns
RES	RESET code	50us	

### Application note



### Typical Application



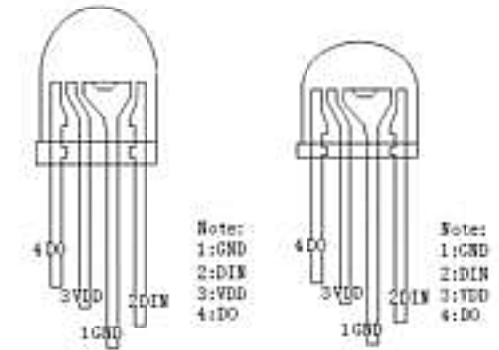
# PL9834

## Voltage step down programmable RGB Lamp

### Feature

- Integrate RGB LEDs with Control IC at same body
- Support 256 dimming level for each color
- Voltage step down to support serial connection
- AC direct Input with bridge diode
- Internal frequency up to 400KHz
- Single wire signal transmission (clock and Date)
- To be controlled by external MCU to achieve target image
- Available on  $\phi$  5mm,  $\phi$  8mm and package type
- No external component required

### Package Type

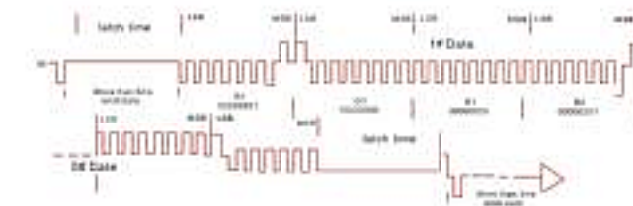
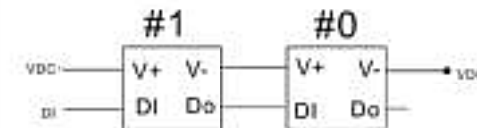


P9834-F8 P9834-F5

### Package selection

PART NO.	Package
P9834-F8	$\phi$ 8mm
P9834-F5	$\phi$ 5mm

### Serial connect



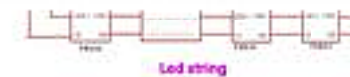
### Application Note

Die LEDs sind Signal-kompatibel zu WS2812. Bei der Programmierung ist zu beachten, dass ROT und GRÜN im Vergleich mit den WS2812 vertauscht sind.

Composition of 24bit data:

R7	R6	R5	R4	R3	R2	R1	R0	G7	G6	G5	G4	G3	G2	G1	G0	B7	B6	B5	B4	B3	B2	B1	B0
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Note: Follow the order of RGB to sent data and the high bit sent at first.



- 220V AC power input,serial connection to use 64PCS lamps
- 110V AC power input,serial connection to use 32PCS lamps

