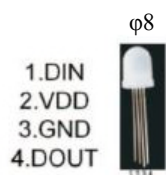


Shift register programmable RGB Lamp

■Features

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

■Package Type

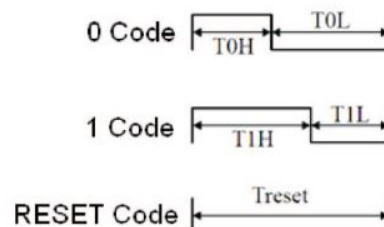


No.	Symbol	Pin name	Description
1	DIN	Data input	Control data signal input
2	VDD	Power supply	Power pin +
3	GND	Ground	Signal ground and power ground
4	DOUT	Data output	Output control data signal

■Data transfer time (TH + TL = 1.25 μs ± 600ns)

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

■Timing waveform



■Maximum Rating (Ta=25°C, Vss=0V)

Item	Symbol	Value	Unit
Power supply voltage	V _{DD}	+3.5~+5.3	V
Logic input voltage	V _I	-0.5~V _{DD} +0.5	V
Operating Temperature	T _{opt}	-25~+80	°C
Storage Temperature	T _{stg}	-55~+150	°C

■LED parameters

Color	BIN number	Wavelength(nm)	Brightness(mcd)	Voltage(V)
Blue	1	465-467	180-200	3.0-3.2
Green	1	522-525	660-720	2.8-3.0
Red	1	620-625	390-420	1.9-2.1