

## PIN function

NO.	Symbol	Function description
1	VDD	Power supply LED
2	DOUT	Control data signal output
3	VSS	Ground
4	DIN	Control data signal input

## Absolute Maximum Ratings

Parameter	Symbol	Ratings	Unit
Power supply voltage	V <sub>DD</sub>	+3.5~+5.3	V
Input voltage	V <sub>I</sub>	-0.5~V <sub>DD</sub> +0.5	V
Operation junction temperature	T <sub>opt</sub>	-25~+80	
Storage temperature range	T <sub>stg</sub>	-40~+105	

**Electrical Characteristics**(T<sub>A</sub>=-20~+70,V<sub>DD</sub>=4.5~5.5V,V<sub>SS</sub>=0V,unless otherwise specified)

Parameter	Symbol	conditions	Min	Tpy	Max	Unit
Input current	I <sub>I</sub>	V <sub>I</sub> =V <sub>DD</sub> /V <sub>SS</sub>	—	—	±1	μA
Input voltage level	V <sub>IH</sub>	D <sub>IN</sub> /SET	0.7V <sub>DD</sub>	—	—	V
	V <sub>IL</sub>	D <sub>IN</sub> /SET	—	—	0.3 V <sub>DD</sub>	V
Hysteresis voltage	V <sub>H</sub>	D <sub>IN</sub> /SET	—	0.35	—	V

**Switching characteristics**(T<sub>A</sub>=-20~+70,V<sub>DD</sub>=4.5~5.5V,V<sub>SS</sub>=0V,unless otherwise specified)

Parameter	Symbol	Condition	Min	Tpy	Max	Unit
Transmission delay time	t <sub>PLZ</sub>	CL=15pF,DIN→	—	—	300	ns
		DOUT,RL=10KΩ	—	—	—	—
Fall time	t <sub>THZ</sub>	CL=300pF,OUTR/OUTG/OUTB	—	—	120	μs
Input capacity	C <sub>I</sub>	—	—	—	15	pF

## RGB IC characteristic parameter

Emitting color	Model	Wavelength(nm)	Luminous intensity(mcd)	Voltage(V)
Red	13CBAUP	620-625	390-420	2.0-2.2
Green	13CGAUP	522-525	660-720	3.0-3.4
Blue	10R1MUX	465-467	180-200	3.0-3.4

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

T0H	0 code ,high voltage time	0.4us	±150ns
T1H	1 code ,high voltage time	0.8us	±150ns
T0L	0 code , low voltage time	0.85us	±150ns
T1L	1 code ,low voltage time	0.45us	±150ns
RES	low voltage time	Above 50μs	