

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 _{DD}	+3.5~+5.3	V
Input voltage	V _I	-0.5~V _{DD} +0.5	V
Operation junction temperature	T _{opt}	-25~+80	
Storage temperature range	T _{stg}	-40~+105	

Electrical Characteristics(T_A=-20~+70,V_{DD}=4.5~5.5V,V_{SS}=0V,unless otherwise specified)

Parameter	Symbol	conditions	Min	Tpy	Max	Unit
Input current	I _I	V _I =V _{DD} /V _{SS}	—	—	±1	μA
Input voltage level	V _{IH}	D _{IN} /SET	0.7V _{DD}	—	—	V
	V _{IL}	D _{IN} /SET	—	—	0.3 V _{DD}	V
Hysteresis voltage	V _H	D _{IN} /SET	—	0.35	—	V

Switching characteristics(T_A=-20~+70,V_{DD}=4.5~5.5V,V_{SS}=0V,unless otherwise specified)

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