

Parameter of Product

LC-S5050-04004-RGBY-000

Detail: 5.4x5.0x1.6mm Top SMD

Date : 2014-11-15

Formal Specification



Shenzhen LED COLOR opto electronic CO.Ltd

LC-S5050-04004-RGBY-000

Description

Features

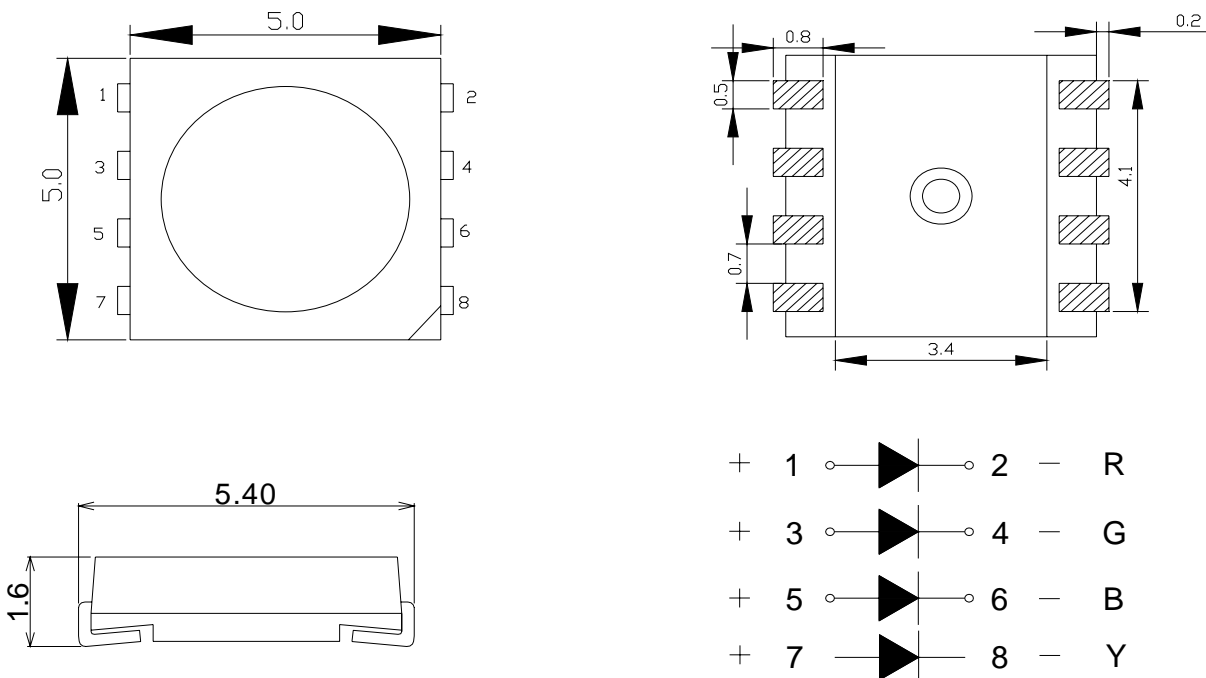
Extremely wide viewing angle
Suitable for all SMT assembly and solder process.
Available on tape and reel

Applications

Optical indicator
Indoor lighting
Interior automotive lighting
Backlight for LCD, switch and Symbol, display
Article lamp
Advertisement

Package Dimensions(

Recommended Soldering PATTERN



Notes:

1. All dimension units are millimeters. (
2. All dimension tolerance is ± 0.15 mm unless otherwise noted.(

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4. Electrical / Optical Characteristics at Ta=25°C

(Thermal Pad Temperature @25°C)

Parameter(SYMBOL	TESTCONDITIONS	UNIT	MIN	TYP	MAX	
Forward Voltage	Vf	If=4*20 mA	V	1.8	3.2	3.4	
Reverse Current	Ir	Vr=5V	μ A	-	-	5	
Viewing Angle	2 θ 1/2	If=4*20 mA	deg	-	120	-	
Color Rendering Index()	RA	If=4*20 mA	-	70	80	90	
Dominant Wavelength	R	Wd	If=4*20 mA	nm	620	625	630
	G				515	520	525
	B				460	465	470
	Y				585	590	595
Luminous Flux ()	R	Φv	If=4*20 mA	lm	2	-	3
	G				6	-	7
	B				1	-	2
	Y				2	-	3

1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

2.the above luminous intensity measurement allowance tolerance ±10%.

3.The above luminous flux intensity measurement allowance tolerance ± 0.5Lm.

5. Absolute Maximum Ratings at Ta=25°C

(Thermal Pad Temperature @25°C)

Parameter	SYMBOL	ABSOLUTE MAXIMUM RATING	UNIT
D.C Forward Current	If	4*20	mA
Pulse Forward Current	Ifp	30	mA
Reverse Voltage	Vr	5	V
Power Dissipation	Pd	4x0.065	W
Operating Temperature	Topr	-25~+85	°C
Storage Temperature	Tstg	- 40~+100	°C
Soldering Temperature (Reflow) (Tsld	max.260 < 5 sec	°C

6. Luminous Flux Rank

Test Current 4*20mA

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	RED		GREEN		Blue		Yellow	
Luminous Flux Rank	C	D	D	E1	B	C	C	D
Luminous Flux (lm)	2-3	3-4	3-4	4-5	1-2	2-3	2-3	3-4

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7. Forward Voltage Rank

Test Current 4*20mA

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Rank (等级)	V1	V2	V3	V4	V5	V6	V7	V8
Voltage (电压)	1.8-2.0V	2.0-2.2V	2.2-2.4V	2.4-2.6V	2.6-2.8V	2.8-3.0V	3.0-3.2V	3.2-3.4V

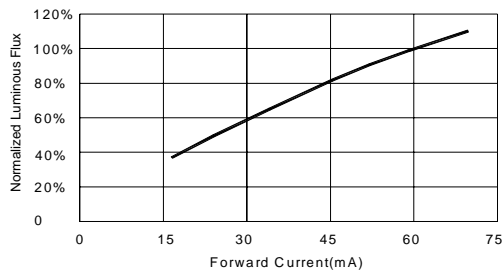
8. Dominant Wavelength Rank

Test Current 4*20mA

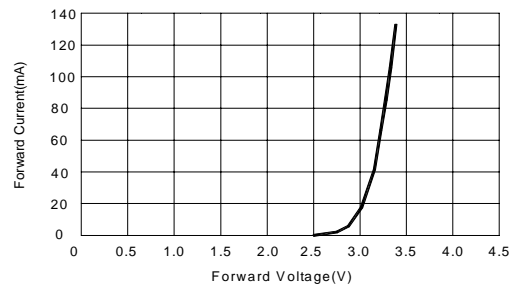
	Red		Green		Blue		Yellow	
Dominant Wavelength Rank	HR1	HR2	PG2	PG3	BL5	BL6	YL7	YL8
Dominant Wavelength(nm)	620-625	625-630	515-520	520-525	460-465	465-470	585-590	590-595

9. Typical optical characteristics curves

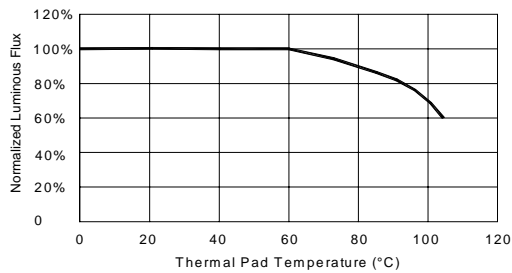
Forward Current vs. Typical Relative Luminous Flux



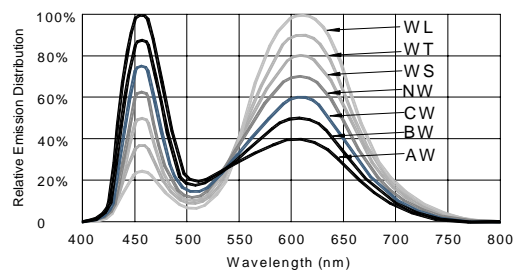
Forward Voltage vs. Forward Current



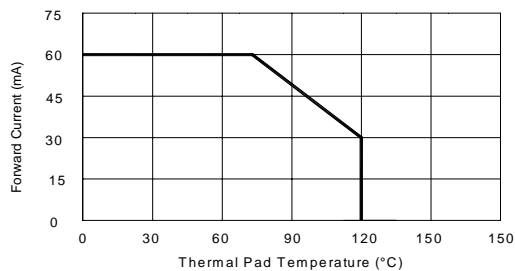
Thermal Pad Temperature vs. Relative Light Output



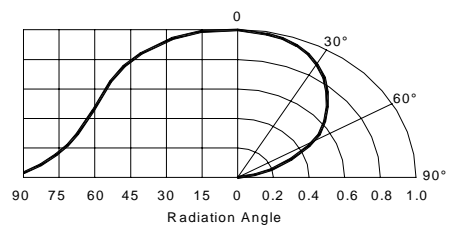
Wavelength Characteristics



Thermal Pad Temperature vs. Forward Current



Typical Radiation Pattern 120°



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10. Packaging Standard:

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