

**CHIP LED 0805 Series Data Sheet**

**SOL-0805C006-XX**



**SOL-0805C006-XX**

**White**

## ➤ Features:

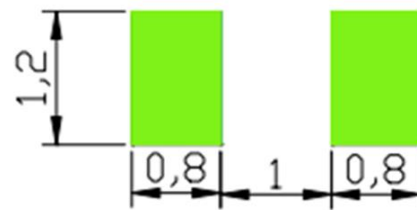
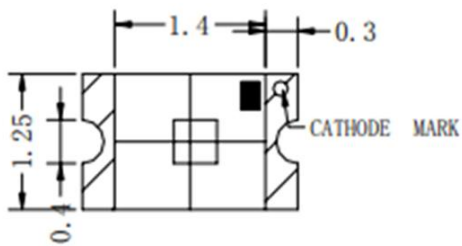
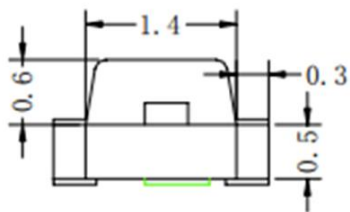
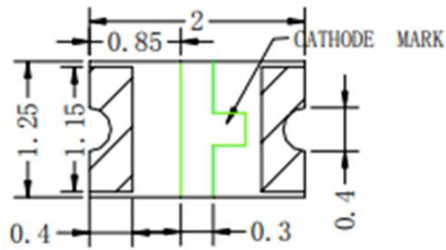
- Emitting Color: White
- Lens Type: Yellow Diffused
- Device Outline: 2.0×1.25×1.1mm
- Complied with RoHS directive

## ➤ Application:

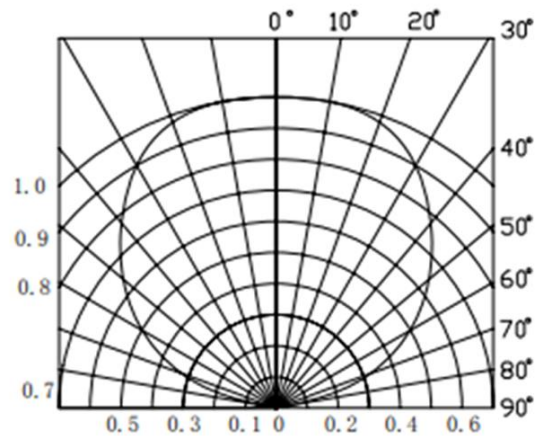
- Backlight for Mobile, Machine Vision, LCD Display
- Backlight in Dashboard and switch of Automotive



## ➤ Outline Dimensions:



SPATIAL DISTRIBUTION



### Note:

- Tolerance is 0.1mm

## ➤ Absolute Maximum Ratings (Ta = 25°C) :

Parameter	Symbol	Test Condition	Value		Unit
			Min.	Max.	
Power Dissipation	Pd	---	---	70	mW
Reverse Voltage	VR	IR = 30μA	5	---	V
Pulse Current	IFp	Duty=0.1, 1kHz	---	100	mA
Forward Current	IFm	---	---	20	mA
Operating Temperature	Topr	---	-40	+85	°C
Storage Temperature	Tstr	---	-40	+85	°C

## ➤ Electrical and optical characteristics (Ta = 25°C) :

Parameter	Symbol	Test Condition	Value			Unit
			Min.	Typ.	Max.	
Forward Voltage	VF	IF = 20 mA 20	---	3.0	3.6	V
Reverse Current	IR	VR = 5V	---	---	30	μA
Chromaticity coordinates	CIE-X	IF = mA	---	0.31	---	----
	CIE-Y			0.31		
Luminous Intensity	IV	IF = mA		500	---	mcd
Viewing Angle	2θ1/2	IF = mA	---	120	---	Deg.

## ➤ Intensity And Forward Voltage Bin Limits:

### (1) Intensity bin limits (IF=20mA)

Rank	IV (mcd)	
	Min	Max
P	280	390
Q	390	550
R	550	770
S	770	1100

Tolerance:  $\pm 10\%$

## ➤ Forward Voltage And Intensity Bin Limits:

Rank	VF (V)	
	Min	Max
D	2.7	2.8
F	2.8	2.9
H	2.9	3.0
J	3.0	3.1
L	3.1	3.2
N	3.2	3.3
Q	3.3	3.4

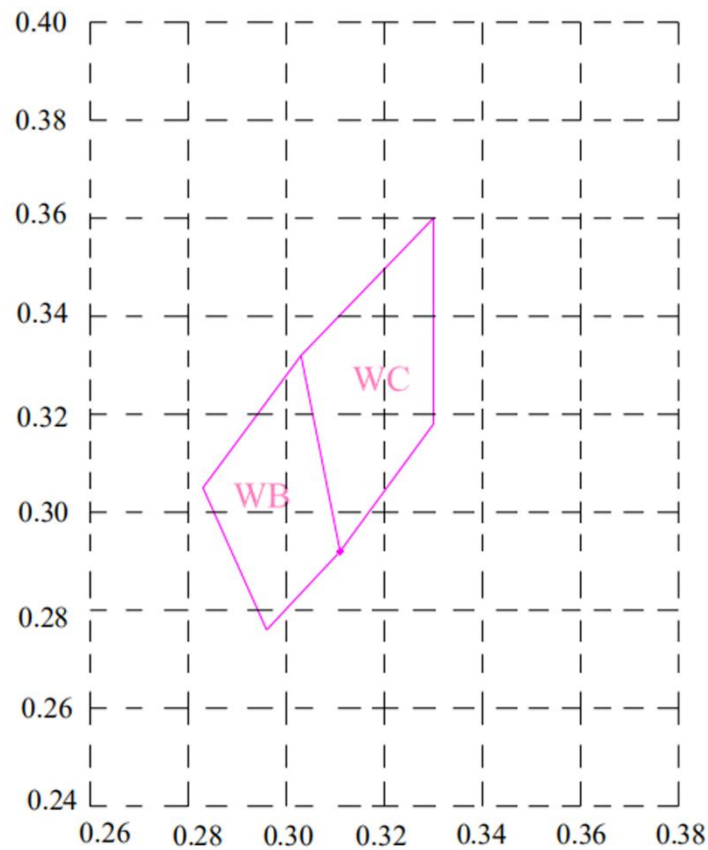
Tolerance:  $\pm 0.1V$

## ➤ Chromaticity coordinates:

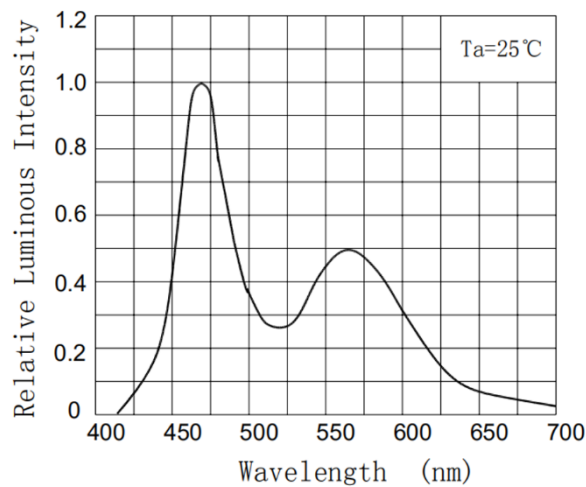
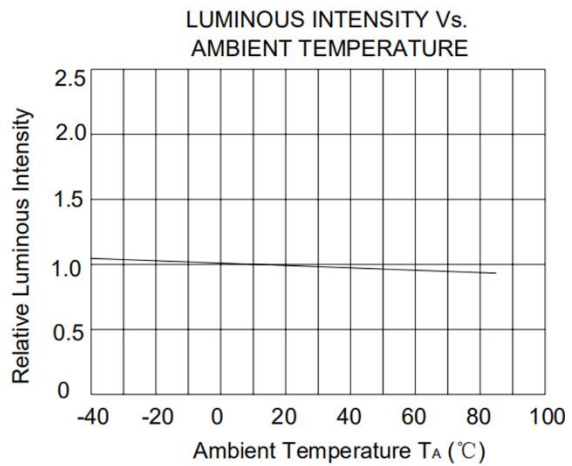
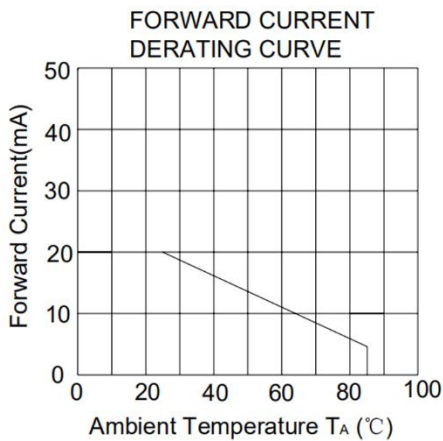
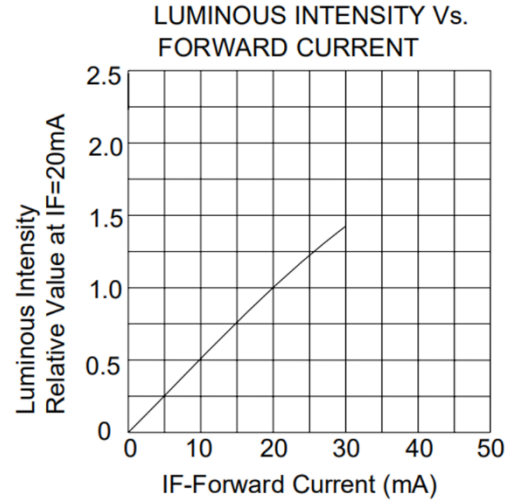
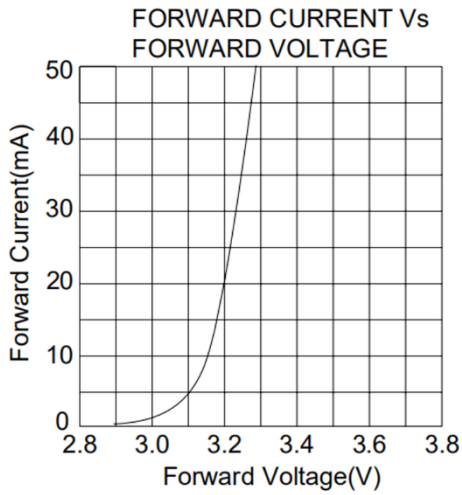
Color coordinate error:  $\pm 0.01$

Bin Code	CIE-X	CIE-Y
WB	0.296	0.276
	0.283	0.305
	0.303	0.332
	0.311	0.292
WC	0.311	0.292
	0.303	0.332
	0.330	0.360
	0.330	0.318

### Diagram



## ➤ Typical electrical/optical characteristic curves :



## ➤ Reliability Analysis:

The reliability of products shall be satisfied with items listed below.

Confidence level :90%; LTPD :10%

No.	Item	Test Condition	Spec.	Q'ty	Time	Standard
1	IR Reflow (Reflow Soldering)	Tsld=260°C, 10sec	GB/T 4937, II, 2.2	20	2times	ALL PASS
2	Solder ability	Tsld=235±5°C, 3sec			1times Over 95%	ALL PASS
3	Temperature Cycle	-40°C— 100°C 30min ~ 30min The cut is not more than 1 min	GB/T 4937, III, 1	20	50cycles	ALL PASS
4	Moisture Resistance Cyclic	25°C/12hr~ 55°C/12hr 95%RH	GB/T 4937, III, 4	20	6cycles	ALL PASS
5	High Temperature Storage	Ta=100°C	GB/T 4937, III, 2	20	1000hrs	ALL PASS
6	Low Temperature Storage	Ta=-40°C	GB/T 4937, III, 2	20	1000hrs	ALL PASS
7	Steady State perating Life	IF=20mA Ta=25°C	GB/T18904.3 Part A	20	1000hrs	Iv decay <30%

### Criteria For Judging Damage

Item	Symbol	Test conditions	Criteria for Judgement	
			Min.	Max.
Luminous Intensity	Iv	IF=20mA	Iv*0.7	/
Forward Voltage	VF	IF=20mA	/	U.S.L*1.1
Reverse current	IR	VR=5v	/	U.S.L*2

\*U.S.L.: Upper Standard Level

\*L.S.L.: Lower Standard Level

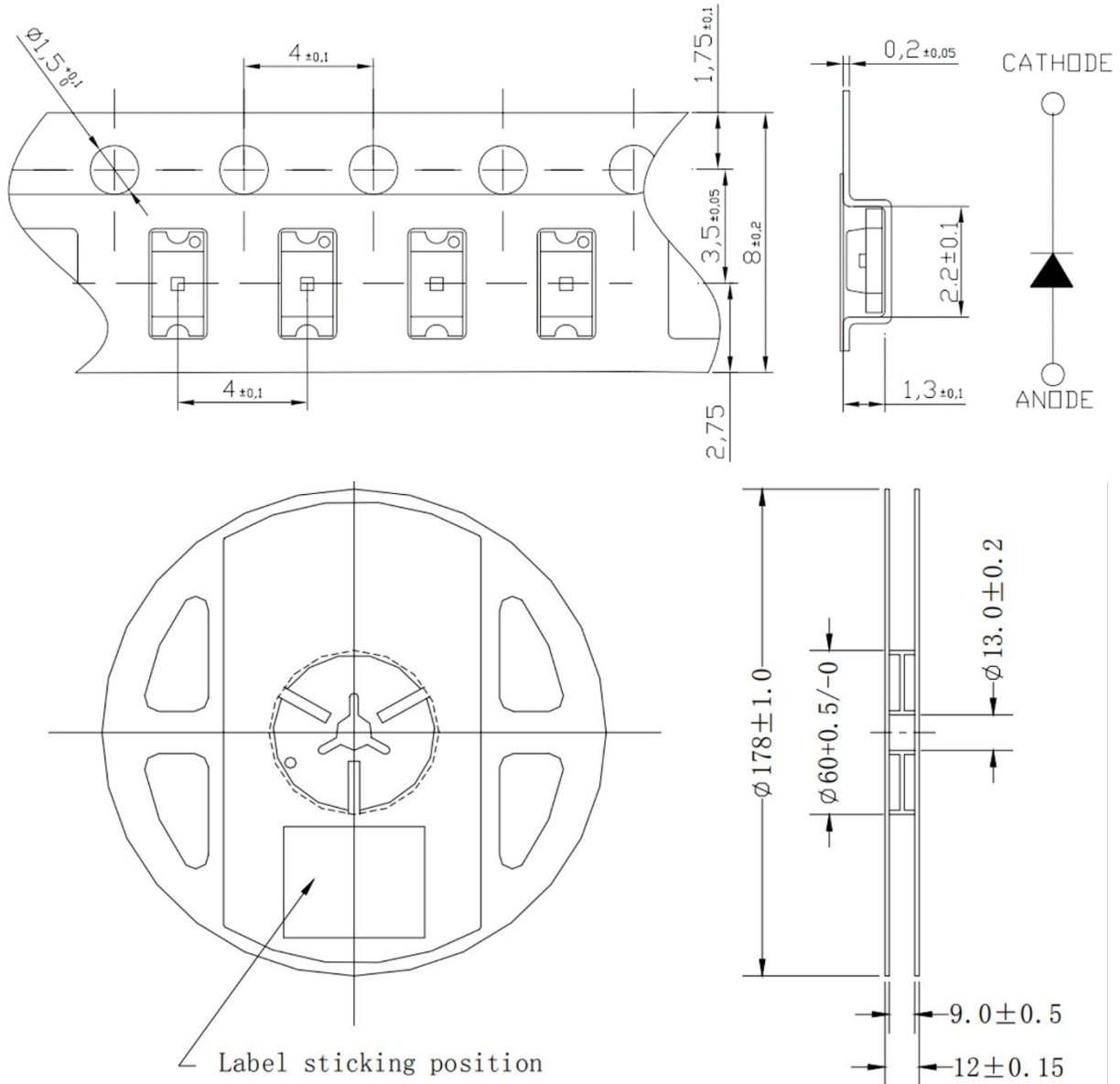


## ➤ Specification of Packing Specification of Packing:

### 10.1 Taping and Orientation

Quantity: 3000 units/reel

Diameter: 178 mm



# Thank You!

