

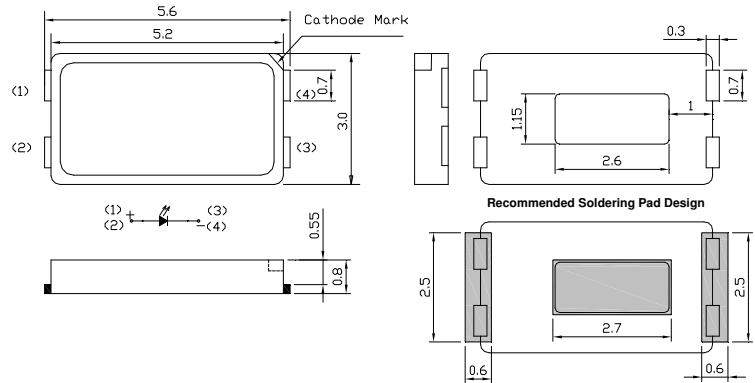
**■Features**

- Top view white LED (5.6x3.0x0.8mm)
- Super high brightness of surface mount LED
- Lead frame package with individual 4 pins
- ESD protection
- Compatible to IR reflow soldering.

**■Applications**

- General lighting
- Decoration lighting
- Indicator

**■Outline Dimension**



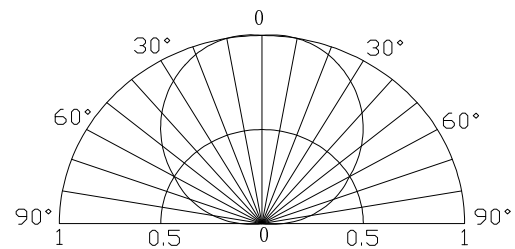
**■Absolute Maximum Rating**

(Ta=25°C)

Item	Symbol	Value	Unit
DC Forward Current	I <sub>F</sub>	150	mA
Pulse Forward Current*	I <sub>FP</sub>	200	mA
Reverse Voltage	V <sub>R</sub>	5	V
Power Dissipation	P <sub>D</sub>	540	mW
Operating Temperature	T <sub>opr</sub>	-30 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-40~ +100	°C
Lead Soldering Temperature	T <sub>sol</sub>	260°C/10sec	-

\*Pulse width Max 0.1ms, Duty ratio max 1/10

**■Directivity**



**■ Electrical -Optical Characteristics**  
(Ta=25°C)

Part Number	Color			V <sub>F</sub> (V)			I <sub>R</sub> (μA)	Φ <sub>v</sub> (lm)			CCT			2θ1/2(deg)	CRI
				Min.	Typ.	Max.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.	Min.
				I <sub>F</sub> =150mA			V <sub>R</sub> =5V	I <sub>F</sub> =150mA							
OSW55630C1D	Cool White	W		2.8	3.1	3.6	10	40	-	55	8000K	-	16000K	120	70
OSW35630C1D	White	W		2.8	3.1	3.6	10	45	-	60	5000K	-	6000K	120	80
OSM75630C1D	Warm White	M	■	2.8	3.1	3.6	10	45	-	55	3500K	-	4500K	120	80
OSM55630C1D	Warm White	M	■	2.8	3.1	3.6	10	40	-	55	2800K	-	3500K	120	80
OSB55630C1D	Blue	B	■	2.8	3.1	3.6	10	5	-	10	455	465	470	120	-
OSG55630C1D	Pure Green	PG	■	2.8	3.1	3.6	10	25	-	35	520	525	530	120	-
OSR55630C1D	Red	R	■	1.8	2.1	2.6	10	10	-	20	620	625	630	120	-
OSY55630C1D	Yellow	Y	■	1.8	2.1	2.6	10	10	-	20	585	590	595	120	-

Note: \* V<sub>f</sub> tolerance: ±0.05V

\* Luminous flux measurement allowance is:±10%

■ Rank

\* Correspondence Table of Luminous Flux (IF=150mA)

Bin code	Flux(lm)	
	Min	Max
1	30	35
2	35	40
3	40	45
4	45	50
5	50	55
6	55	60
.....	.....	.....

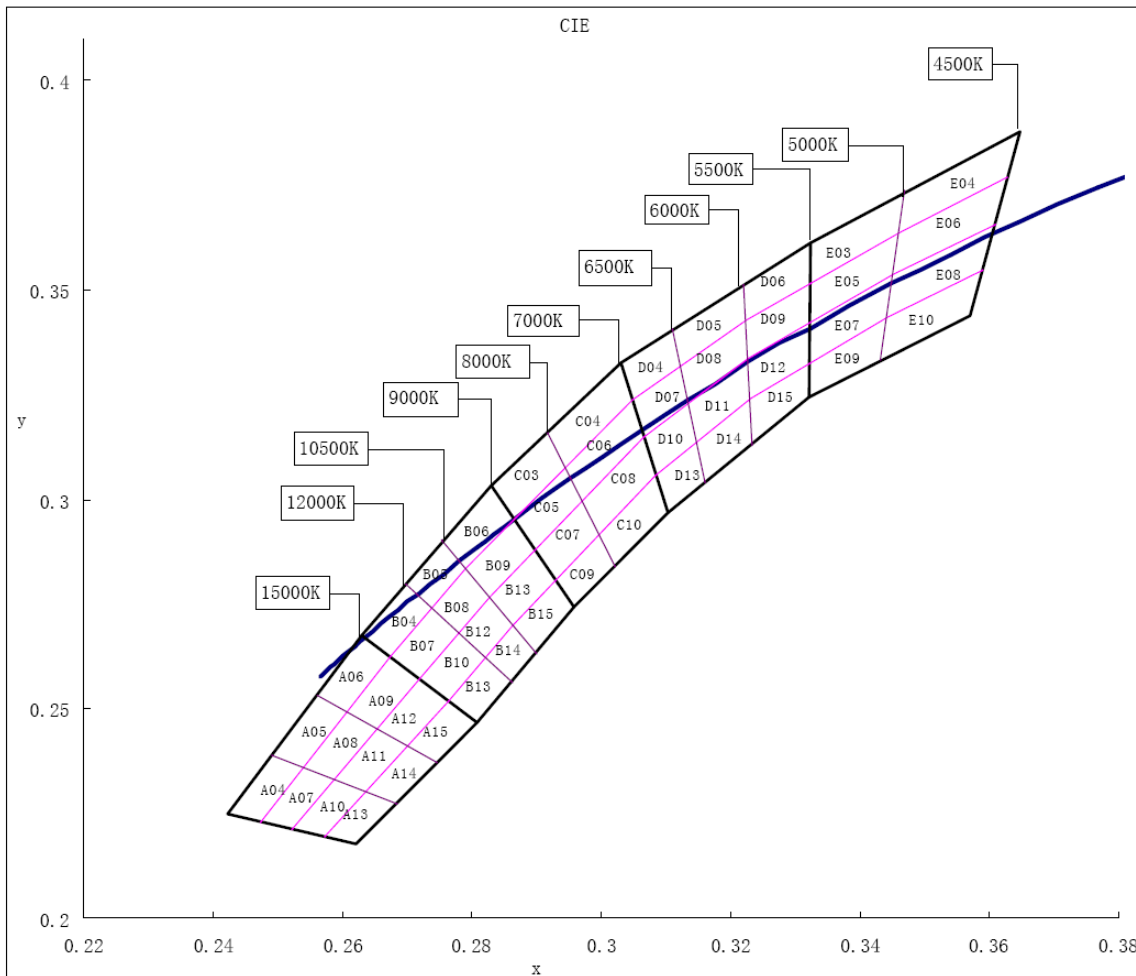
\* Correspondence Table of Luminous Flux (IF=65mA)

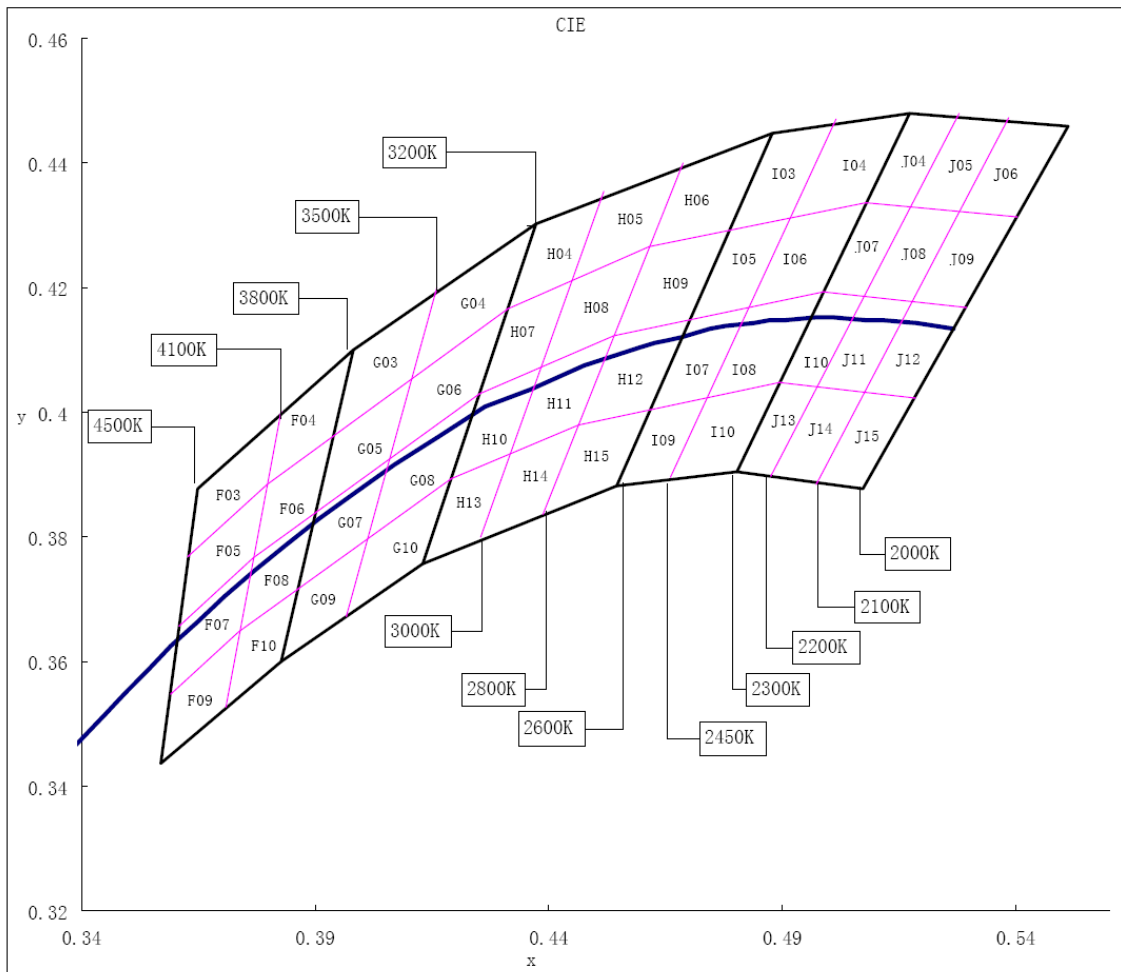
Bin Code	Flux (lm)	
	Min	Max
1	17	19
2	19	22
3	22	25
4	25	29
5	29	33
6	33	37

\*VF bin Limit (IF=150mA)

Bin code	Min(V)	Max(V)
A	2.8	3.0
B	3.0	3.2
C	3.2	3.4
D	3.4	3.6

■ Chromaticity Diagram





\*Color coordinate is derived from the CIE 1931 chromaticity.

■ Rank

\* Correspondence Table of Luminous Flux (IF=150mA)

Bin Code	Flux (lm)	
	Min	Max
A1	5	10
A2	10	15
A3	15	20
B1	20	25
B2	25	30
1	30	35

\*VF bin Limit (IF=150mA) ( BL/PG)

Bin code	Min (V)	Max(V)
88	2.8	3.0
99	3.0	3.2
AA	3.2	3.4
BB	3.4	3.6

\*VF bin Limit (IF=150mA) ( YL/HR)

Bin code	Min (V)	Max(V)
33	1.8	2.0
44	2.0	2.2
55	2.2	2.4
66	2.4	2.6

■ **Recommended Reflow Soldering Profile**

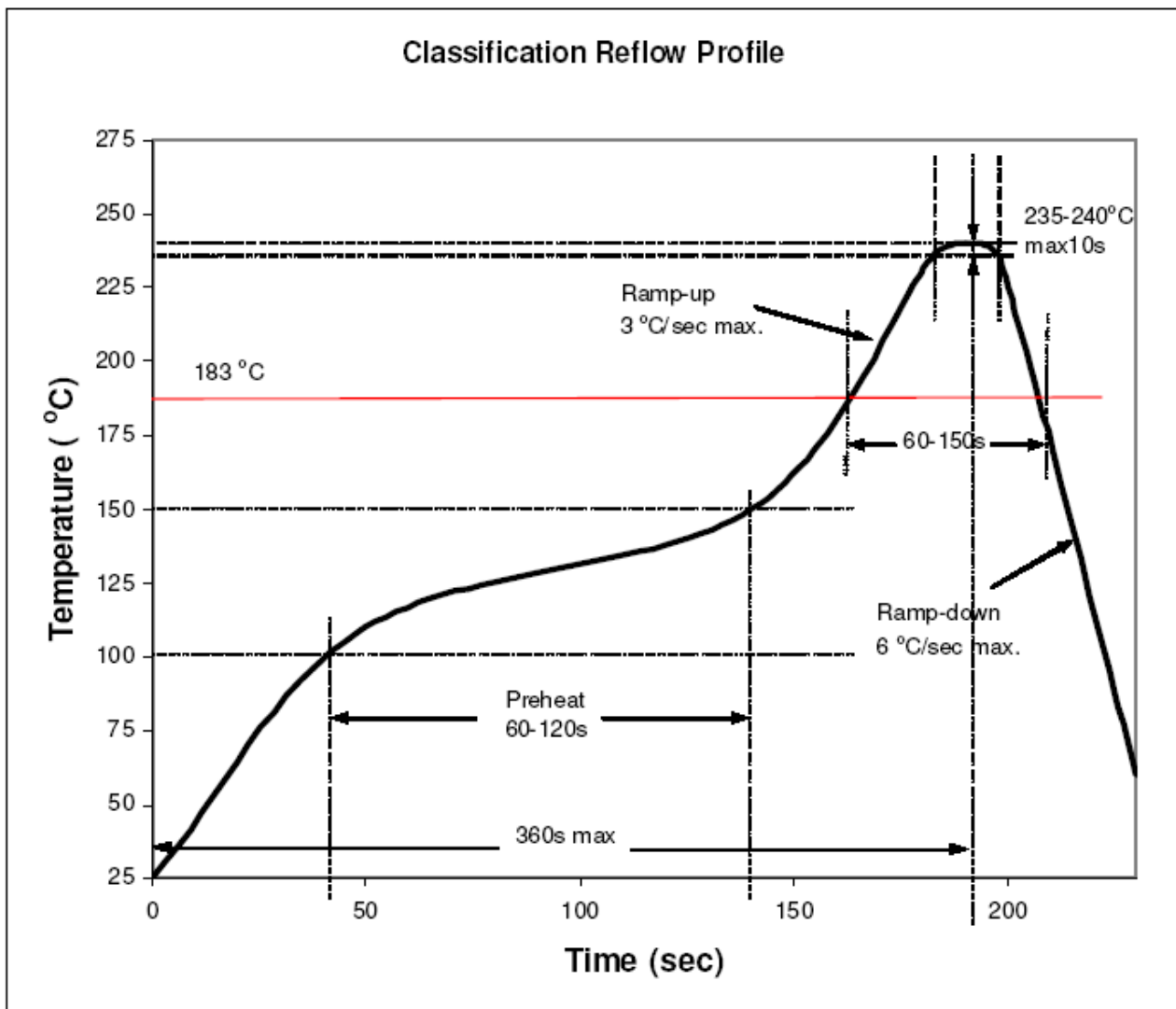
**Surface mounting condition**

In automatic mounting of the SMD LEDs on printed circuit boards, any bending, expanding and pulling forces or shock against the SMD LEDs should be kept min. to prevent them from electrical failures and mechanical damages of the devices.

**Soldering reflow**

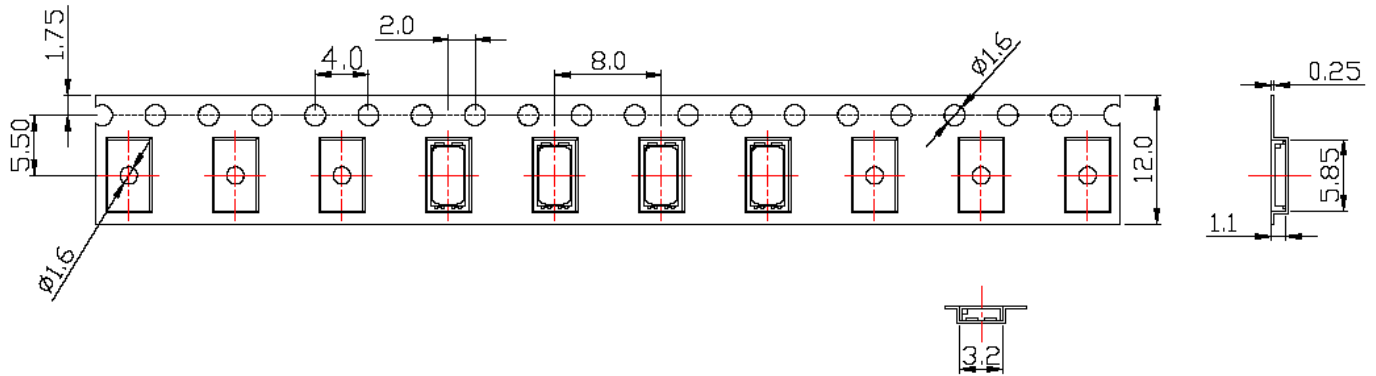
- Soldering of the SMD LEDs should conform to the soldering condition in the individual specifications.
- SMD LEDs are designed for reflow soldering.
- In the reflow soldering, too high temperature and too large temperature gradient such as rapid heating/cooling may cause electrical & optical failures and damages of the devices.
- Wellypower can't guarantee the LEDs after they have been assembled using the solder dipping method.

**1) Lead solder**



■ Package Model

Loaded Quantity 3000 pcs. Per Reel



Reel Part

