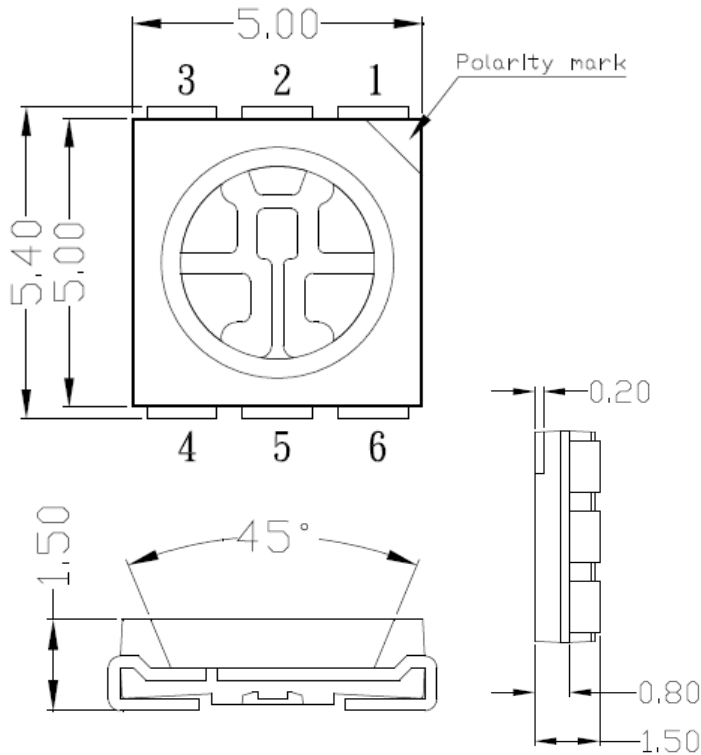


## SURFACE MOUNT LED LAMPS

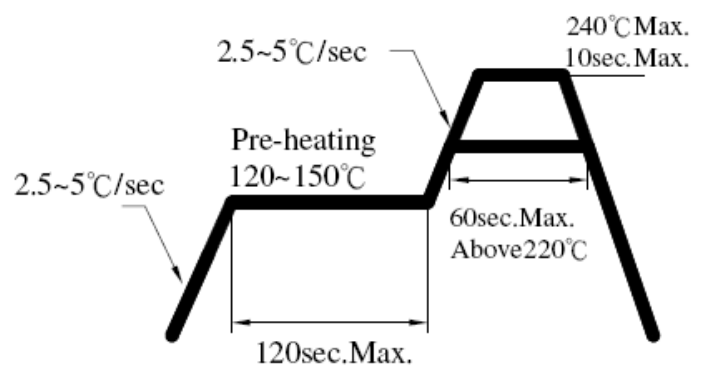
Power White Surface Mount Device

Part Number: 61-24UWC

### Package outlines & Re-flow Profile

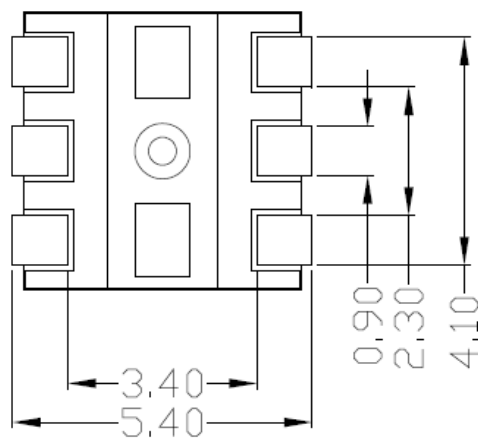


#### Reflow Temp/Time

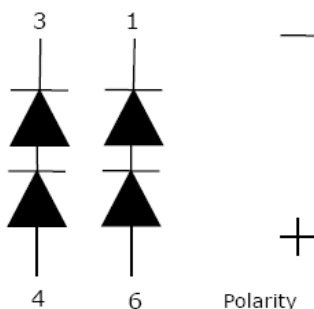


#### Soldering iron

Basic spec is  $\leq 5\text{sec}$  when  $260^\circ\text{C}$ . If temperature is higher, time should be shorter ( $+10^\circ\text{C} \rightarrow -1\text{sec}$ ). Power dissipation of iron should be smaller than 15W, and temperatures should be controllable. Surface temperature of the device should be under  $230^\circ\text{C}$ .



For reflow soldering (Propose)



ITEM	MATERIALS
Resin (mold)	Epoxy
Lens color	Yellow Diffused
Printed circuit board	BT
Emitted color	White
Material	InGaN

#### NOTES:

- All dimensions are in millimeters (inches);
- Tolerances are  $\pm 0.1\text{mm}$  (0.004inch) unless otherwise noted.
- Polarity referring onto the cathode mark is reversed on the red.



A-BRIGHT INDUSTRIAL CO., LTD.

## SURFACE MOUNT LED LAMPS

Part Number: 61-24UWC

### ELECTRO-OPTICAL CHARACTERISTICS

(T<sub>A</sub>=25°C)

Parameter	Test Condition	Symbol	Value			Unit
			MIN.	TYP.	MAX.	
Viewing angle at 50% I <sub>v</sub>	I <sub>F</sub> =10mA	2θ 1/2	120			Deg
Forward voltage	I <sub>F</sub> =20mA	V <sub>F</sub>	5.8	---	7.0	V
Luminous intensity	I <sub>F</sub> =20mA*2line	I <sub>v</sub>	3600	4500	---	mcd
Peak pulsing current (1/10 duty f=1kHz)		I <sub>FP</sub>	100			mA

### Absolute maximum ratings

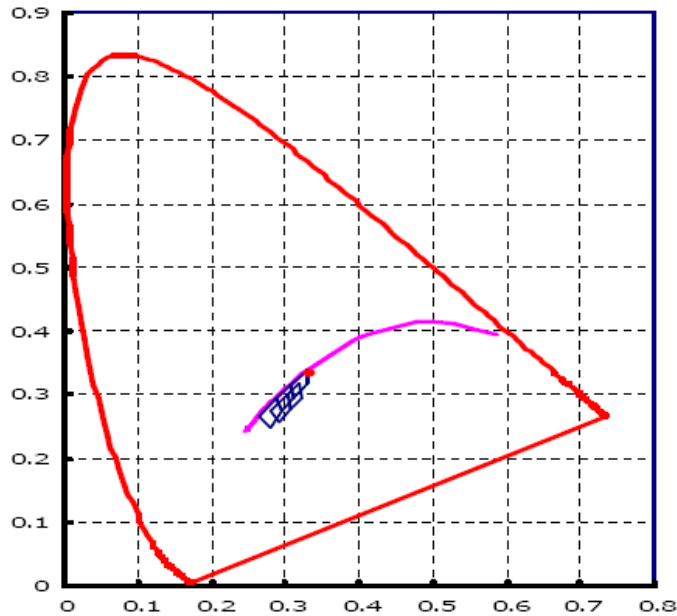
(T<sub>A</sub>=25°C)

Parameter	Symbol	Value	Unit
Forward current	I <sub>F</sub>	80	mA
Reverse voltage	V <sub>R</sub>	5	V
Reverse current	I <sub>R</sub>	10	μA
Power Consumption	P <sub>C</sub>	300	mW
Operating temperature range	Top	-40 ~+85	°C
Storage temperature range	Tstg	-40 ~+100	°C

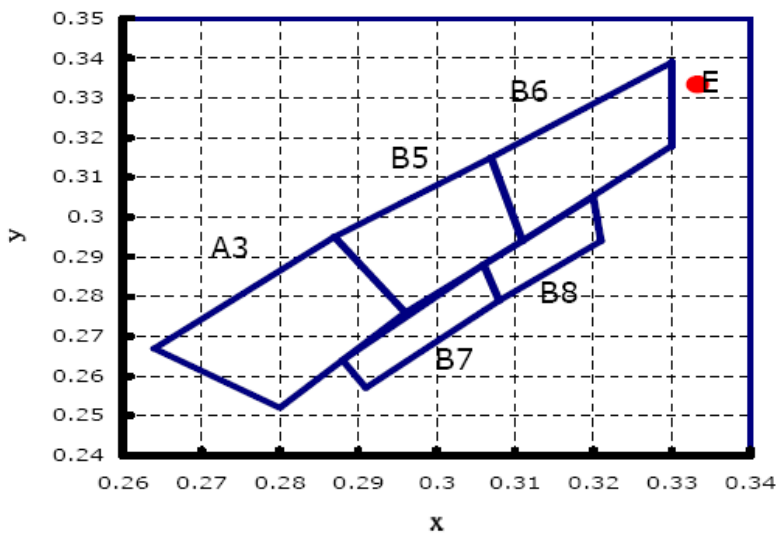
**SURFACE MOUNT LED LAMPS**

Part Number: 61-24UWC

**CIE Chromaticity Diagram**



**Color Coordinate**



**Color Ranks**

Rank A3				
x	0.280	0.264	0.287	0.296
y	0.252	0.267	0.295	0.276

Rank B5				
x	0.296	0.287	0.307	0.311
y	0.276	0.295	0.315	0.294

Rank B7				
x	0.291	0.288	0.306	0.308
y	0.257	0.264	0.288	0.279

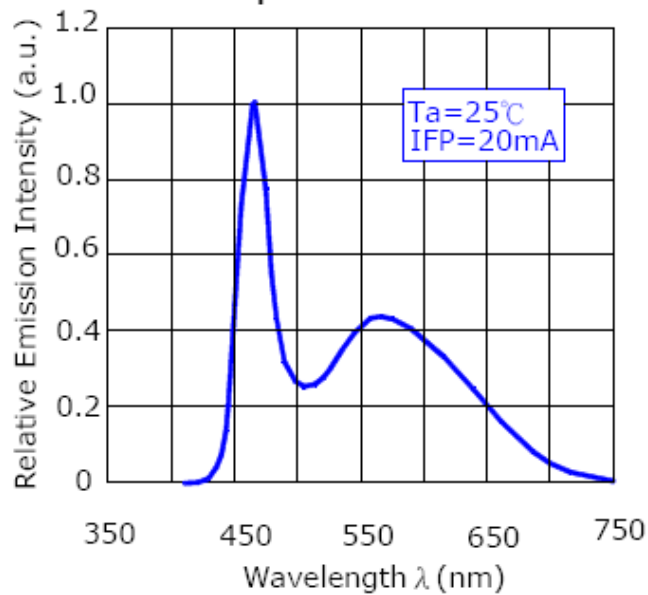
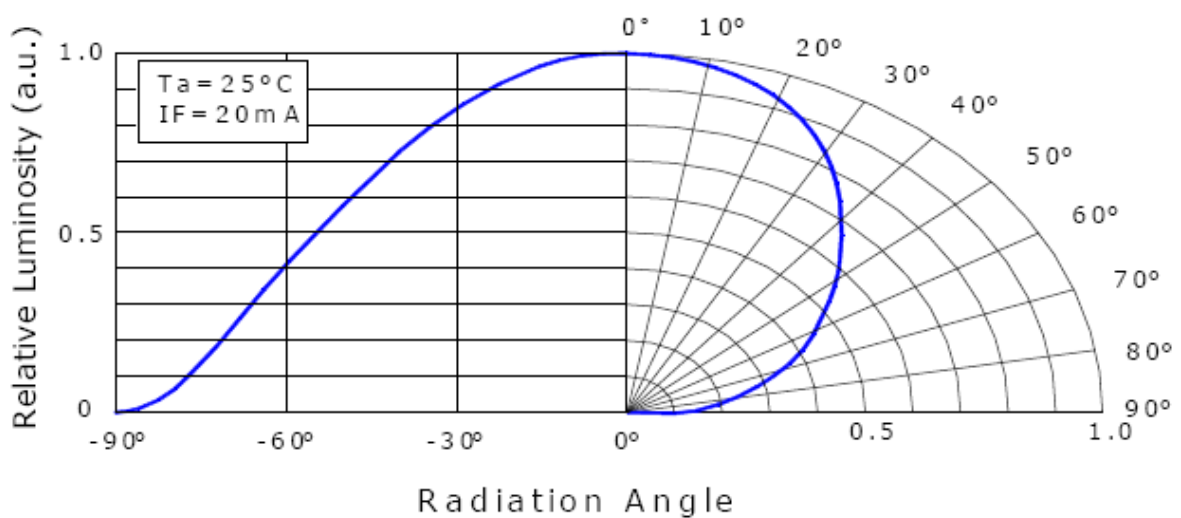
Rank B6				
x	0.311	0.307	0.330	0.330
y	0.294	0.315	0.339	0.318

Rank B8				
x	0.308	0.306	0.32	0.321
y	0.279	0.288	0.305	0.294

Color coordinates measurement allowance is  $\pm 0.01$

**SURFACE MOUNT LED LAMPS**

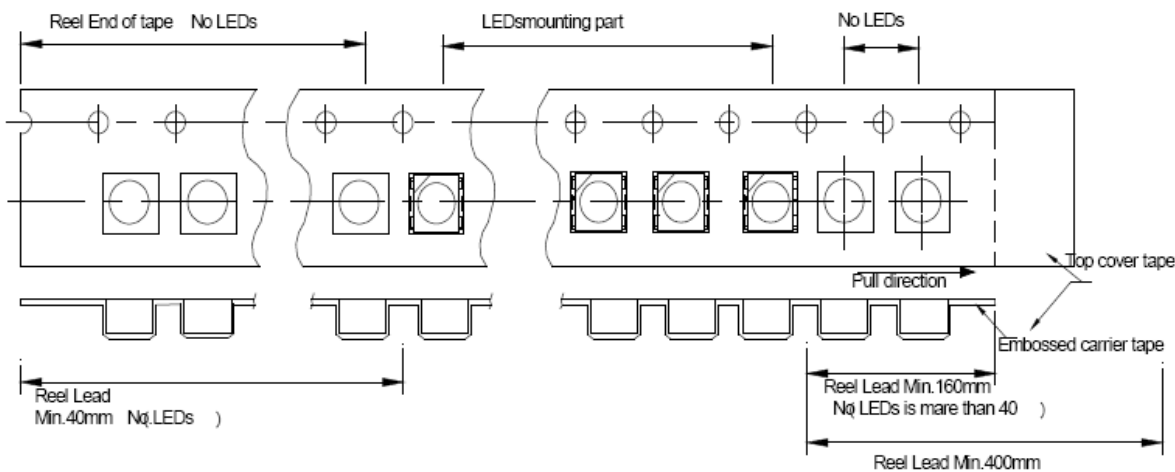
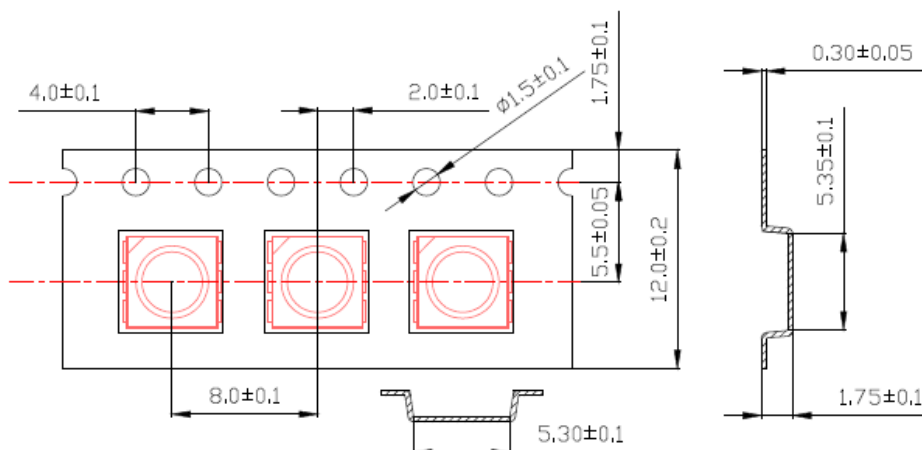
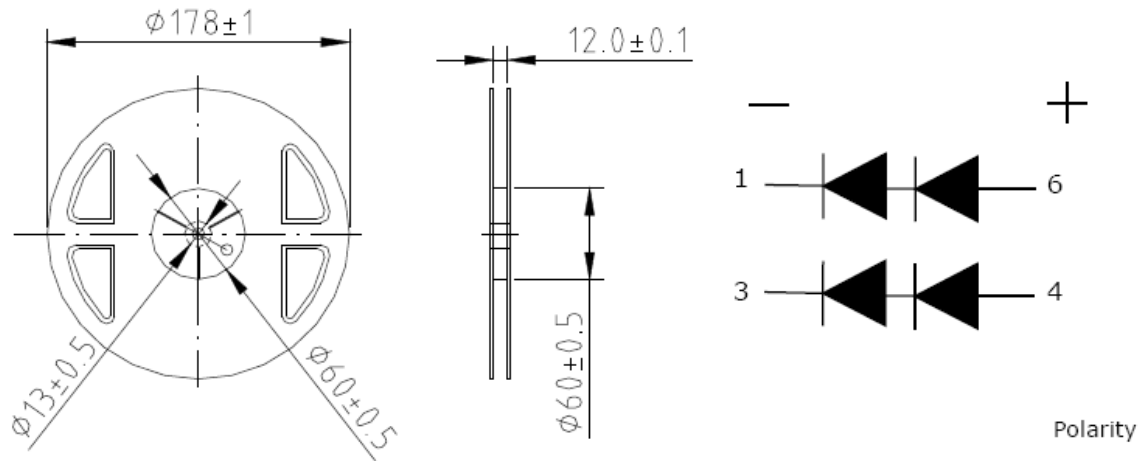
Part Number: 61-24UWC

**Typical Electro-Optical Characteristic Curves****Spectrum****Beam Pattern**

**SURFACE MOUNT LED LAMPS**

**Part Number: 61-24UWC**

**Taping Dimension (Unit=mm)**



**SURFACE MOUNT LED LAMPS****Part Number: 61-24UWC****Precautions For Use**

## 1. Over-current proof

Customer must apply resistors for protection, otherwise slight voltage shift will cause big current change (Burn out will happen).

## 2. Storage

2.1 Do not open moisture proof bag before the products are ready to use.

2.2 Before opening the package, the LEDs should be kept at 30°C or less and 90%RH or less.

2.3 The LEDs should be used within a year.

2.4 After opening the package, the LEDs should be kept at 30°C or less and 70%RH or less.

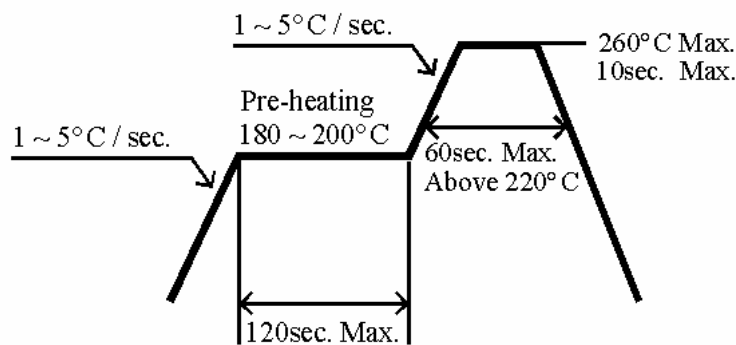
2.5 The LEDs should be used within 168 hours (7 days) after opening the package.

2.6 If the moisture absorbent material (silica gel) has faded away or the LEDs have exceeded the storage time, baking treatment should be performed using the following conditions.

Baking treatment : 60±5°C for 24 hours.

## 3. Soldering Condition

## 3.1 Pb-free solder temperature profile



3.2 Reflow soldering should not be done more than two times.

3.3 When soldering, do not put stress on the LEDs during heating.

3.4 After soldering, do not warp the circuit board.

## 4. Soldering Iron

Each terminal is to go to the tip of soldering iron temperature less than 280°C for 3 seconds within once in less than soldering iron capacity 25W. Leave two seconds and more intervals, and do soldering of each terminal. Be careful because the damage of the product is often started at the time of the hand solder.