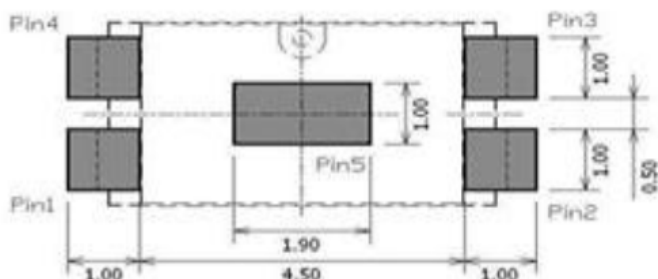
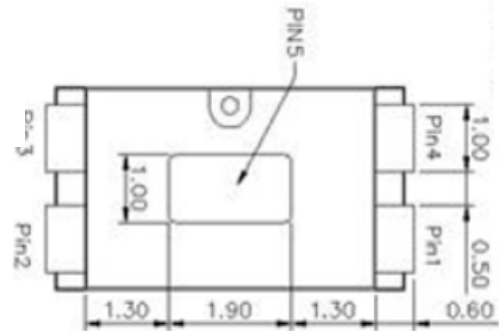
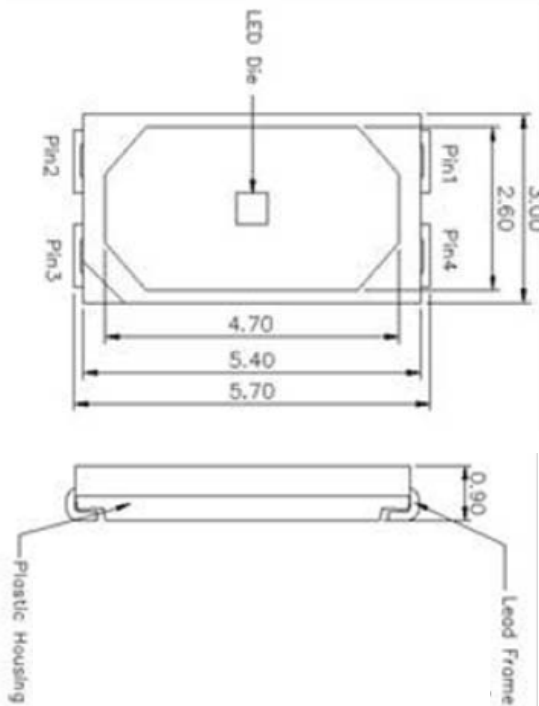


## SURFACE MOUNT LED LAMPS

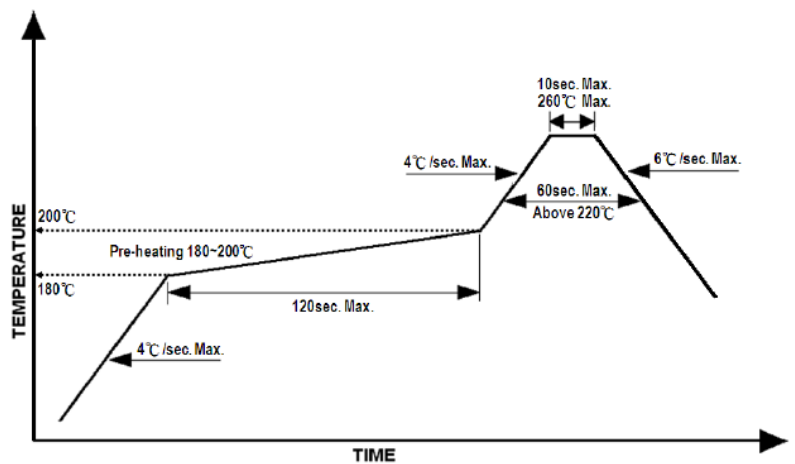
5630 Package Power Warm White Surface Mount Device

Part Number: 62-217BSW1C2

### 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  $230^\circ\text{C}$ .

| ITEM                  | MATERIALS       |
|-----------------------|-----------------|
| Resin (mold)          | Epoxy           |
| Lens color            | Yellow Diffused |
| Printed circuit board | BT              |
| Emitted color         | Warm 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: 62-217BSW1C2

**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> =150mA | 2θ 1/2          | 120   |      |      | Deg  |
| Forward voltage  | I <sub>F</sub> =150mA | V <sub>F</sub>  | 2.8   | ---  | 3.5  | V    |
| Color Temperature  | I <sub>F</sub> =150mA | CCT             | 2750  | 3000 | 3250 | K    |
| Luminous Flux  | I <sub>F</sub> =150mA | Flux            | ---   | 52   | ---  | lm   |
| Pulse Forward Current<br>(Pulse Width ≤ 10msec, and duty ≤ 1/10) |                       | I <sub>FP</sub> | 300   |      |      | mA   |

**Absolute maximum ratings**

(T<sub>A</sub>=25°C)

| Parameter                   | Symbol         | Value    | Unit |
|-----------------------------|----------------|----------|------|
| Forward current             | I <sub>F</sub> | 150      | mA   |
| Reverse voltage             | V <sub>R</sub> | 5        | V    |
| Reverse current             | I <sub>R</sub> | 1        | μA   |
| Power dissipation           | P <sub>D</sub> | 585      | mW   |
| Operating temperature range | Top            | -30 ~+80 | °C   |
| Storage temperature range   | Tstg           | -40 ~+85 | °C   |



**A-BRIGHT INDUSTRIAL CO., LTD.**

# SURFACE MOUNT LED LAMPS

Part Number: 62-217BSW1C2

## Bin Code

■ Iv Bin:

| Color | Bin Code   | Spec. Range  |
|-------|------------|--------------|
| White | MC2        | 15.8~18.1lm  |
|       | MD2        | 16.9 ~18.1lm |
|       | NA1        | 18.1~19.3lm  |
|       | NB1        | 19.3~20.6lm  |
|       | NC2        | 20.6~22.0lm  |
|       | ND2        | 22.0~23.5lm  |
|       | AP1        | 23.4~25.1lm  |
|       | BP1        | 25.1~26.8m   |
|       | CP2        | 26.8~28.6m   |
|       | DP2        | 28.6~30.4m   |
|       | QA1        | 30.4~32.6m   |
|       | QB1        | 32.6~34.9m   |
|       | QC2        | 34.9~37.2m   |
|       | QD2        | 37.2~39.8m   |
|       | RA1        | 39.8~42.5m   |
|       | RB1        | 42.5~45.3m   |
|       | RC2        | 45.3~48.4m   |
|       | RD2        | 48.4~51.7m   |
|       | SA3        | 51.7~55.2m   |
|       | SB3        | 55.2~58.9m   |
| SC4   | 58.9~62.4m |              |
| SD4   | 62.4~67.2m |              |

Luminous Intensity Measurement Allowance is  $\pm 7\%$

■ Vf Bin

| Bin Code | Spec. Range |
|----------|-------------|
| H1       | 2.8-2.9V    |
| H2       | 2.9-3.0V    |
| H3       | 3.0-3.1V    |
| H4       | 3.1-3.2V    |
| J1       | 3.2-3.3V    |
| J2       | 3.3-3.4V    |
| J3       | 3.4-3.5V    |

Forward Voltage Measurement Allowance is  $\pm 0.05V$

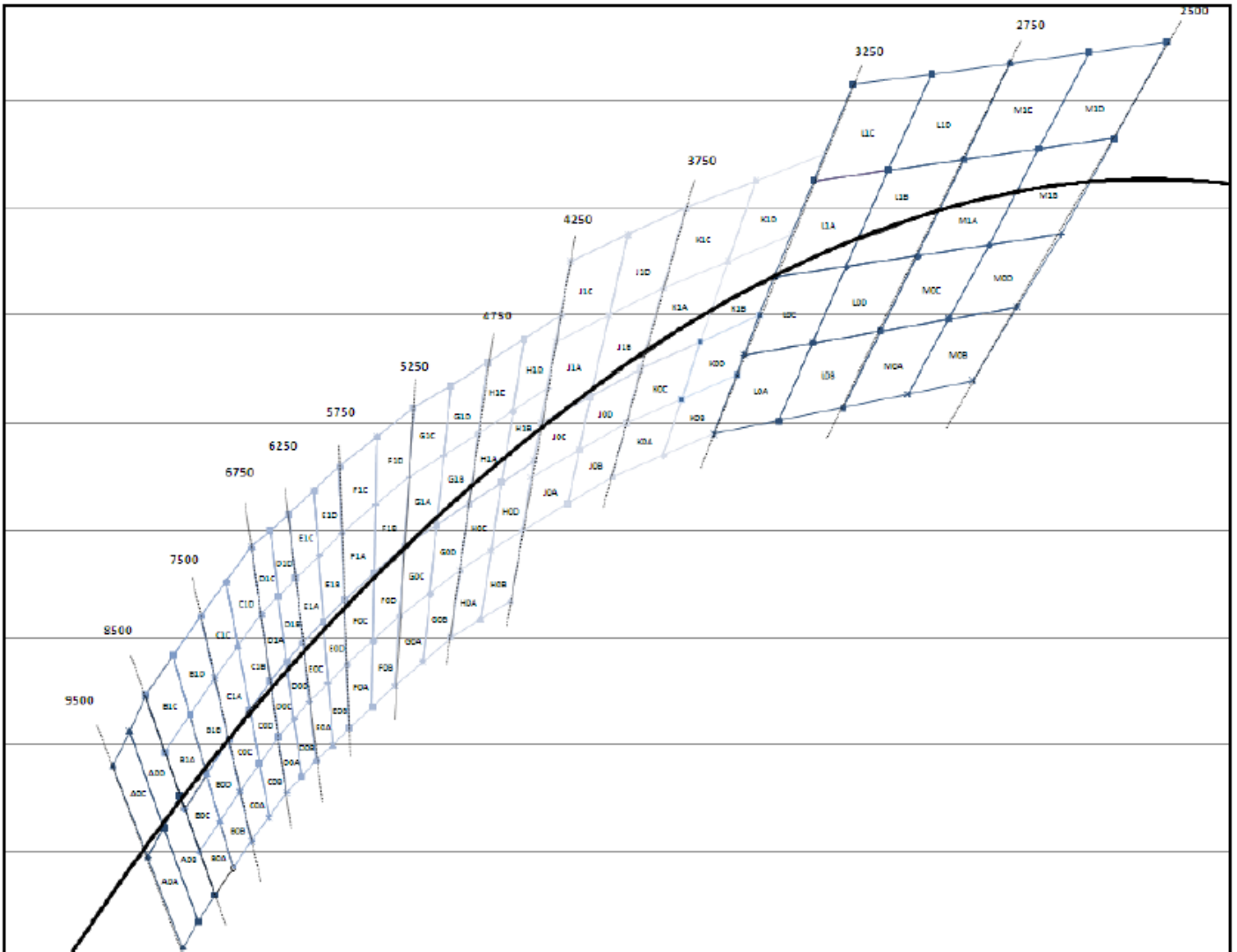
| Color Temperature |       | Iv Bin |      |      |
|-------------------|-------|--------|------|------|
| Min.              | Max.  | Min.   | Typ. | Max. |
| 2750K             | 3750K | RD2    | SA3  | SB3  |
| 3750K             | 6750K | RB1    | RC2  | RD2  |
| 6750K             | 9500K | RD2    | SA3  | SB3  |



**A-BRIGHT** A-BRIGHT INDUSTRIAL CO., LTD.  
**SURFACE MOUNT LED LAMPS**

Part Number: 62-217BSW1C2

**CIE Chromaticity Diagram**

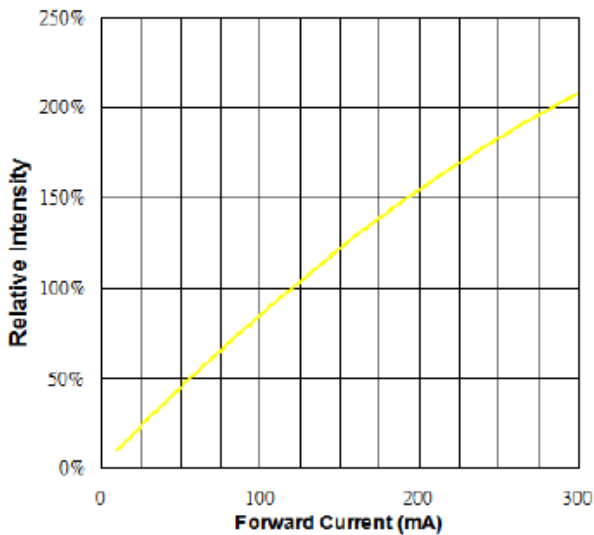


**SURFACE MOUNT LED LAMPS**

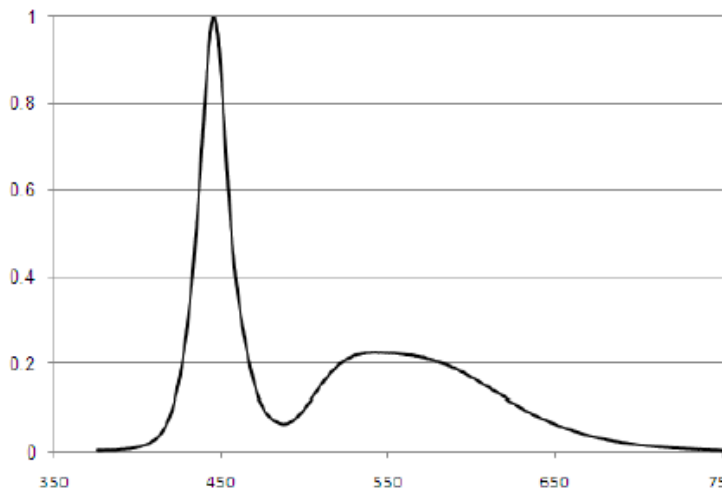
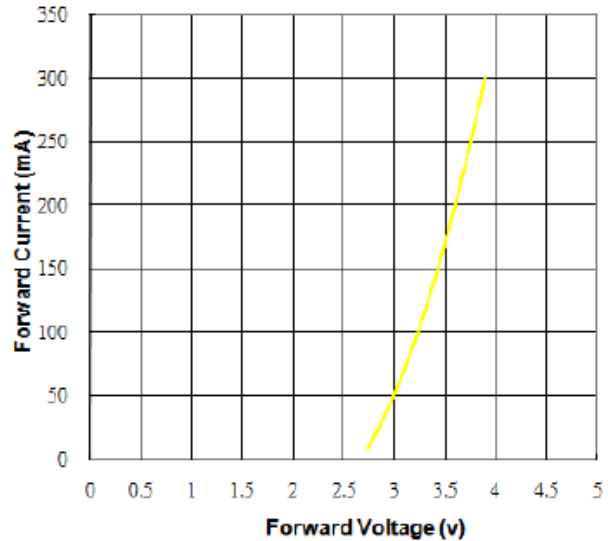
Part Number: 62-217BSW1C2

**Typical Electro-Optical Characteristic Curves**

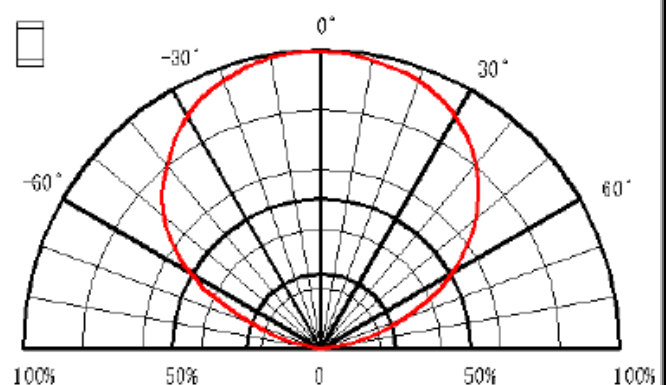
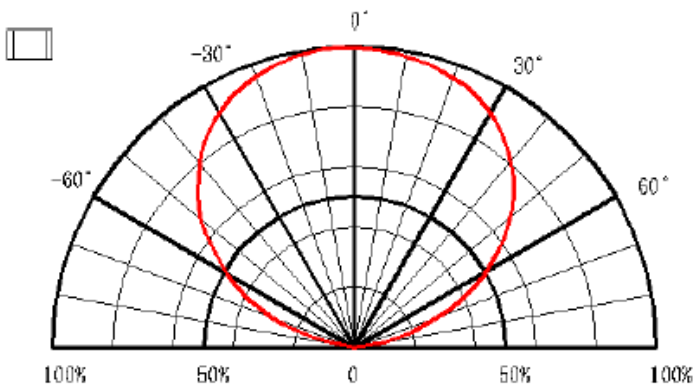
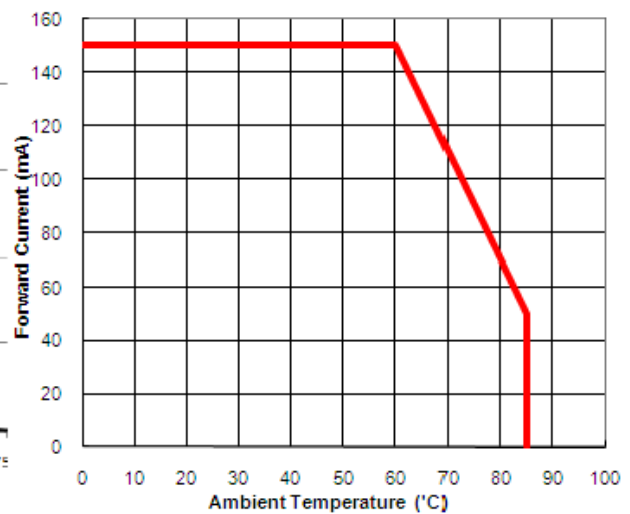
Relative Intensity vs. Forward Current



Forward Current vs. Forward Voltage



Forward Current vs. Ambient Temperature

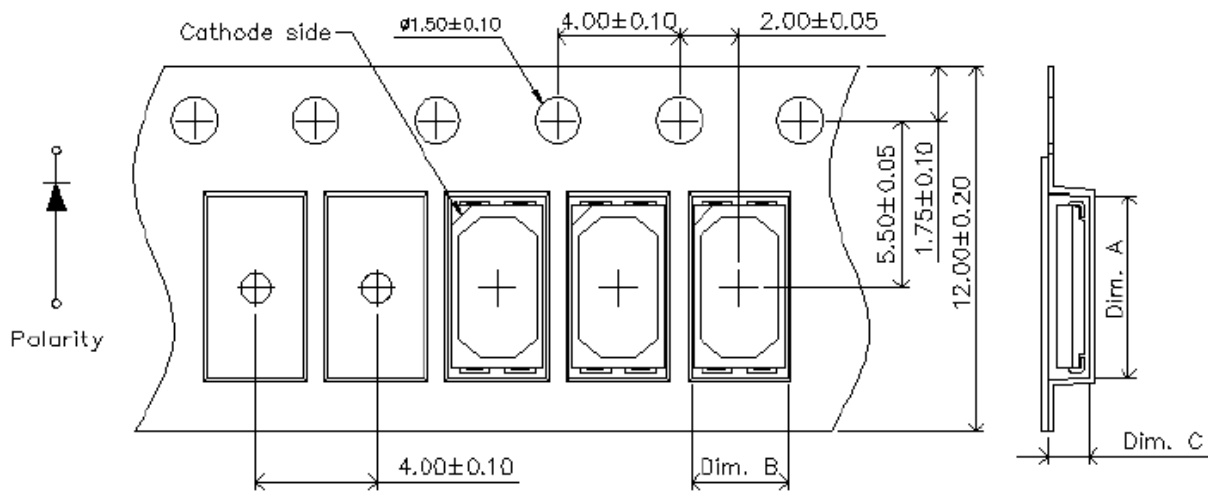


# **A-BRIGHT** A-BRIGHT INDUSTRIAL CO., LTD. SURFACE MOUNT LED LAMPS

Part Number: 62-217BSW1C2

## Packaging Tape, Reel, and Packing Model

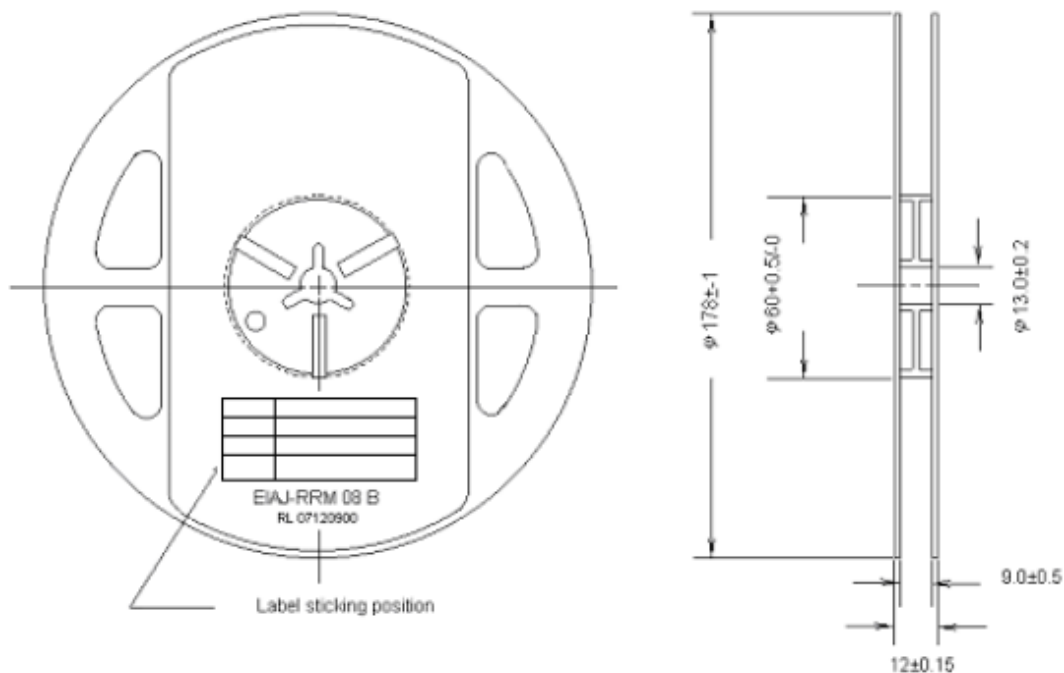
### Tape Dimension



| Part No. | Dim. A        | Dim. B        | Dim. C        | Q'ty/Reel |
|----------|---------------|---------------|---------------|-----------|
| HT-T5301 | $6.0 \pm 0.1$ | $3.2 \pm 0.1$ | $1.1 \pm 0.1$ | 2K        |

Unit: mm

### Reel Dimension



# **A-BRIGHT** A-BRIGHT INDUSTRIAL CO., LTD. **SURFACE MOUNT LED LAMPS**

Part Number: 62-217BSW1C2

## **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.

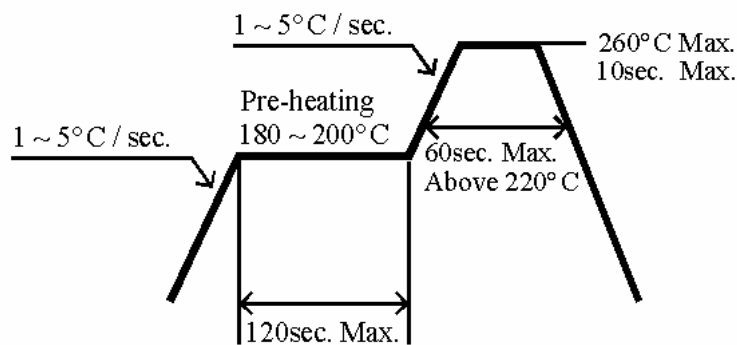
2.5 The LEDs should be used within 168 hours (7 days) after opening the package.

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.