# 5.70*3.00 SMD

## A-5730BUW-S

## Features

- Single color.
- Viewing angle:120 deg
- The materials of the LED dice is InGaN
- RoHS compliant lead-free soldering compatible

## Applications

- Optical indicator
- Indoor display
- Interior automotive lighting
- Backlight for LCD, switch and Symbol, display
- Light pipe application
- General use

## Ordering Information

| PART NO. | SIZE | Dice | Lens Type |
|---|---|---|---|
| A-5730BUW-S | 5.70*3.00*0.90mm | WHITE (InGaN ) | Yellow Diffused |

| Luminous intensity(mcd) | | Luminous flux(lm) | |
|---|---|---|---|
| Min. | Typ. | Min. | Typ. |
| 16500 | 18000 | - | 53 |





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## Maximum Ratings

| Parameter | Symbol | Value | Unit |
|---|---|---|---|
| Operating temperature | $T_{OP}$ | -20 ~ 85 | ºC |
| Storage temperature | $T_{STG}$ | -35 ~ 85 | ºC |
| Forward current ($T_A$=25 ºC) | $I_F$ | 180 | mA |
| Pulse Forward Current | $I_{FP}$ | 1000 | mA |
| Reverse voltage ($T_A$=25 ºC) | $V_R$ | 5 | V |
| Electrostatic Discharge (HBM) | ESD | 2000 | V |
| Power Dissipation | Pd | - | mW |

*[1] at 1/10 Duty Cycle

## Electrical / Optical Characteristics

($T_A$ = 25 ºC)

| Parameter | | Symbol | Value | Unit |
|---|---|---|---|---|
| **Viewing angle at 50%**<br>$I_F$ = 20mA | (Typ.) | **$2\theta_{1/2}$** | 120 | degree |
| **Forward voltage**<br>$I_F$ = 20mA | (Min.)<br>(Typ.)<br>(Max.) | **$V_F$**<br>**$V_F$**<br>**$V_F$** | 2.90<br>3.20<br>3.50 | V<br>V<br>V |
| **Reverse current**<br>$V_R$ = 5V | (Max.) | $I_R$ | 10 | µA |
| **Color Rending Index**<br>$V_R$ = 5V | (Min.) | **-** | 70 | - |
| **Color Temperature**<br>$I_F$ = 20mA | (Typ.) | **Tc** | 6500 | K |

## Luminous Intensity and Luminous Flux

($T_A$ = 25 ºC & $I_F$ = 20 mA)

| Luminous intensity(mcd) | | Luminous flux(lm) | |
|---|---|---|---|
| Min. | Typ. | Min. | Typ. |
| 16500 | 18000 | - | 53 |





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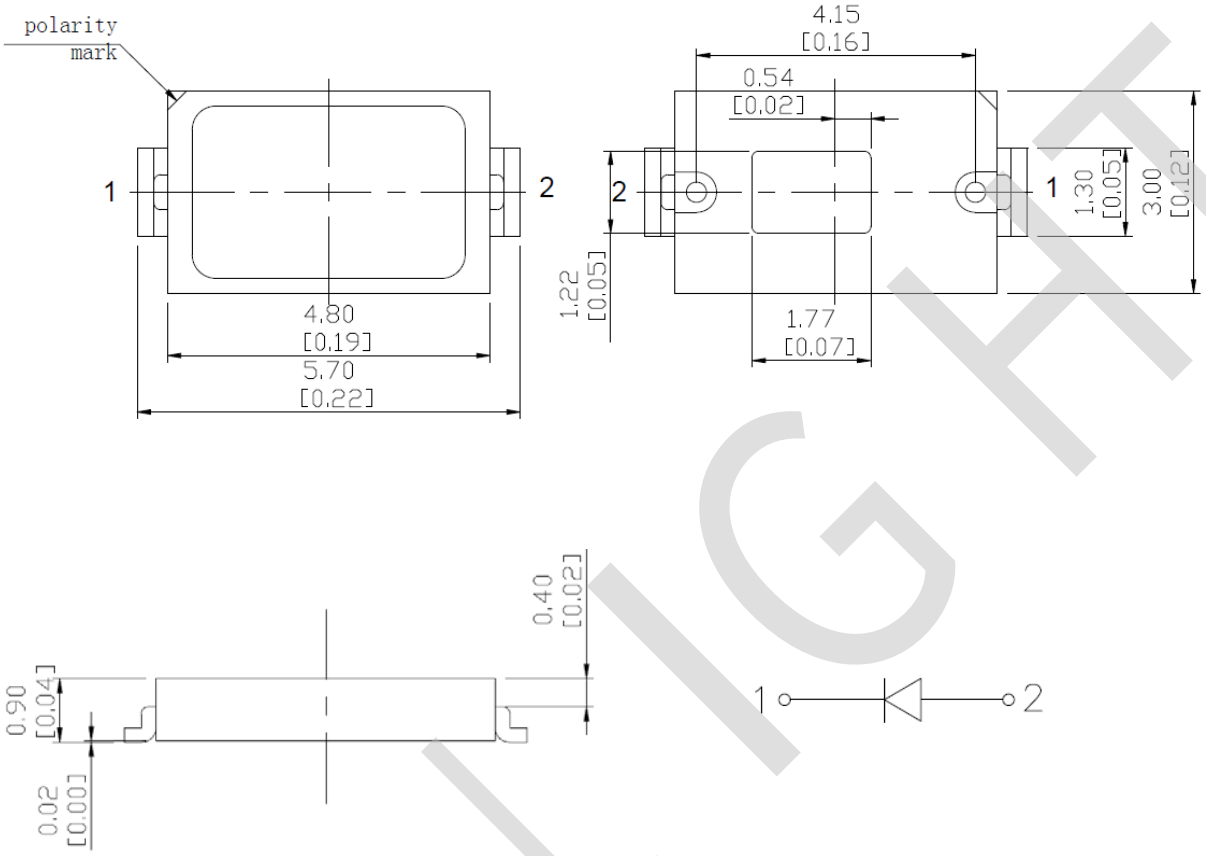
## Package Dimensions





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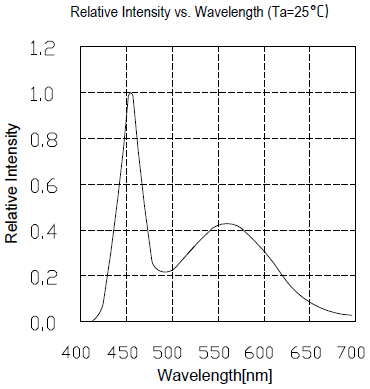
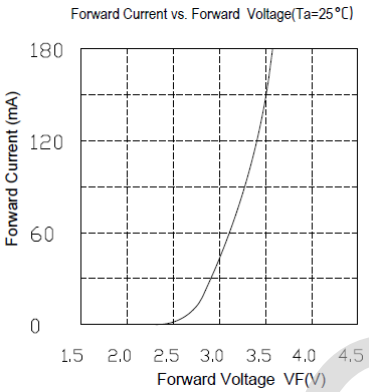
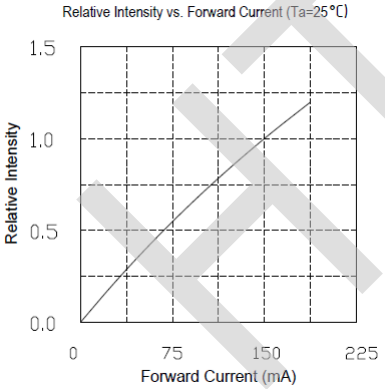
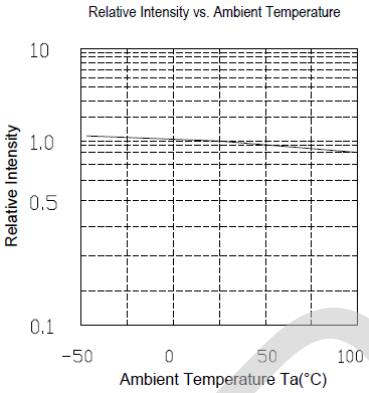
## Electrical/Optical Charateristic

Spectral Distribution

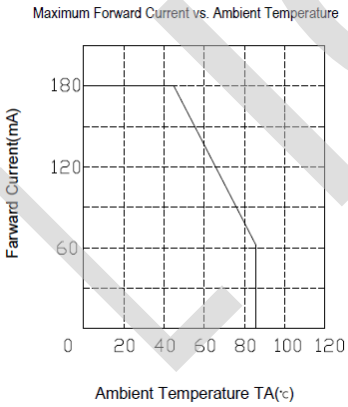



Derating



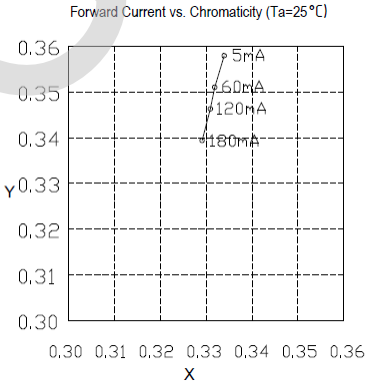
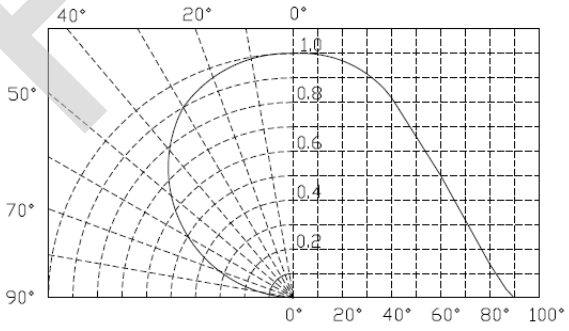




Diagram characteristics of radiation





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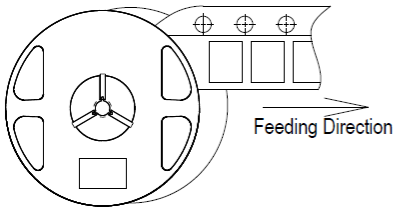
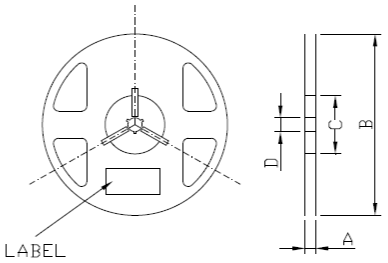
# Package Outline Dimensions

● Feeding Direction

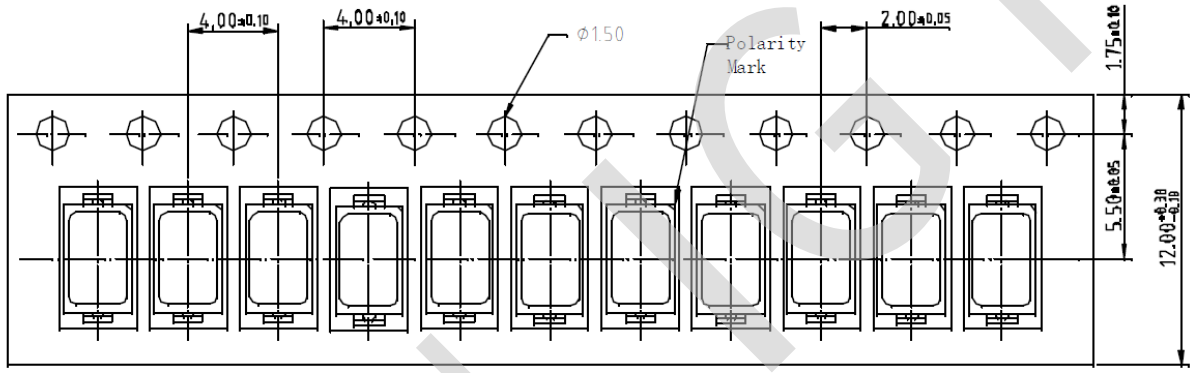



● Dimensions of Reel (Unit: mm)

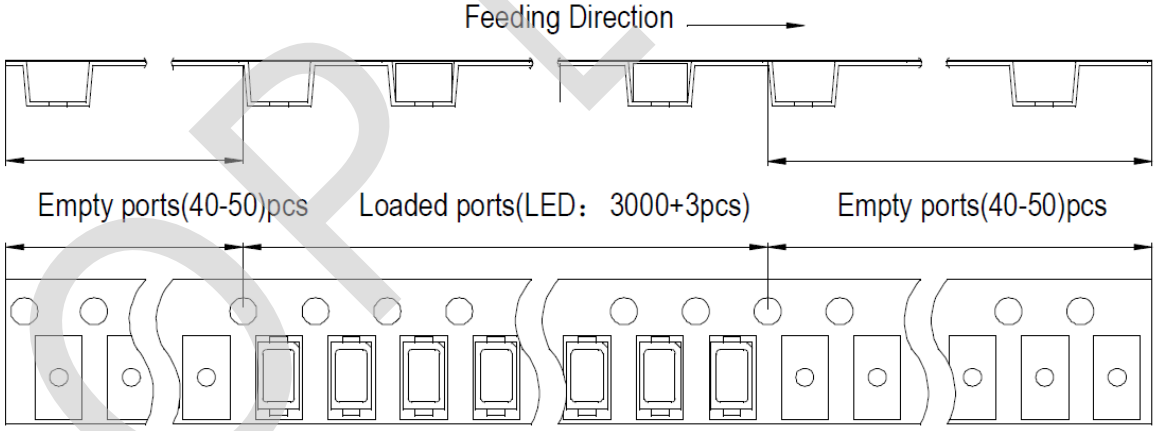



| | |
|---|---|
| A | 13.6±0.1mm |
| B | 179±1mm |
| C | 58±1mm |
| D | 13.5±0.5mm |

● Dimensions of Tape (Unit: mm)




● Arrangement of tape：




NOTES：

1. Empty component pockets are sealed with top cover tape;
2. The maximum number of missing lamps is two;
3. The cathode is oriented towards the tape sprocket hole in accordance with ANSI/EIA RS-481 specifications.
4. 3,000 pcs/ Reel.





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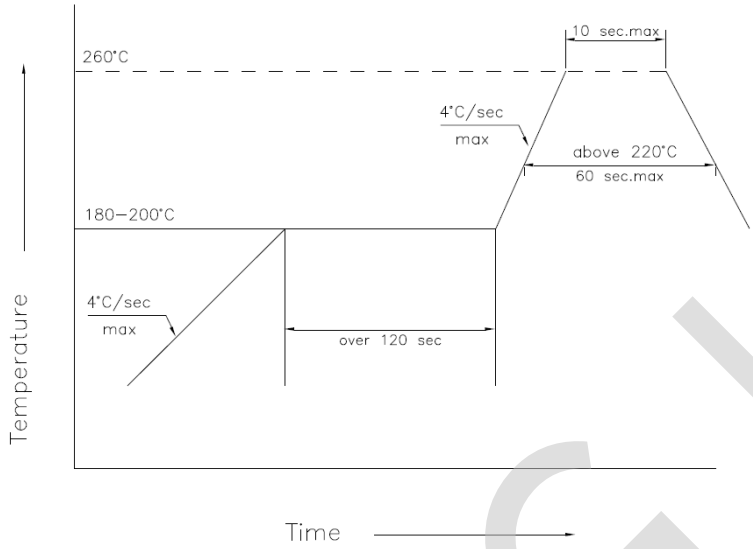
## SMT Reflow Soldering Instructions



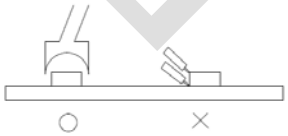

1.Reflow soldering should not be done more than two times
2.When soldering , do not put stress on the LEDs during heating

### Soldering iron

1.When hand soldering, the temperature of the iron must less than 300℃ for 3 seconds
2.The hand solder should be done only one times

### Repairing

Repair should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used (as below figure). It should be confirmed beforehand whether the characteristics of LEDs will or will not be damaged by repairing.



### Cautions

The encapsulated material of the LEDs is silicone. Therefore the LEDs have a soft surface on the top of package. The pressure to the top surface will be influence to the reliability of the LEDs. Precautions should be taken to avoid the strong pressure on the encapsulated part. So when use the picking up nozzle, the pressure on the silicone resin should be proper.





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