

5.60*3.00 SMD

A-5630BUW-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-5050BUW-S	5.60*3.00*0.90mm	WHITE (InGaN)	Yellow Diffused

($T_A = 25\text{ }^\circ\text{C}$ & $I_F = 100\text{ mA}$)

Luminous intensity(mcd)		Luminous flux(lm)	
Min.	Typ.	Min.	Typ.
-	9000	-	29

Maximum Ratings

Parameter	Symbol	Value	Unit
Operating temperature	T _{OP}	-20 ~ 85	°C
Storage temperature	T _{STG}	-35 ~ 85	°C
Forward current (T _A =25 °C)	I _F	160	mA
Pulse Forward Current	I _{FP}	300	mA
Reverse voltage (T _A =25 °C)	V _R	5	V
Electrostatic Discharge (HBM)	ESD	5000	V
Power Dissipation	Pd	592	mW

*¹ at 1/10 Duty Cycle

Electrical / Optical Characteristics

(T_A = 25 °C)

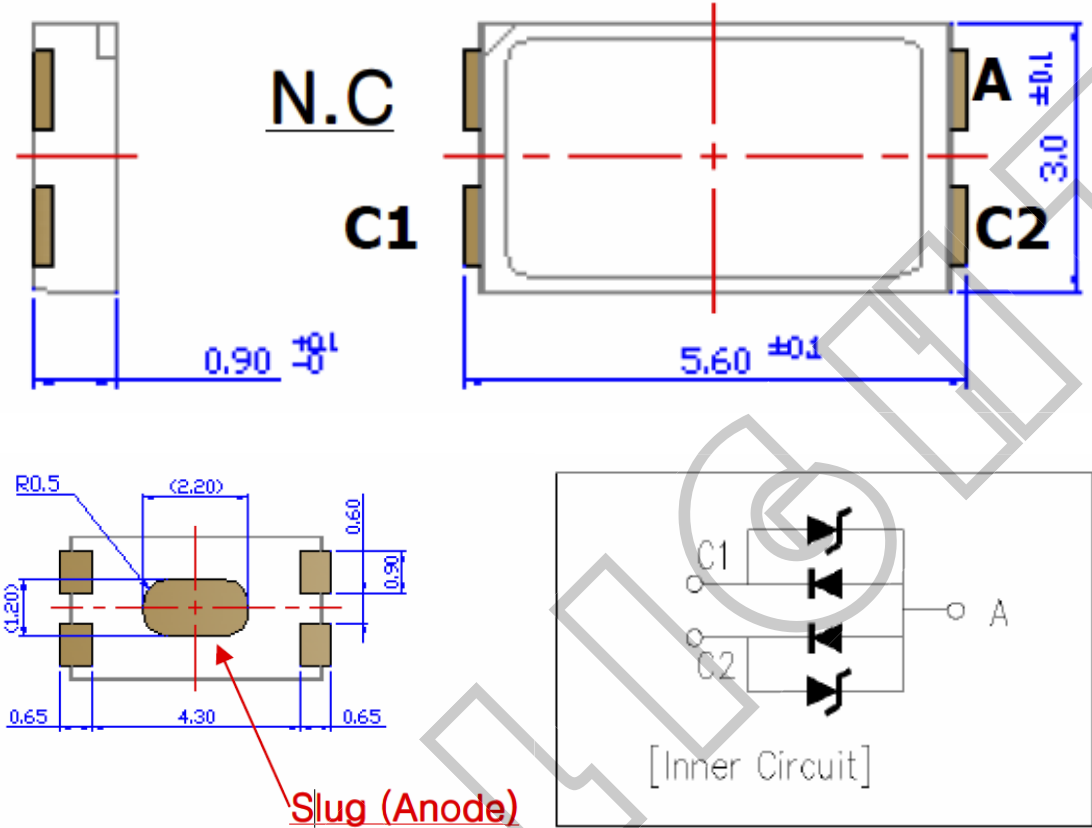
Parameter	Symbol	Value	Unit
Viewing angle at 50% I _F = 20mA	(Typ.) 2θ_{1/2}	120	degree
Forward voltage I _F = 20mA	(Min.) V_F	2.90	V
	(Typ.) V_F	3.20	V
	(Max.) V_F	3.40	V
Reverse current V _R = 5V	(Max.) I_R	10	μA
Color Rending Index V _R = 5V	(Min.) -	70	-
Color Temperature I _F = 20mA	(Typ.) Tc	6500	K

Luminous Intensity and Luminous Flux

(T_A = 25 °C & I_F = 100 mA)

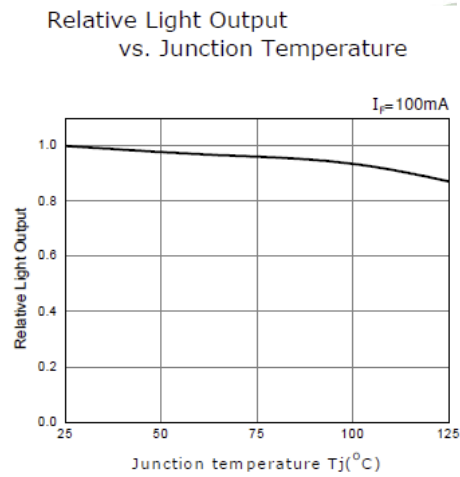
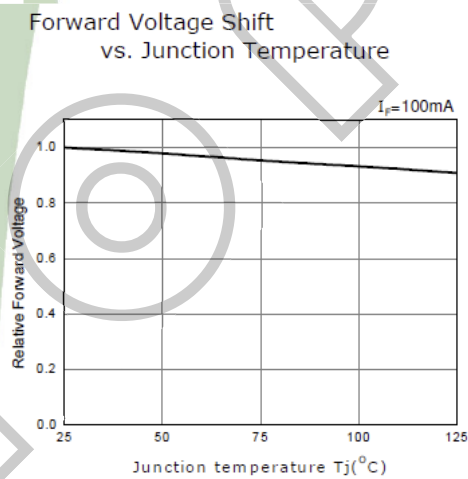
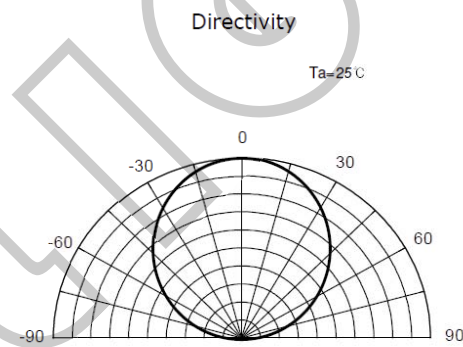
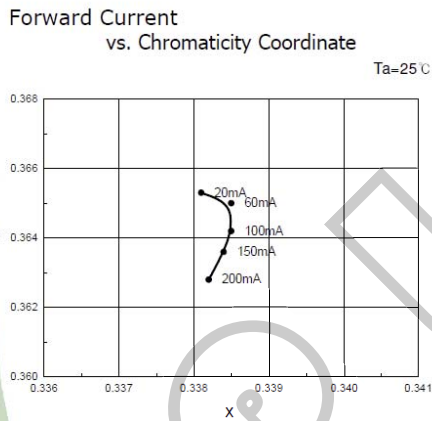
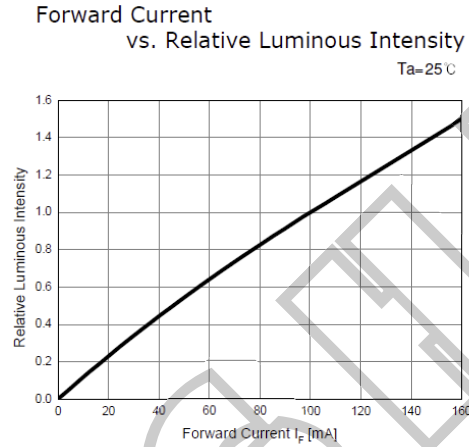
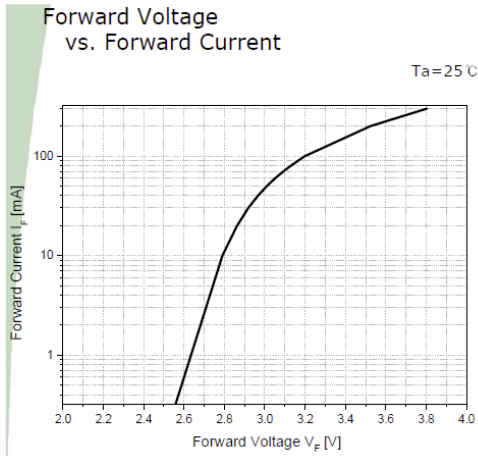
Luminous intensity(mcd)		Luminous flux(lm)	
Min.	Typ.	Min.	Typ.
-	9000	-	29

Package Dimensions

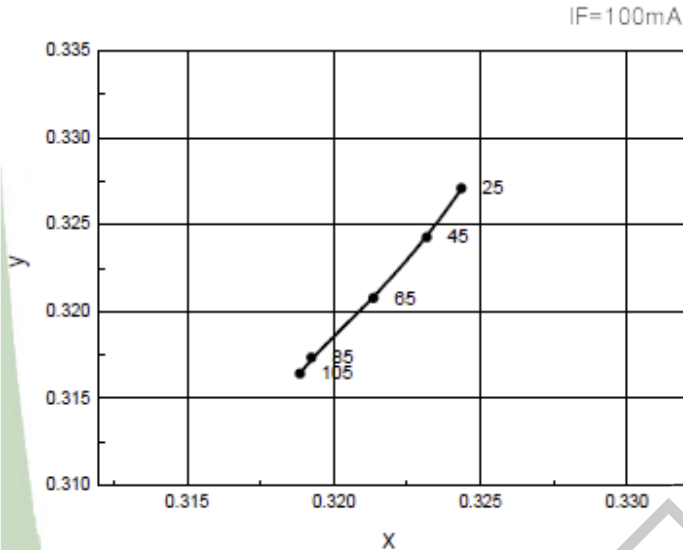


- Notes:
- 1. All dimension units are millimeters.
 - 2. All dimension tolerance is ± 0.15 mm unless otherwise noted.

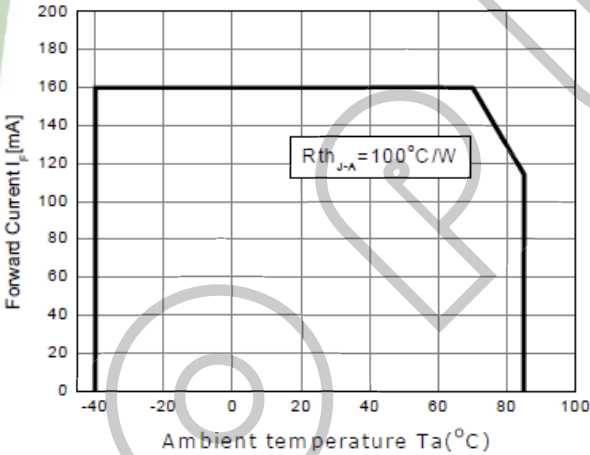
Electrical/Optical Characteristic



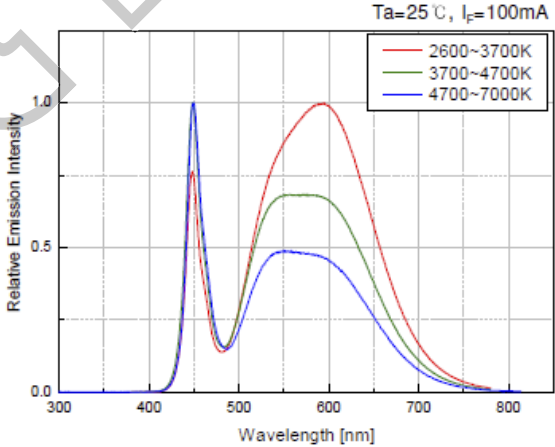
Junction Temperature (°C)
vs. Chromaticity Coordinate



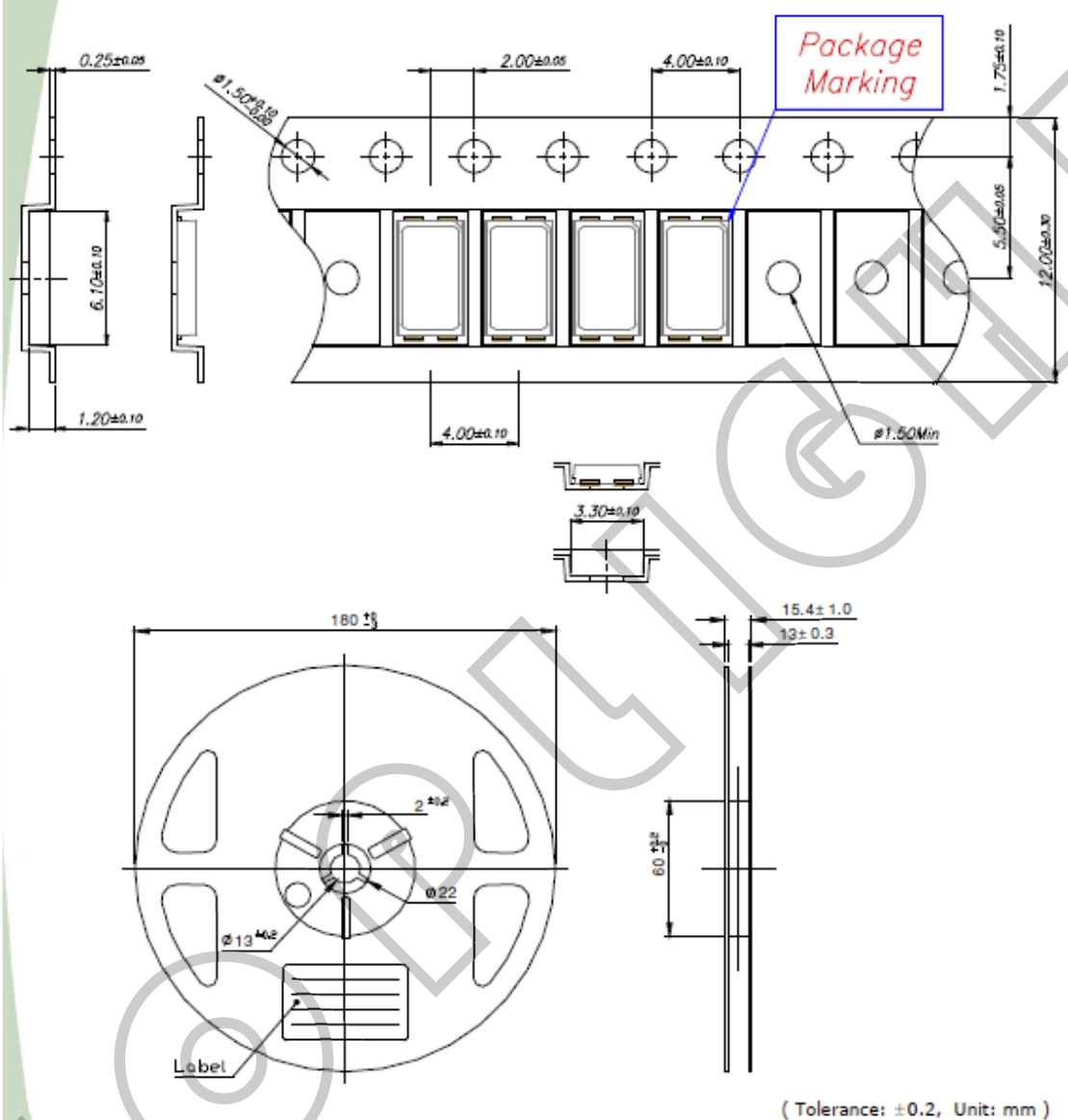
Ambient Temperature
vs. Maximum Forward Current



Spectrum

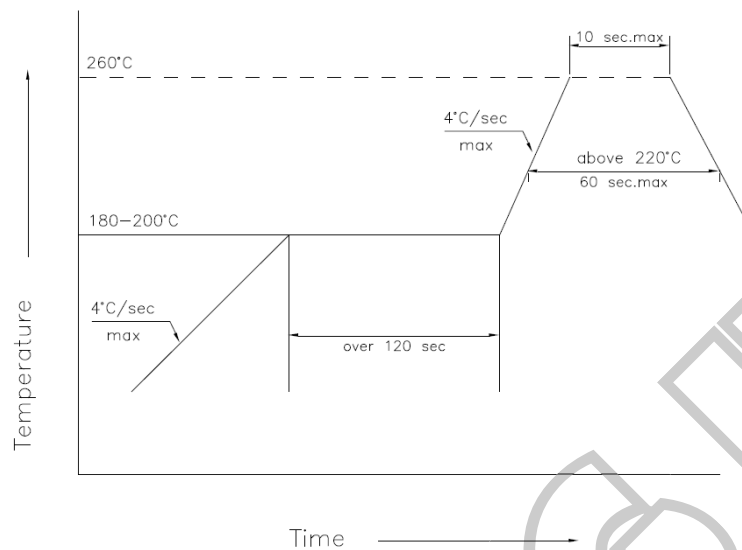


Package Outline Dimensions



- (1) Quantity : 3,500pcs/Reel
 - (2) Cumulative Tolerance : Cumulative Tolerance/10 pitches to be ± 0.2mm
 - (3) Adhesion Strength of Cover Tape : Adhesion strength to be 0.1-0.7N when the cover tape is turned off from the carrier tape at the angle of 10° to the carrier tape
 - (4) Package : P/N, Manufacturing data Code No. and quantity to be indicated on a damp proof Package
- Rev. 09
September 2011

SMT Reflow Soldering Instructions



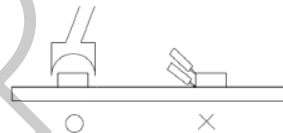
1. Reflow soldering should not be done more than two times
2. When soldering, do not put stress on the LEDs during heating

Soldering iron

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

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 influence 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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