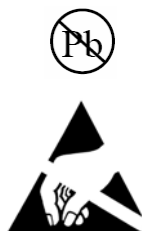




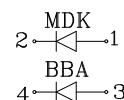
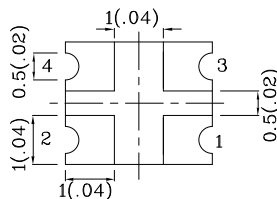
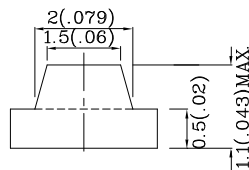
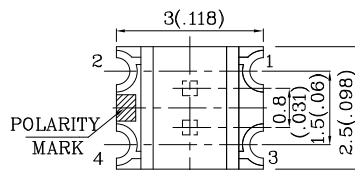
## PRELIMINARY SPEC

### Features

- 3.0mmx2.5mm SMT LED, 1.1mm THICKNESS.
- BI-COLOR, LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- PACKAGE : 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES



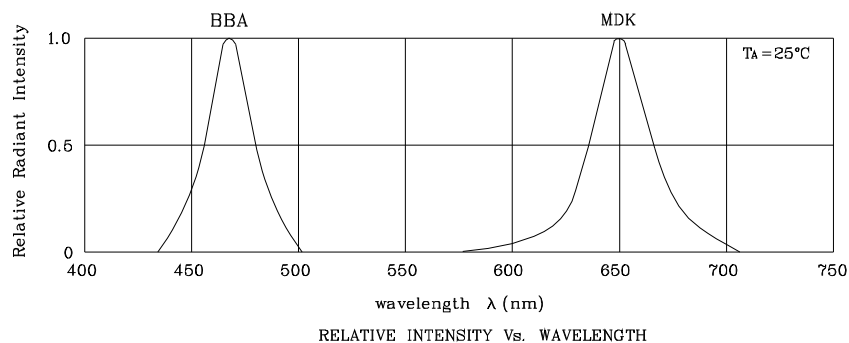
### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.0079)$  unless otherwise noted.
3. Specifications are subject to change without notice.

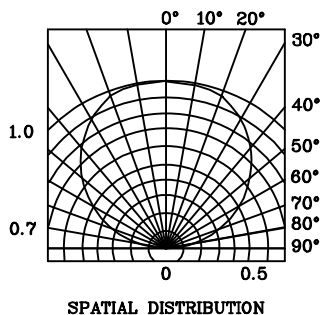
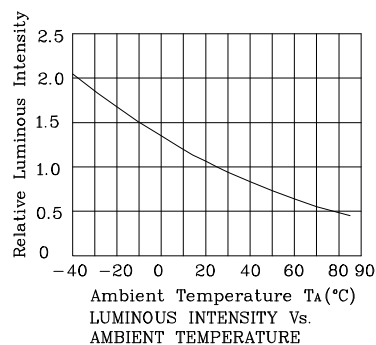
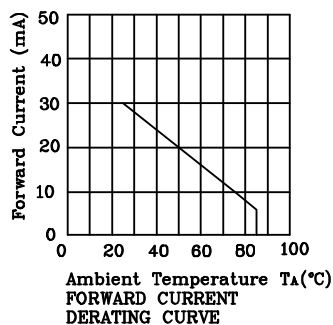
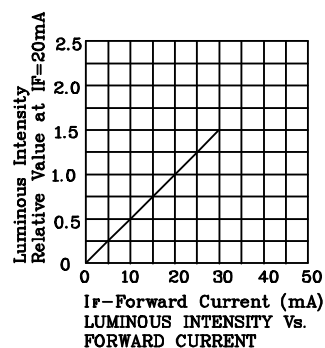
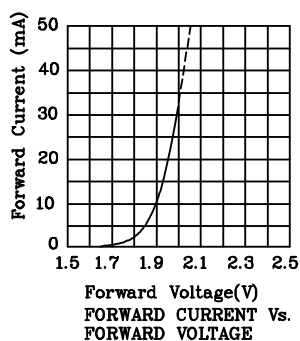
Absolute Maximum Ratings (TA=25°C)		MDK (InGaA 1P)	BBA (InGaN)	Unit
Reverse Voltage	VR	5	5	V
Forward Current	IF	30	30	mA
Forward Current (Peak) 1/10Duty Cycle 0.1ms Pulse Width	iFS	185	100	mA
Power Dissipation	PT	75	120	mW
Electrostatic Discharge Threshold (HBM)		-	1000	V
Operating Temperature	TA	-40 ~ +85		°C
Storage Temperature	Tstg	-40 ~ +85		

Operating Characteristics ( $T_A=25^\circ\text{C}$ )		MDK (InGaA IP)	BBA (InGaN)	Unit
Forward Voltage (Typ.) ( $I_F=20\text{mA}$ )	$V_F$	1.95	3.2	V
Forward Voltage (Max.) ( $I_F=20\text{mA}$ )	$V_F$	2.5	4.0	V
Reverse Current (Max.) ( $V_R=5\text{V}$ )	$I_R$	10	10	$\mu\text{A}$
Wavelength Of Peak Emission (Typ.) ( $I_F=20\text{mA}$ )	$\lambda_P$	650	468	nm
Wavelength Of Dominant Emission (Typ.) ( $I_F=20\text{mA}$ )	$\lambda_D$	635	470	nm
Spectral Line Full Width At Half-Maximum (Typ.) ( $I_F=20\text{mA}$ )	$\Delta\lambda$	28	21	nm
Capacitance (Typ.) ( $V_F=0\text{V}$ , $f=1\text{MHz}$ )	$C$	35	100	pF

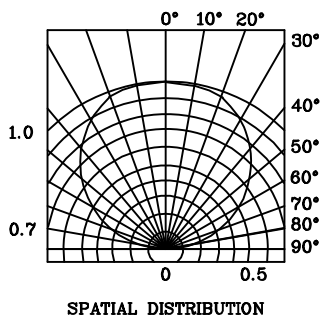
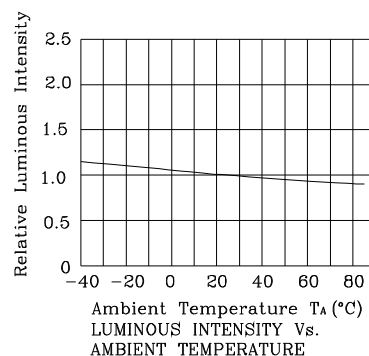
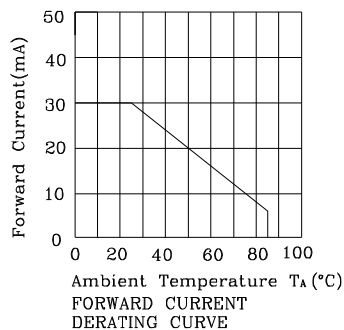
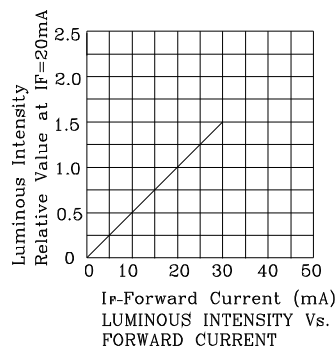
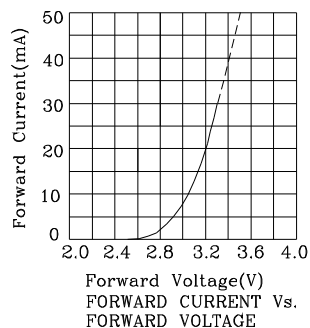
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.		
ZMDKBBA57W	Red	InGaAlP	Water Clear	50	158	650	120°
	Blue	InGaN		18	59	468	
Published Date : FEB 25 ,2008		Drawing No : SDSA6265		V1	Checked : B.L.LIU		P.1/5



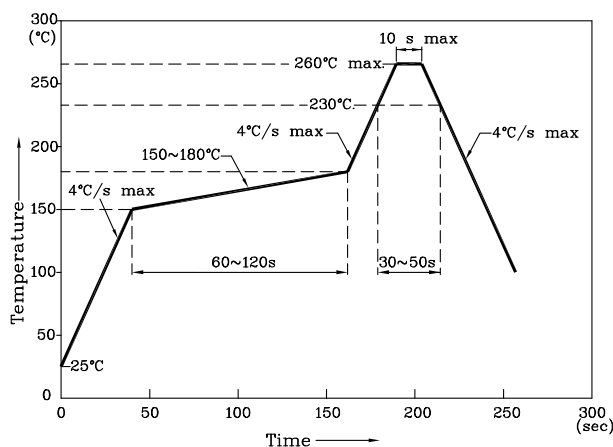
❖ MDK



❖ **BBA**



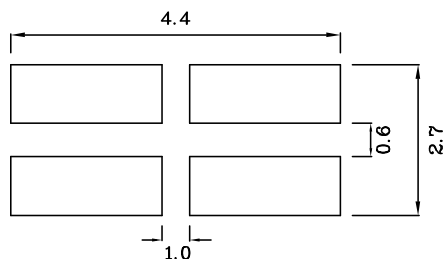
Reflow Soldering Profile For Lead-free SMT Process.



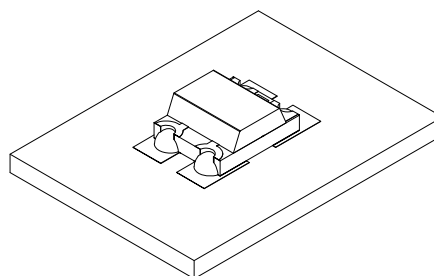
NOTES:

1. Maximum soldering temperature should not exceed 260°C.
2. Recommended reflow temperature: 145°C-260°C.
3. Do not put stress to the epoxy resin during high temperatures conditions.

❖ **Recommended Soldering Pattern**  
(Units : mm; Tolerance:  $\pm 0.1$ )

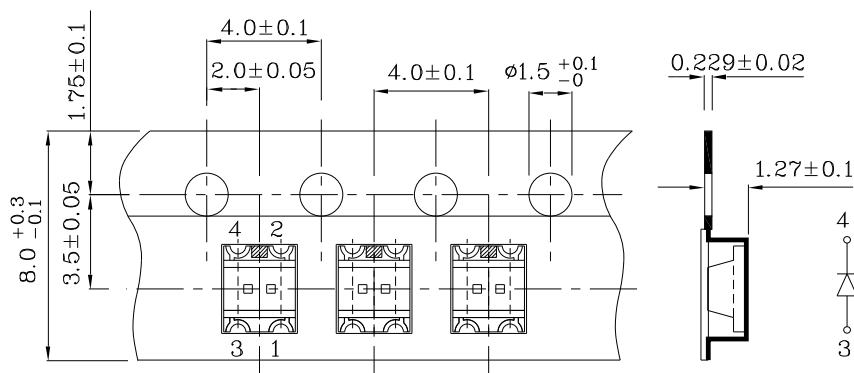


❖ **The device has a single mounting surface. The device must be mounted according to the specifications.**



❖ **Tape Specification (Units : mm)**

TAPE



Remarks:

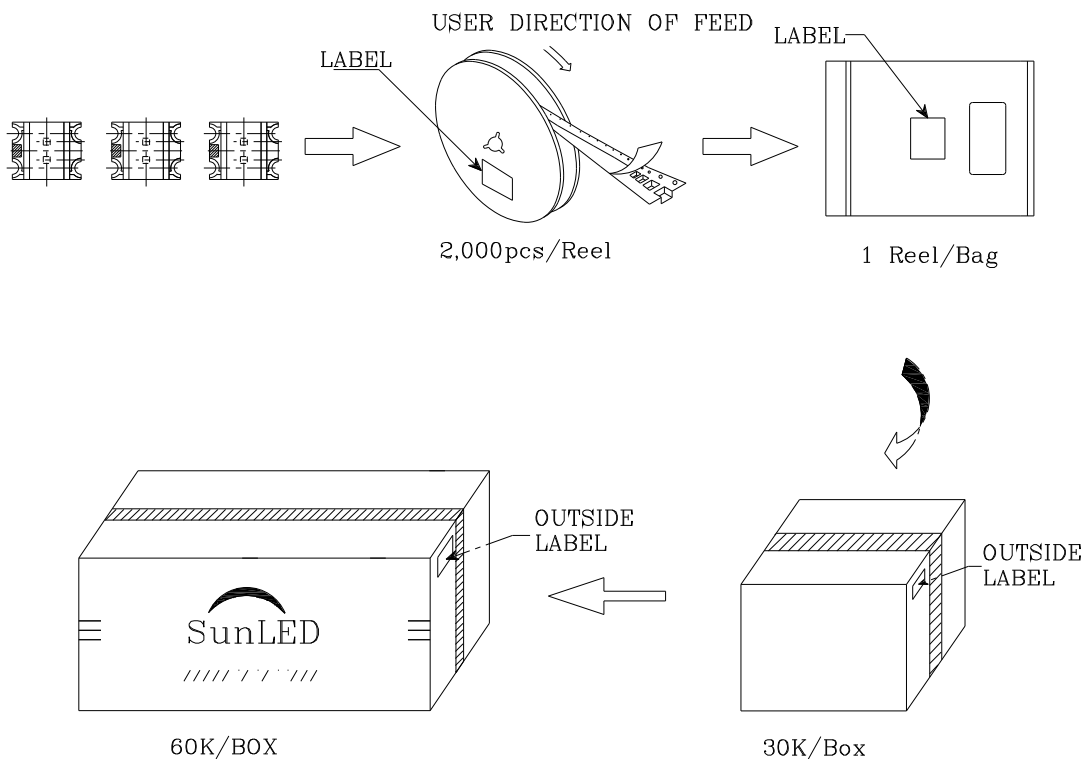
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity/ luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength:  $\pm 1\text{nm}$
2. Luminous intensity/ luminous flux:  $\pm 15\%$
3. Forward Voltage:  $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.

**PACKING & LABEL SPECIFICATIONS**

**ZMDKBBA57W**



**SunLED**

Q.C. Q C

XX XX XXXX

PASSED

P/NO : Zxxx57x

QTY : 2,000 pcs CODE: XXX

S/N : XX

LOT NO :

XXXXXXXXXXXXXXXXXXXXXXX

RoHS Compliant