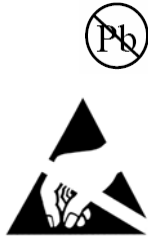


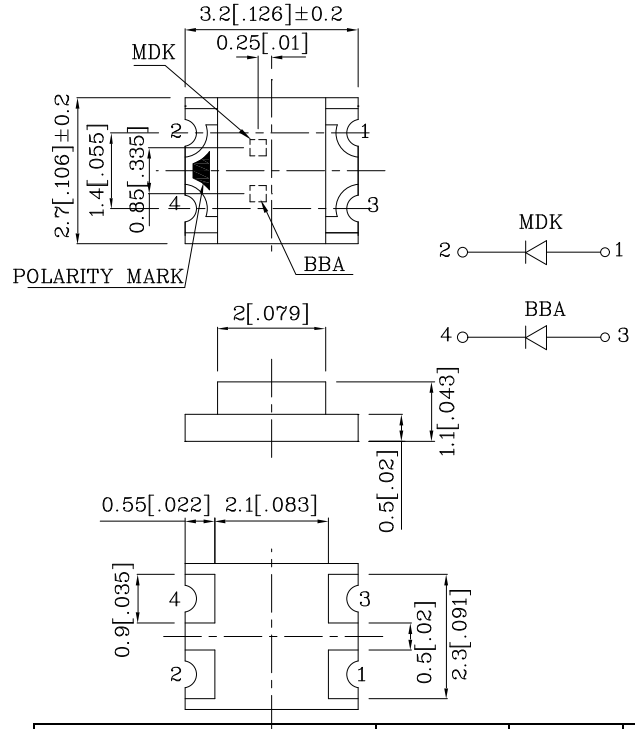
PRELIMINARY SPEC

**Features**

- 3.2mmx2.7mm SMT LED, 1.1mm THICKNESS.
- BI -COLOR,LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.



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



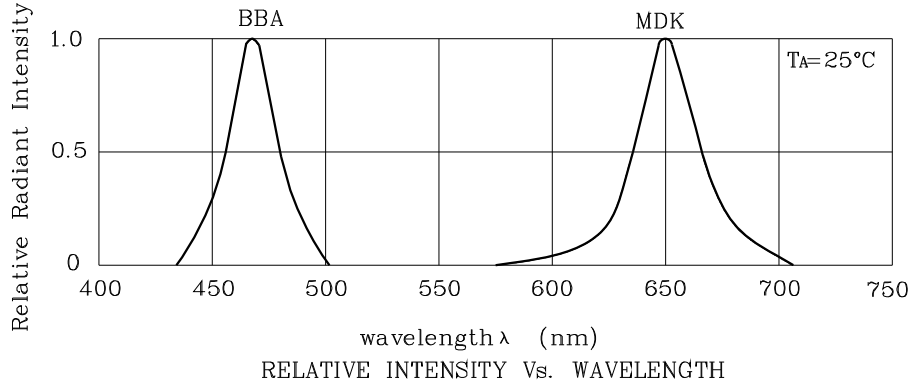
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1(0.004)$ " unless otherwise noted.
- 3.Specifications are subject to change without notice.

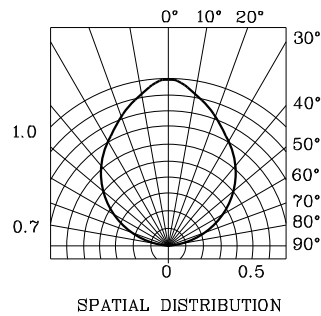
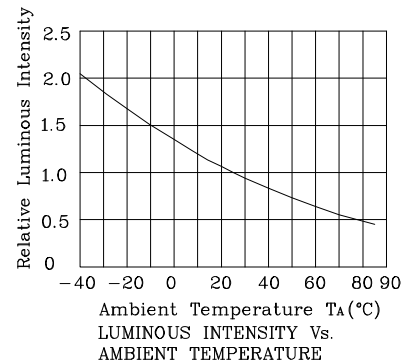
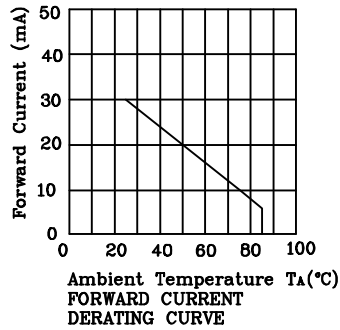
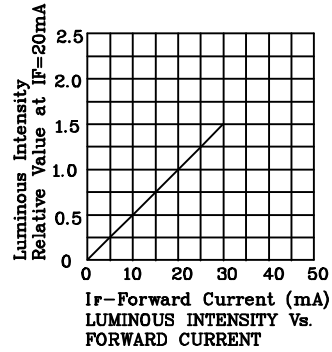
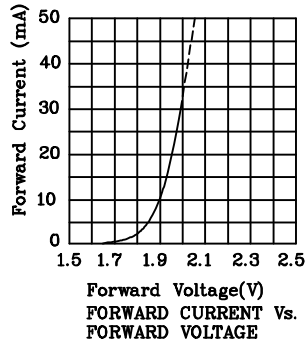
Absolute Maximum Ratings (TA=25°C)		MDK (InGaAlP)	BBA (InGaN)	Unit
Reverse Voltage	VR	5	5	V
Forward Current	IF	30	30	mA
Forward Current (Peak) 1/10Duty Cycle 0.1ms Pulse Width	iFS	185	100	mA
Power Dissipation	Pr	75	120	mW
Electrostatic Discharge Thresh- old (HBM)	-	-	1000	V
Operating Temperature	TA	-40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

Operating Characteristics (TA=25°C)		MDK (InGaAlP)	BBA (InGaN)	Unit
Forward Voltage (Typ.) (IF=20mA)	VF	1.95	3.2	V
Forward Voltage (Max.) (IF=20mA)	VF	2.5	4.0	V
Reverse Current (Max.) (VR=5V)	IR	10	10	uA
Wavelength Of Peak Emission (Typ.) (IF=20mA)	$\lambda P$	650	468	nm
Wavelength Of Dominant Emission (Typ.) (IF=20mA)	$\lambda D$	635	470	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA)	$\Delta\lambda$	28	21	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	C	35	100	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm $\lambda P$	Viewing Angle 2 $\theta$ 1/2
				min.	typ.		
ZMDKBBA98W	Red	InGaAlP	Water Clear	50	158	650	100°
	Blue	InGaN		18	59	468	

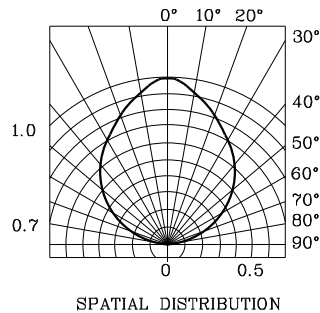
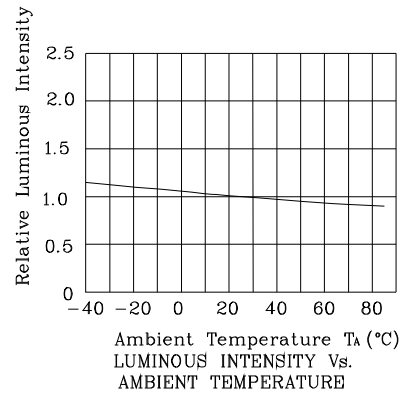
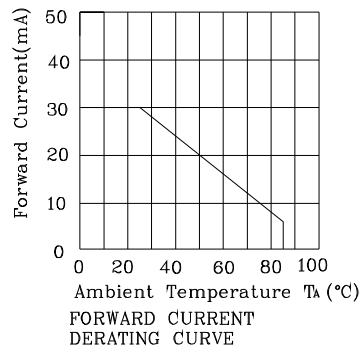
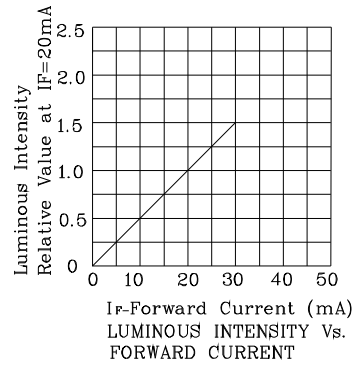
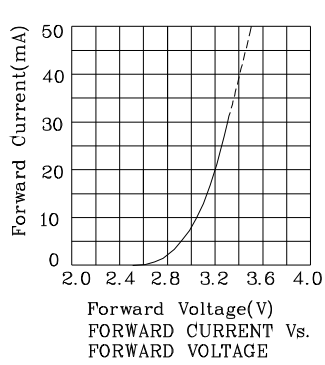


❖ MDK

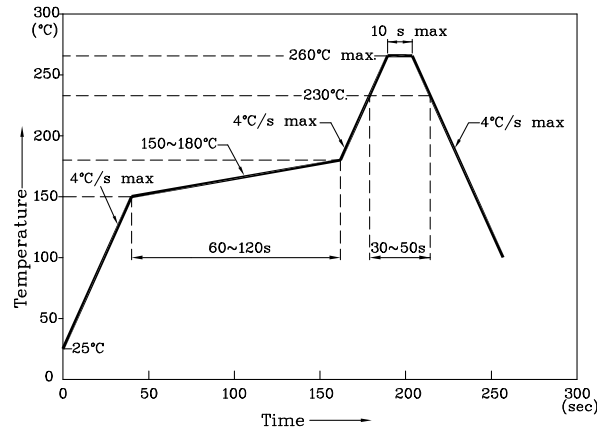




❖ **BBA**



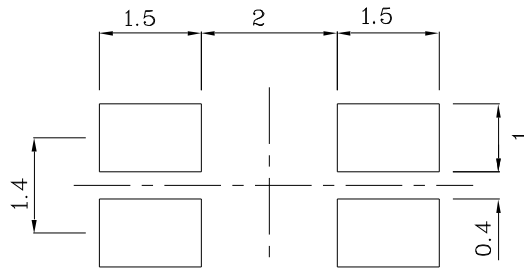
Reflow Soldering Profile For Lead-free SMT Process.



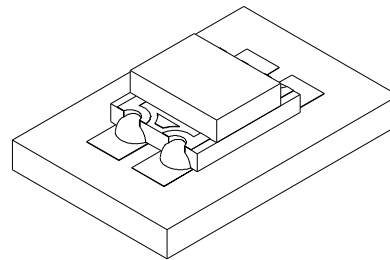
NOTES:

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.

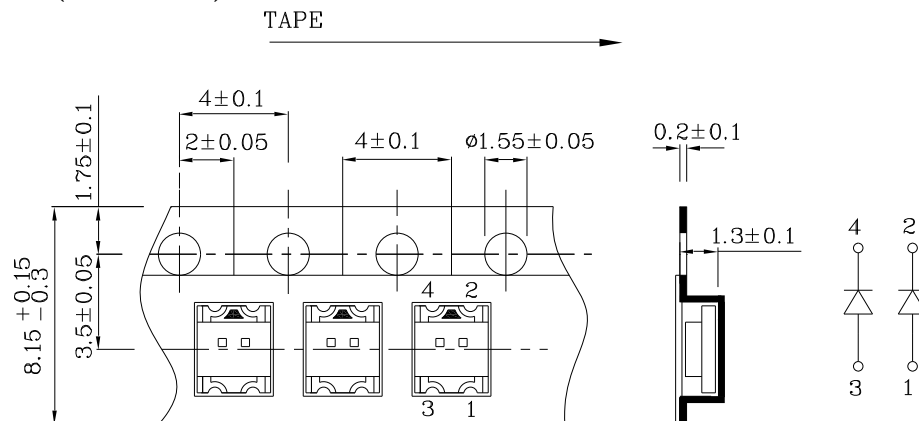
❖ Recommended Soldering Pattern  
(Units : mm; Tolerance: ± 0.1)



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



❖ Tape Specification (Units : mm)



Remarks:

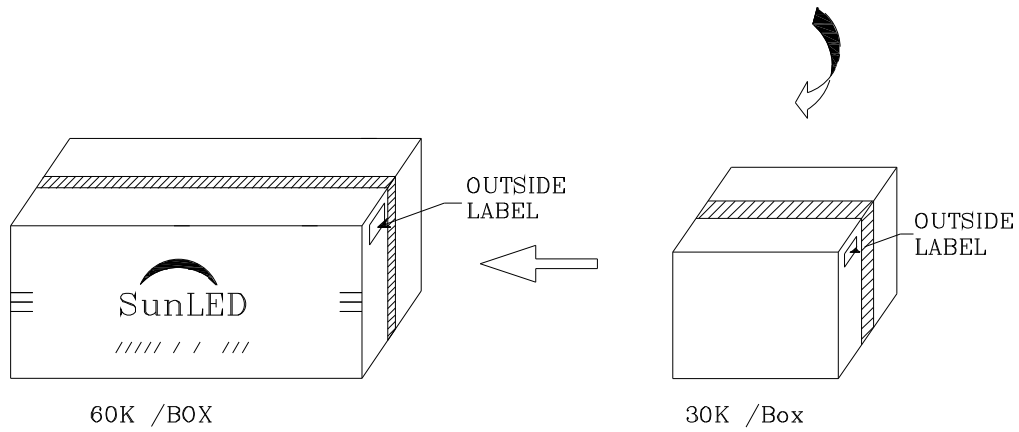
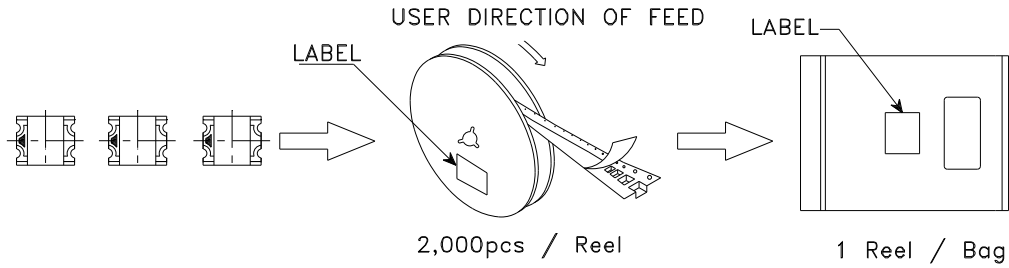

If special sorting is required (e.g. binning based on forward voltage, luminous intensity/ Luminous Flux or wavelength), the typical accuracy of the sorting process is as follows:

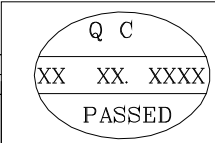


1. Wavelength: +/-1nm
2. Luminous Intensity/ Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

**PACKING & LABEL SPECIFICATIONS**

**ZMDKBBA98W**

	
P/NO : Zxx98x	
QTY : 2,000 pcs	CODE: XXX
S/N : XX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	