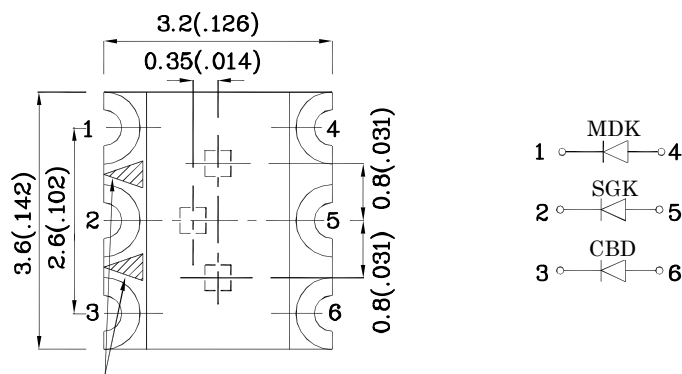


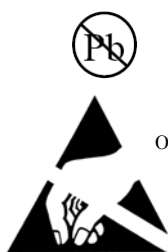
## PRELIMINARY SPEC

## Features

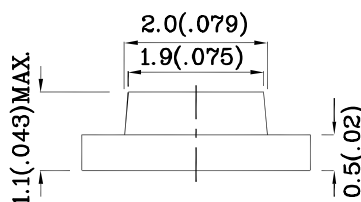
- 3.2mmx3.6mm SMT LED, 1.1mm thickness.
- Low power consumption.
- One red, one green and one blue chips in one package.
- Package : 1000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant



## POLARITY MARK



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



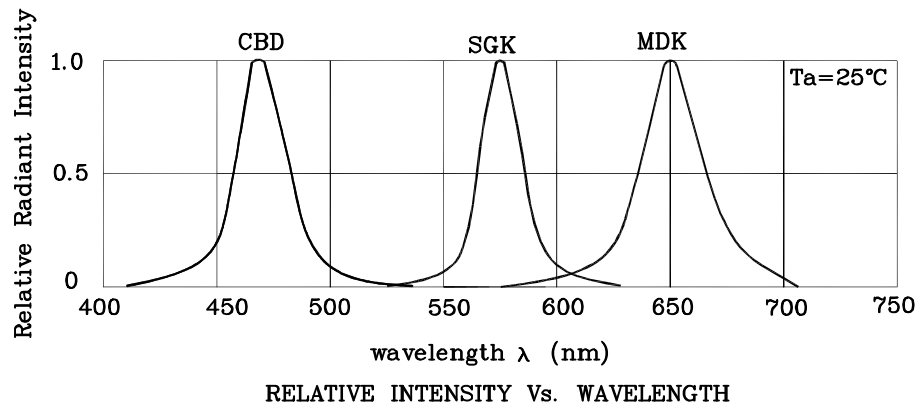
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008")$  unless otherwise noted.
3. Specifications are subject to change without notice.

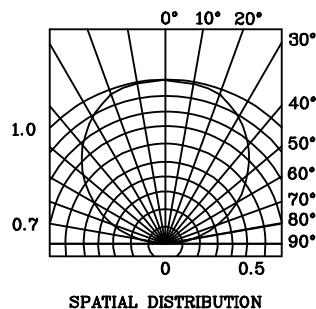
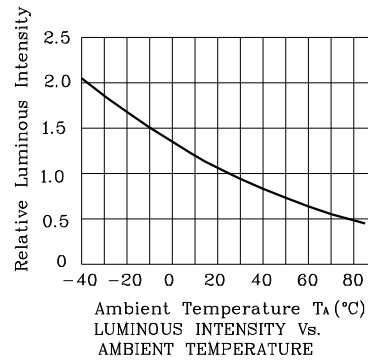
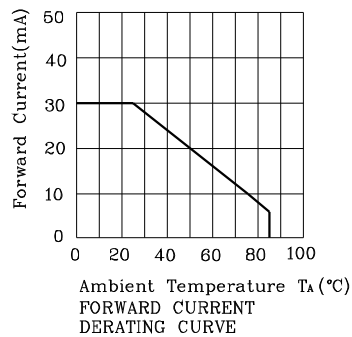
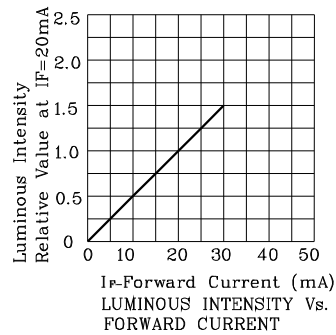
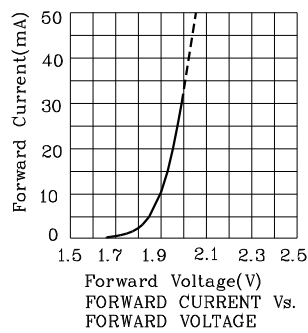
Absolute Maximum Ratings (TA=25°C)		MDK (AlGaInP)	SGK (AlGaInP)	CBD (InGaIn)	Unit
Reverse Voltage	VR	5	5	5	V
Forward Current	IF	30	30	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	185	150	150	mA
Power Dissipation	PD	75	75	120	mW
Operating Temperature	TA	-40 ~ +85			°C
Storage Temperature	Tstg	-40 ~ +85			

Operating Characteristics (TA=25°C)		MDK (AlGaInP)	SGK (AlGaInP)	CBD (InGaN)	Unit
Forward Voltage (Typ.) (IF=20mA)	VF	1.95	2.1	3.3	V
Forward Voltage (Max.) (IF=20mA)	VF	2.5	2.5	4.0	V
Reverse current (Max.) (VR=5V)	IR	10	10	10	uA
Wavelength of Peak Emission (Typ.) (IF=20mA)	λ P	650	574	468	nm
Wavelength of Dominant emission (Typ.) (IF=20mA)	λ D	630	570	470	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA)	Δλ	28	20	25	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	C	35	15	100	pF

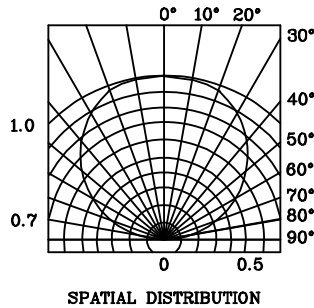
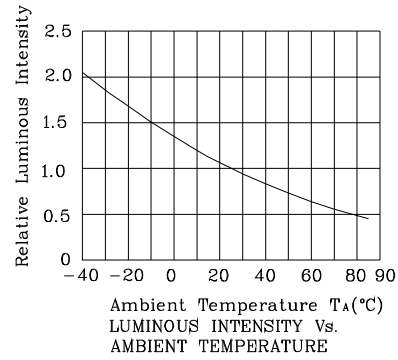
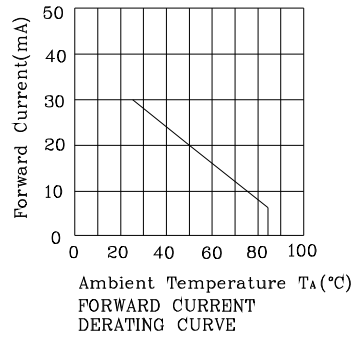
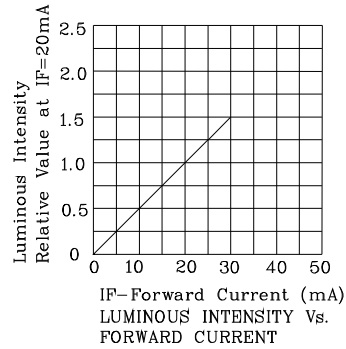
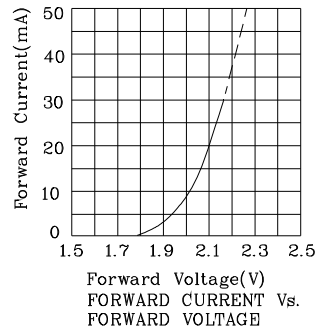
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd	Wavelength nm λ P	Viewing Angle 2θ 1/2
				min.	typ.	
XZMDKSGKCB061W	Red	AlGaInP	Water Clear	70	218	650
	Green	AlGaInP		18	59	574
	Blue	InGaN		36	89	468
Published Date : NOV 23,2009		Drawing No : XDSB3832		V2	Checked : B.L.LIU	
					P.1/6	



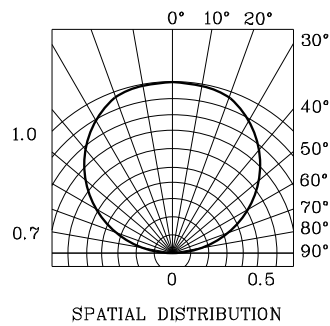
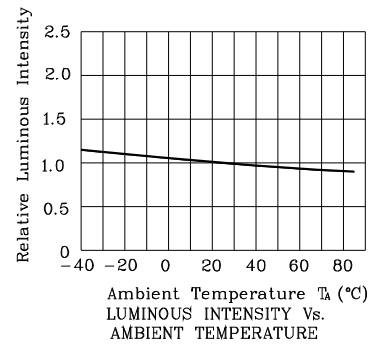
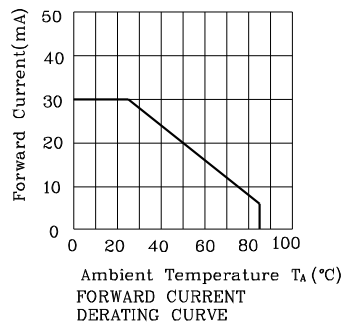
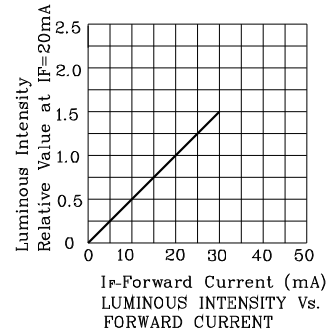
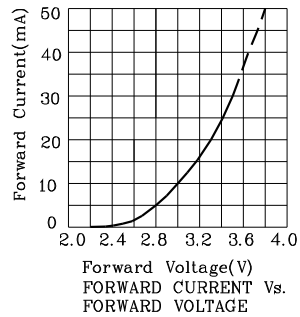
❖ MDK



❖ SGK

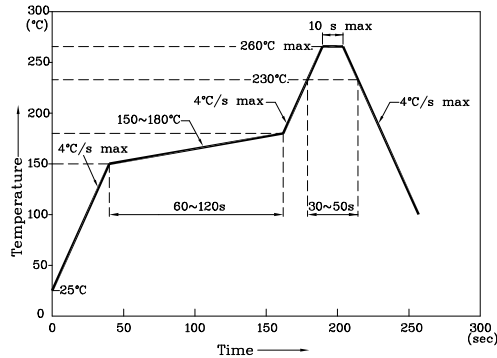


❖ CBD



**Reflow soldering is recommended and the soldering profile is shown below.  
Other soldering methods are not recommended as they might cause damage to the product.**

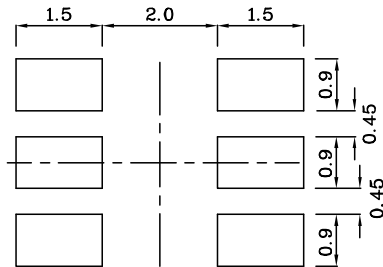
Reflow Soldering Profile For Lead-free SMT Process.



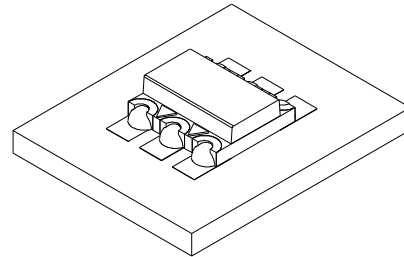
NOTES:

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.

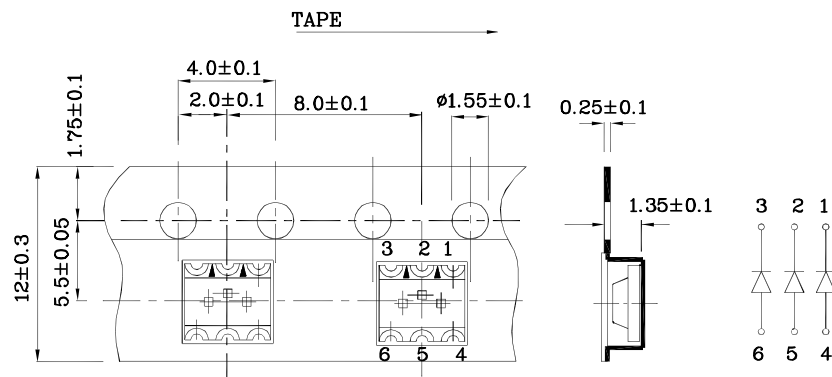
❖ **Recommended Soldering Pattern**  
(Units : mm; Tolerance: ± 0.1)



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



❖ **Tape Specification (Units : mm)**



Remarks:

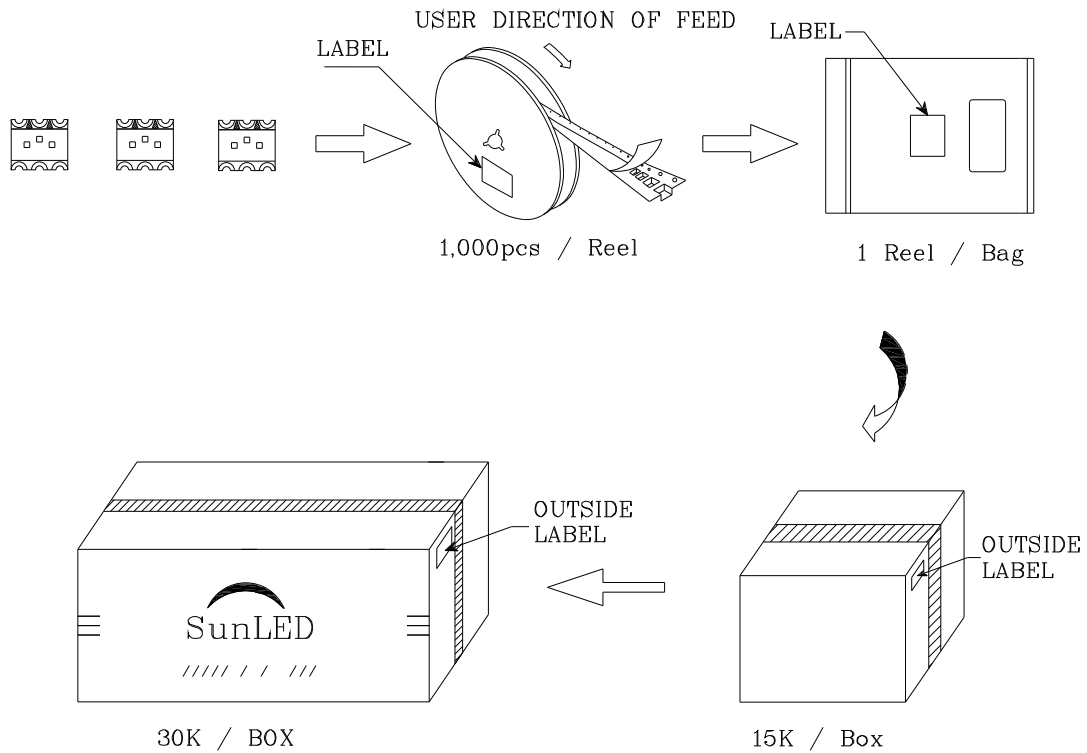
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity/ luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

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**

**XZMDKSGKCBD61W**



P/NO : XZxx61x		
QTY : 1,000 pcs		CODE: XXX
S/N : XX		
LOT NO:  XXXXXXXXXXXXXXXXXXXX		
RoHS Compliant		