

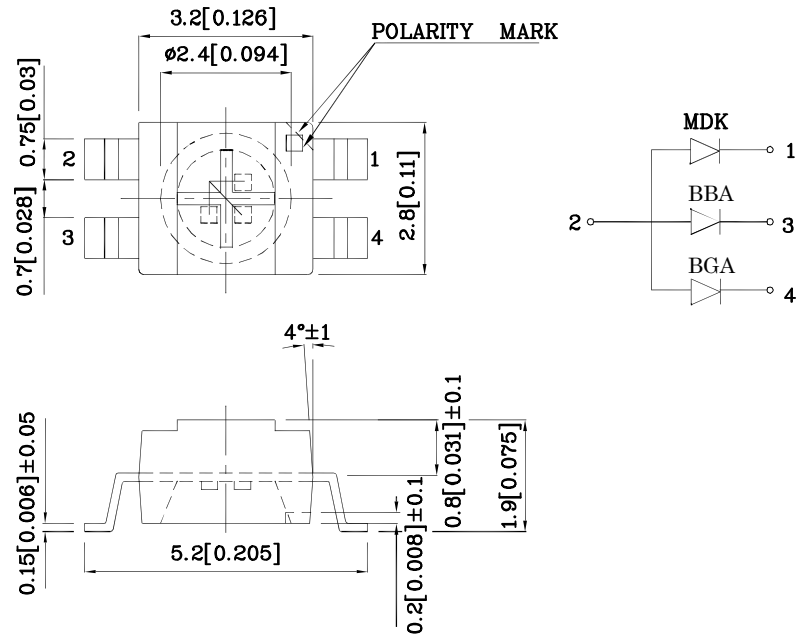
Features

- Ideal for indication light on hand held products
- Long life and robust package
- Variety of lens types and color choices available
- Standard Package: 2000pcs/ Reel
- MSL (Moisture Sensitivity Level): 4
- RoHS compliant



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Package Schematics



Notes:

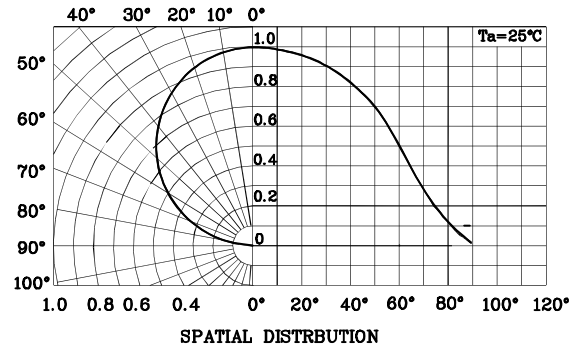
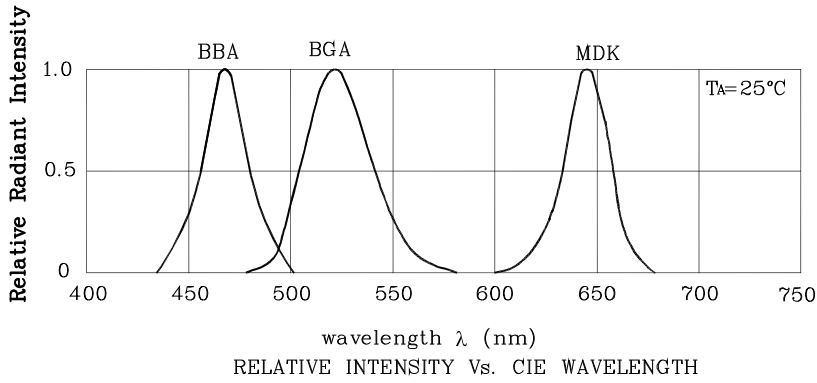
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.2(0.008") unless otherwise noted.
3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T _A =25°C)		MDK (AlGaInP)	BBA (InGaN)	BGA (InGaN)	Unit
Reverse Voltage	V _R	5	5	5	V
Forward Current	I _F	30	30	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i _{FS}	185	100	100	mA
Power Dissipation	P _D	75	120	120	mW
Electrostatic Discharge Threshold (HBM)		-	1000	1000	V
Operating Temperature	T _A	-40 ~ +85			°C
Storage Temperature	T _{stg}				

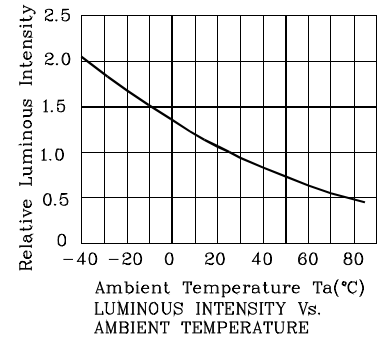
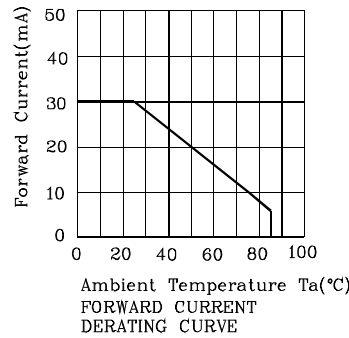
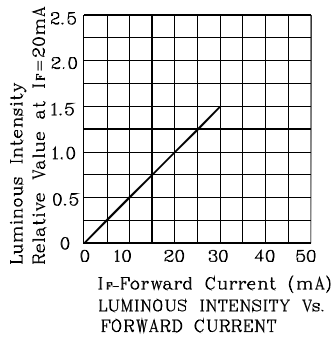
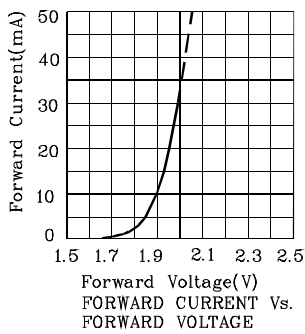
Operating Characteristics (T _A =25°C)		MDK (AlGaInP)	BBA (InGaN)	BGA (InGaN)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V _F	1.95	3.2	3.2	V
Forward Voltage (Max.) (I _F =20mA)	V _F	2.5	4	4	V
Reverse Current (Max.) (V _R =5V)	I _R	10	10	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.)	λ _P	650 645*	468 468*	520 520*	nm
Wavelength of Dominant Emission CIE127-2007*(Typ.) (I _F =20mA)	λ _D	630 630*	470 465*	525 530*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	Δλ	28	21	35	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	C	35	100	100	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I _F =20mA) mcd		Wavelength CIE127-2007* λPnm	Viewing Angle 2θ 1/2
				min.	typ.		
XZMDKBBABGA45W-9	Red	AlGaInP	Water Clear	200	317	650	120°
	Blue	InGaN		55*	98	468	
	Green	InGaN		120	248	520	
				55*	100*	468*	
				120*	250*	520*	

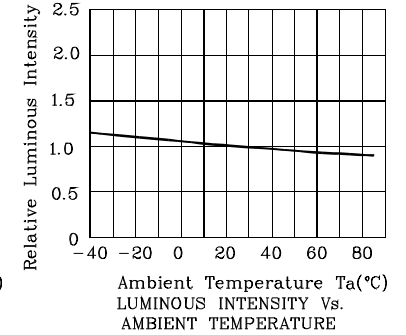
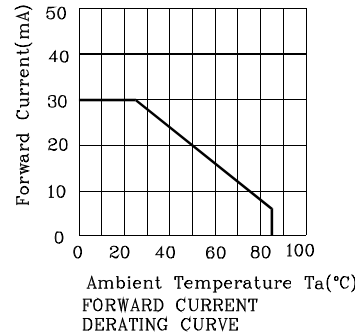
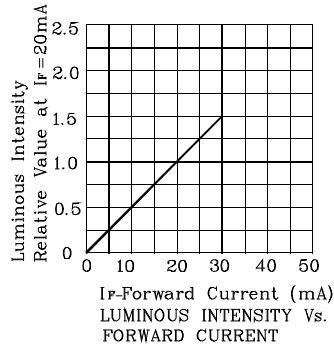
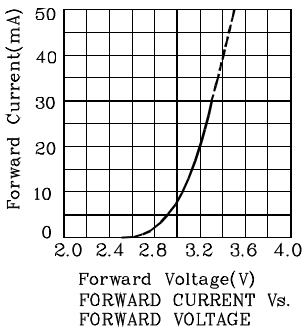
*Intensity intensity value and wavelength are in accordance with CIE127-2007 standards.



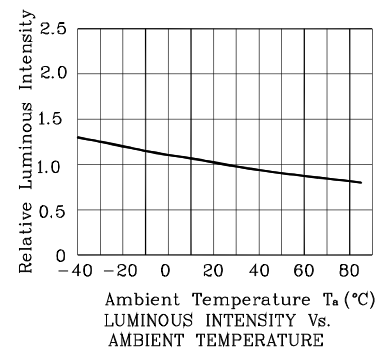
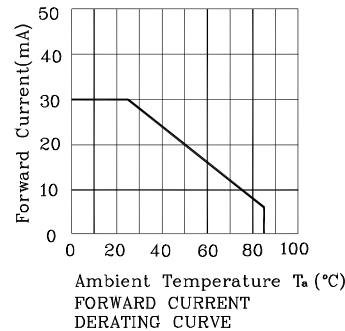
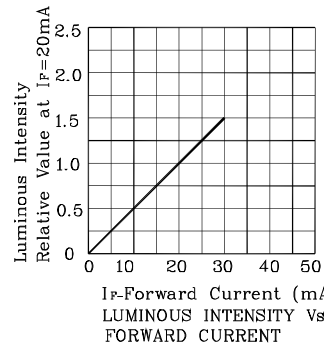
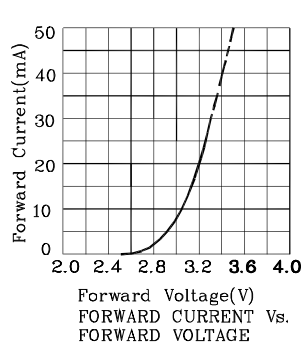
❖ MDK



❖ BBA



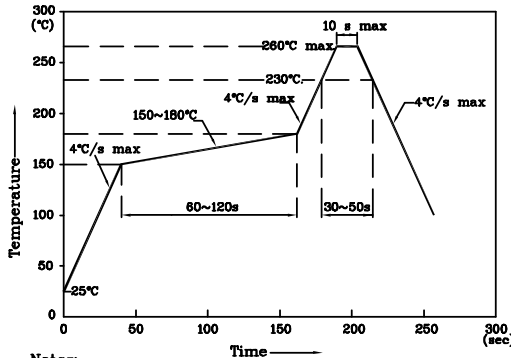
❖ BGA



LED is recommended for reflow soldering and soldering profile is shown below.

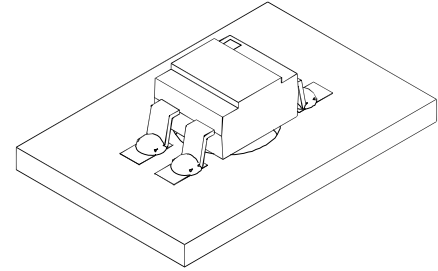
❖ The device has a single mounting surface. The device must be mounted according to the specifications.

Reflow Soldering Profile for SMD Products (Pb-Free Components)

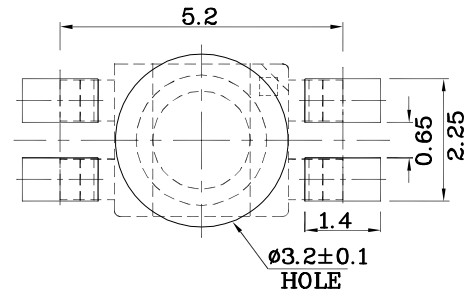


Notes:

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

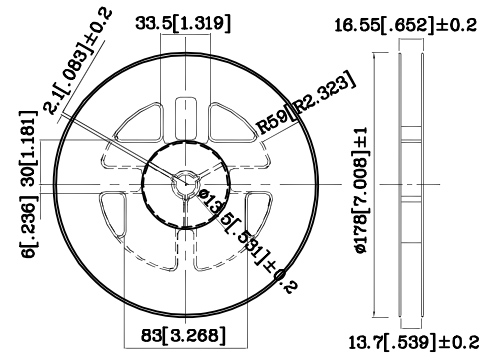
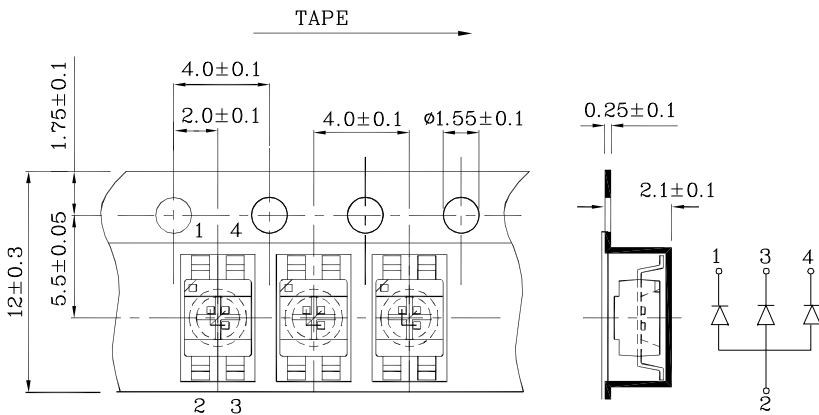


❖ Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



❖ Tape Specification (Units : mm)

❖ Reel Dimension



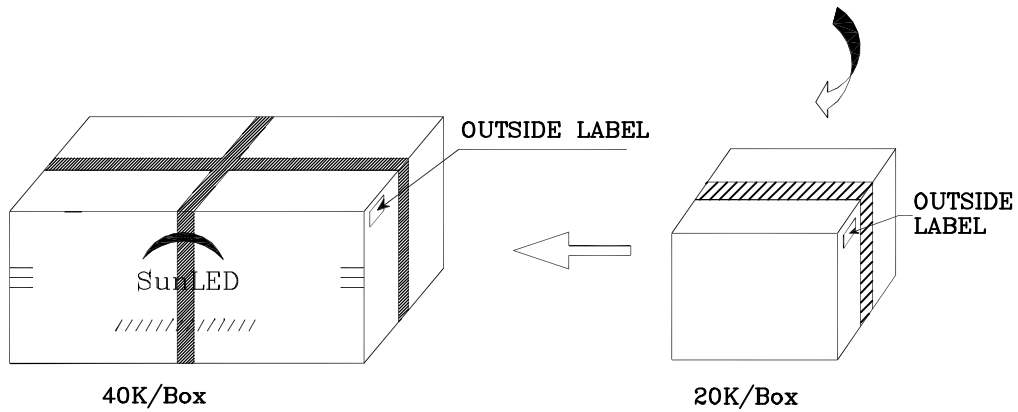
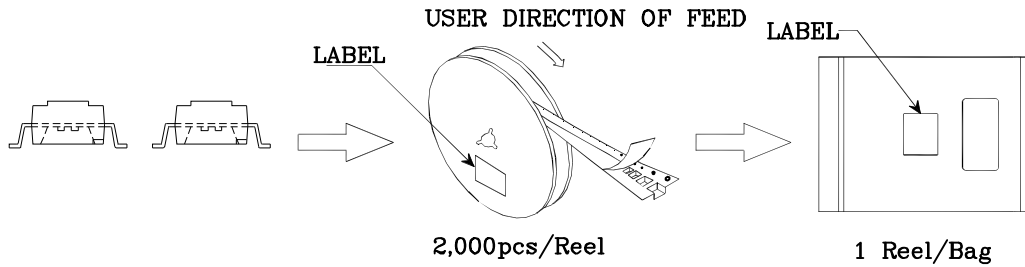

Remarks:

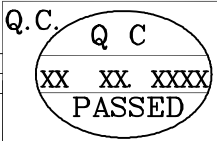

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

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

	
P/NO : XZxxx45x-9	
QTY : 2000 pcs	CODE: XXX
S/N : XX	
LOT NO :	
 XXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	