

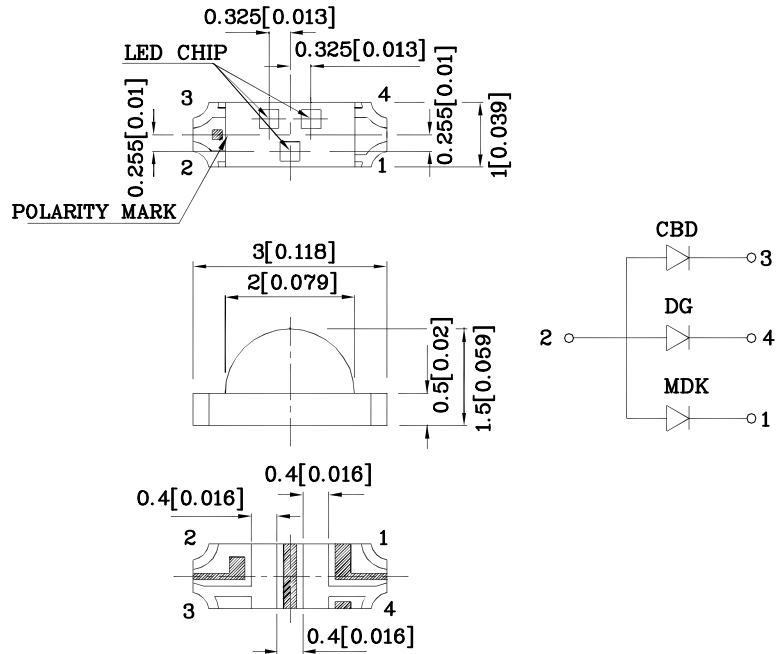
Features

- Ideal for indication light on hand held products
- Long life and robust package
- Variety of lens types and color choices available
- Package : 2000 pcs / reel
- Moisture sensitivity level : level 3
- RoHS compliant



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Package Schematics



Notes:

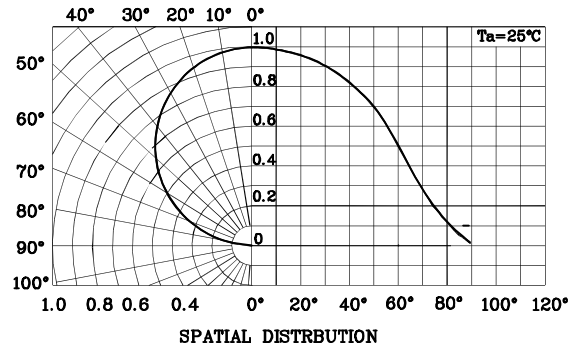
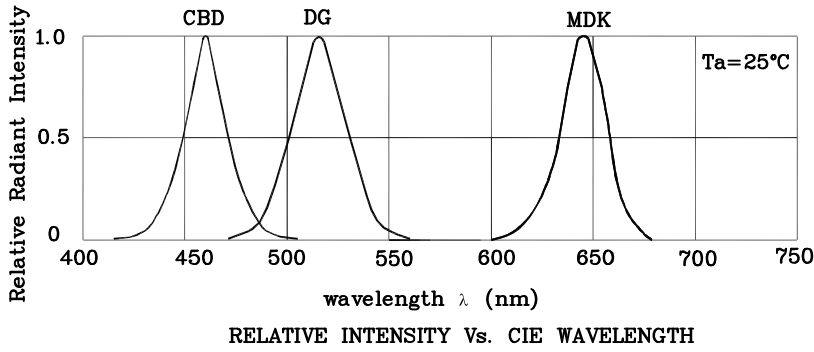
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.2(0.008)$ unless otherwise noted.
3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T _A =25°C)		MDK (AlGaInP)	CBD (InGaN)	DG (InGaN)	Unit
Reverse Voltage	V _R	5	5	5	V
Forward Current	I _F	30	30	25	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i _{FS}	185	150	150	mA
Power Dissipation	P _D	75	120	102.5	mW
Operating Temperature	T _A	-40 ~ +85			°C
Storage Temperature	T _{stg}				
Electrostatic Discharge Threshold (HBM)		-	250	450	V

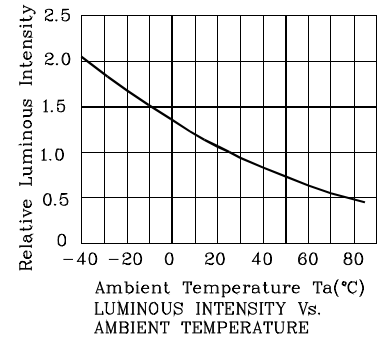
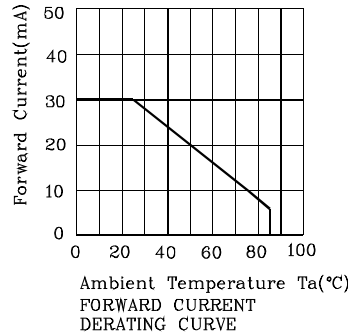
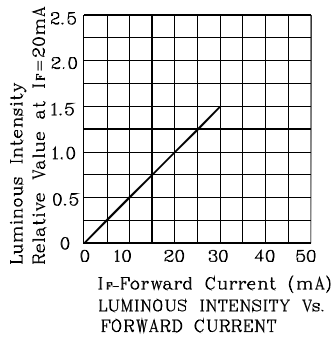
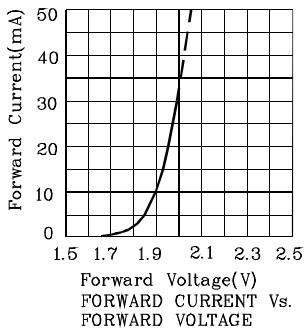
Operating Characteristics (T _A =25°C)		MDK (AlGaInP)	CBD (InGaN)	DG (InGaN)	Unit
Forward Voltage (Typ.)(I _F =20mA)	V _F	1.95	3.3	3.3	V
Forward Voltage (Max.)(I _F =20mA)	V _F	2.5	4	4.1	V
Reverse Current (Max.)(V _R =5V)	I _R	10	50	50	uA
Wavelength of Peak Emission CIE127-2007*(Typ.) (I _F =20mA)	λ _P	650 645*	468 460*	515 515*	nm
Wavelength of Dominant Emission CIE127-2007*(Typ.) (I _F =20mA)	λ _D	630 630*	470 465*	525 525*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	Δλ	28	25	30	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	C	35	100	45	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I _F =20mA) mcd		Wavelength CIE127-2007* λ _P nm	Viewing Angle 2θ 1/2
				min.	typ.		
ZMDKCBDDG56WT	Red	AlGaInP	Water Clear	120 55*	218 80*	650 645*	120°
	Blue	InGaN		40 40*	69 70*	468 460*	
	Green	InGaN		200 200*	347 350*	515 515*	

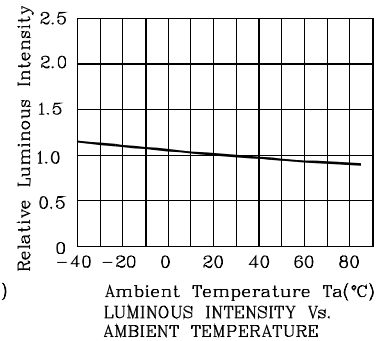
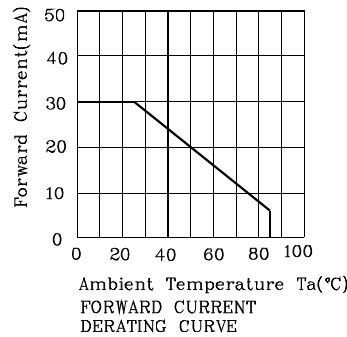
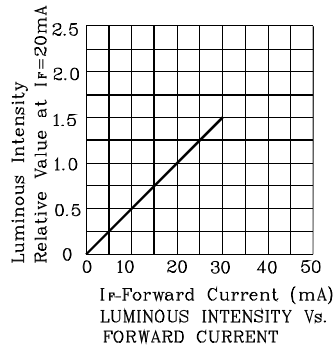
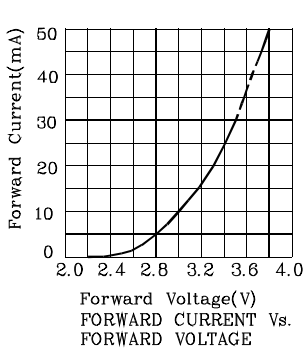
*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.



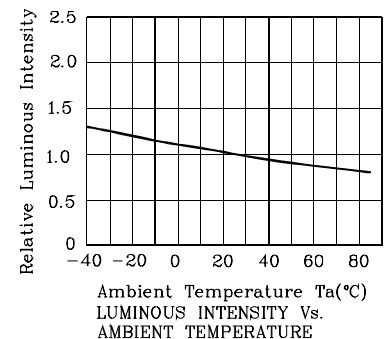
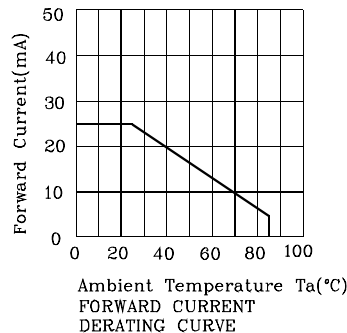
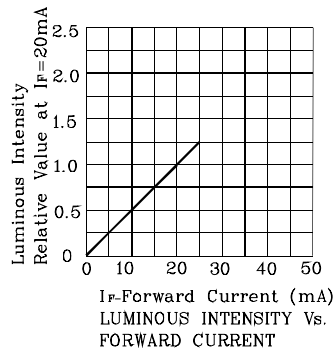
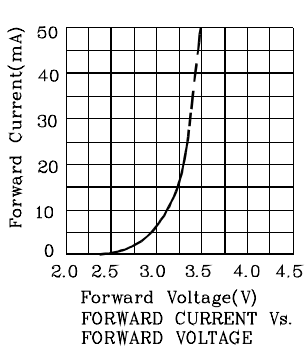
❖ MDK



❖ CBD



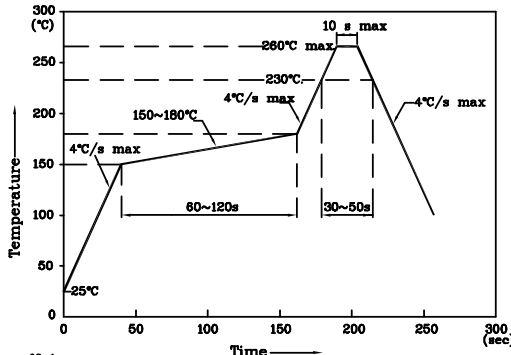
❖ DG



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

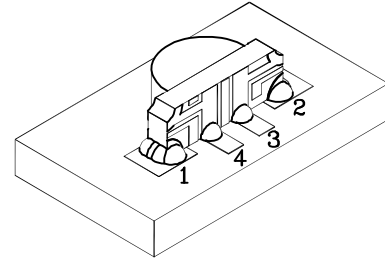
❖ The device has a single mounting surface. The device must be mounted according to the specifications.

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

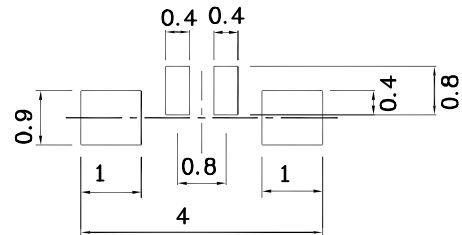


Notes:

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

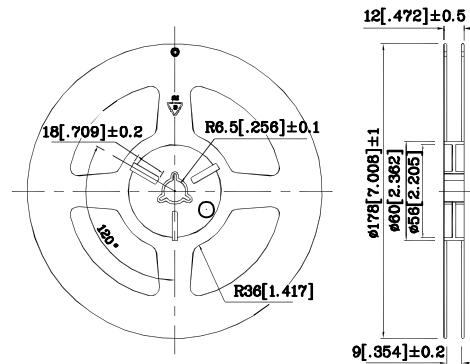
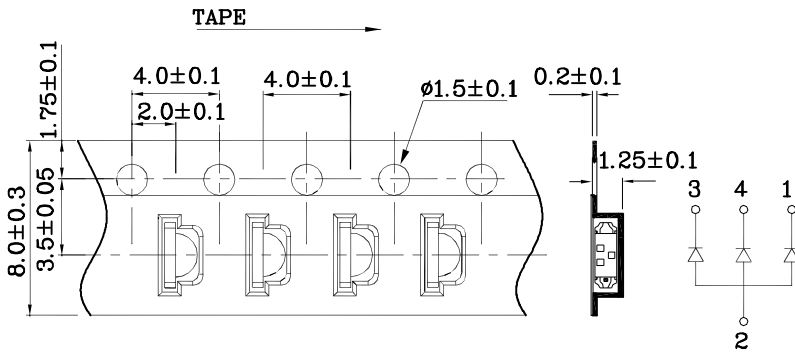


❖ Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



❖ Tape Specification (Units : mm)

❖ Reel Dimension



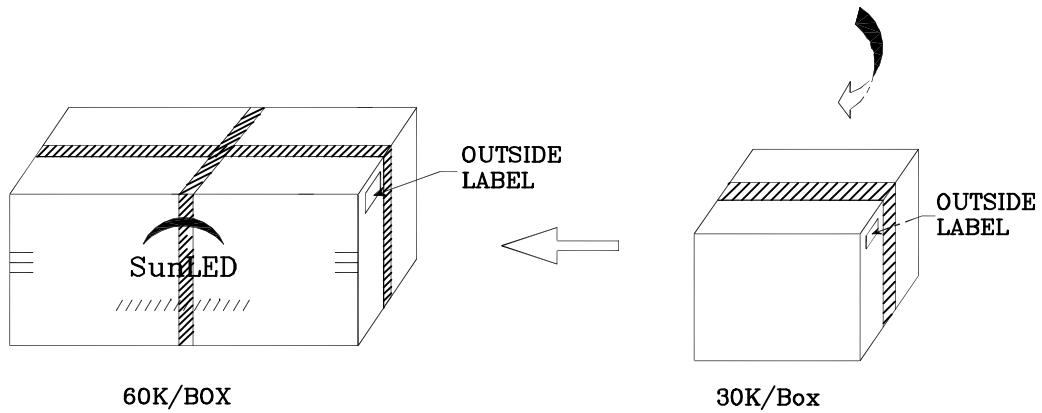
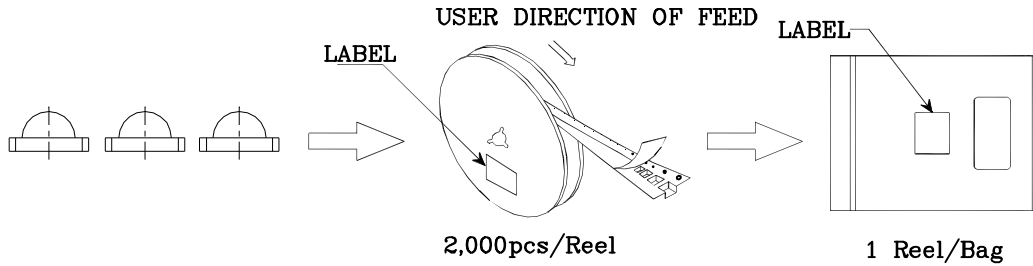

Remarks:

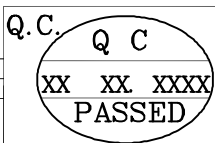

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

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 : Zxx56x	
QTY : 2,000 pcs	CODE: XXX
S/N : XX	
LOT NO :	
 XXXXXXXXXXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	