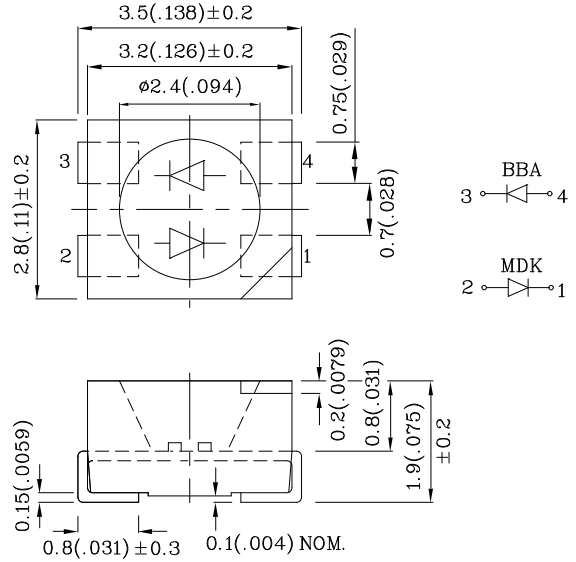


Features

- BOTH CHIPS CAN BE CONTROLLED SEPARATELY.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- PACKAGE: 1500PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



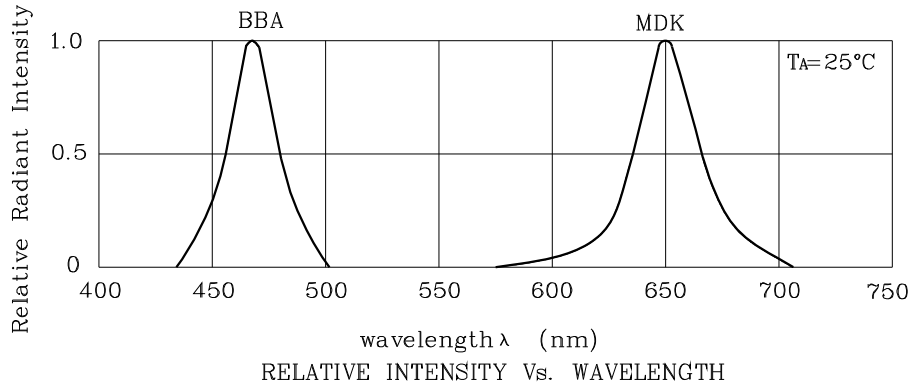
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25(0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

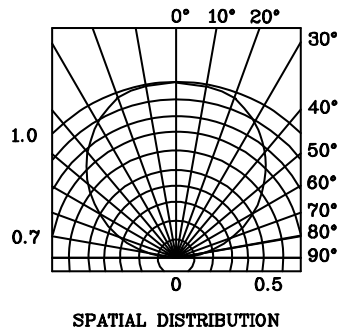
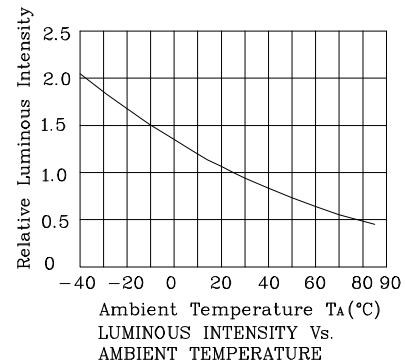
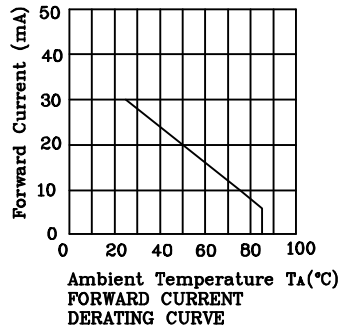
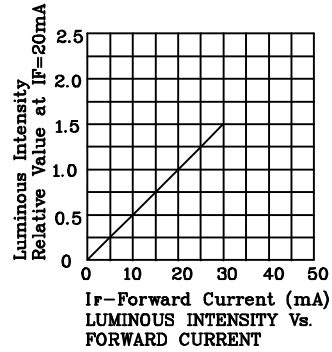
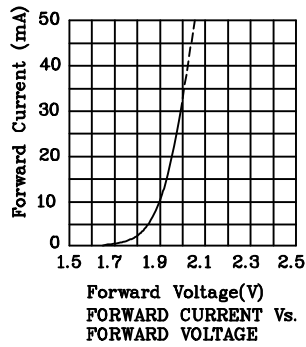
Absolute Maximum Ratings (TA=25°C)		MDK (InGaAlP)	BBA (InGaN)	Unit
Reverse Voltage	V _R	5	5	V
Forward Current	I _F	30	30	mA
Forward Current (Peak) 1/10Duty Cycle 0.1ms Pulse Width	i _{FS}	185	100	mA
Power Dissipation	P _T	75	120	mW
Electrostatic Discharge Threshold (HBM)		-	1000	V
Operating Temperature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

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

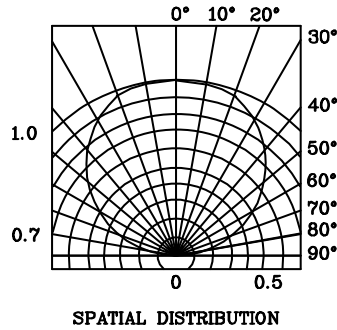
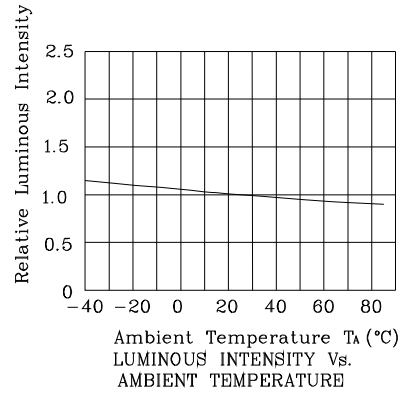
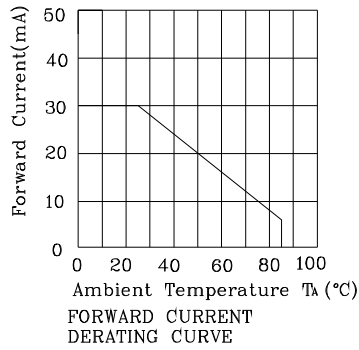
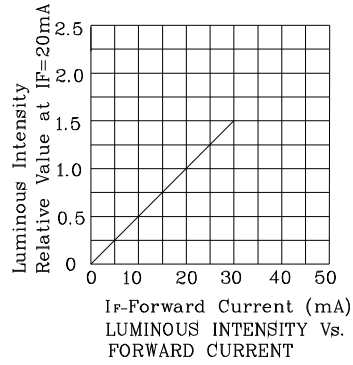
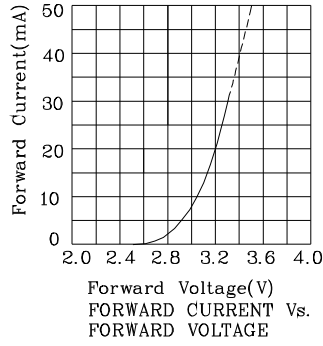
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I _F =20mA) mcd		Wavelength nm λ P	Viewing Angle 2θ 1/2
				min.	typ.		
ZMDKBBA45W	Red	InGaAlP	Water Clear	70	198	650	120°
	Blue	InGaN		36	69	468	



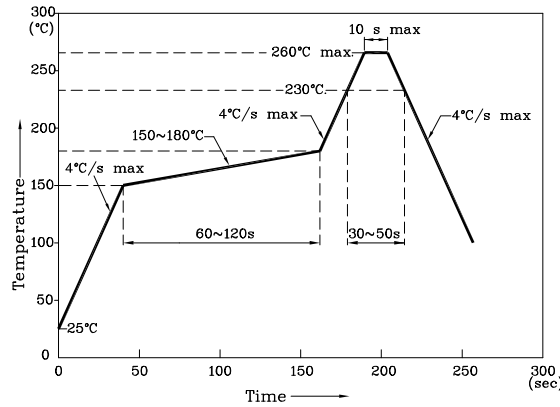
❖ MDK



❖ BBA



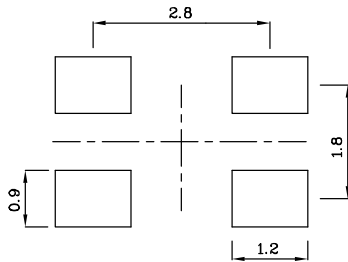
Reflow Soldering Profile For Lead-free SMT Process.



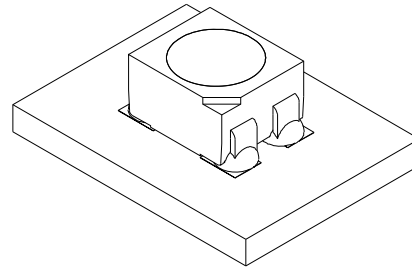
NOTES:

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.

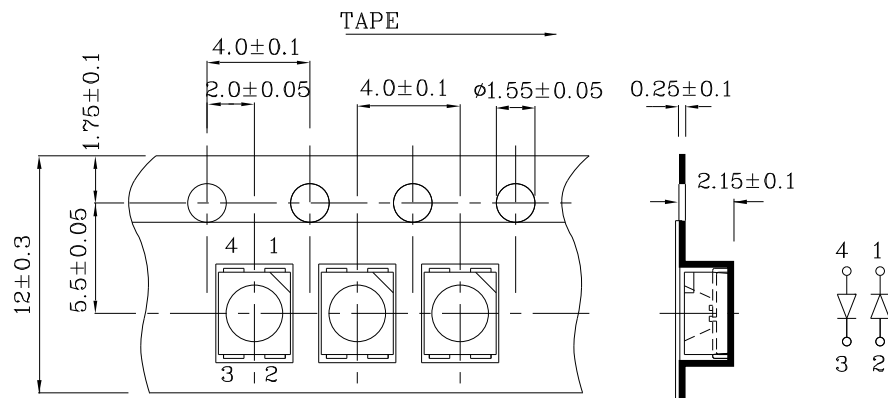
❖ Recommended Soldering Pattern
(Units : mm; Tolerance: ± 0.1)



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



❖ Tape Specification (Units : mm)



Remarks:

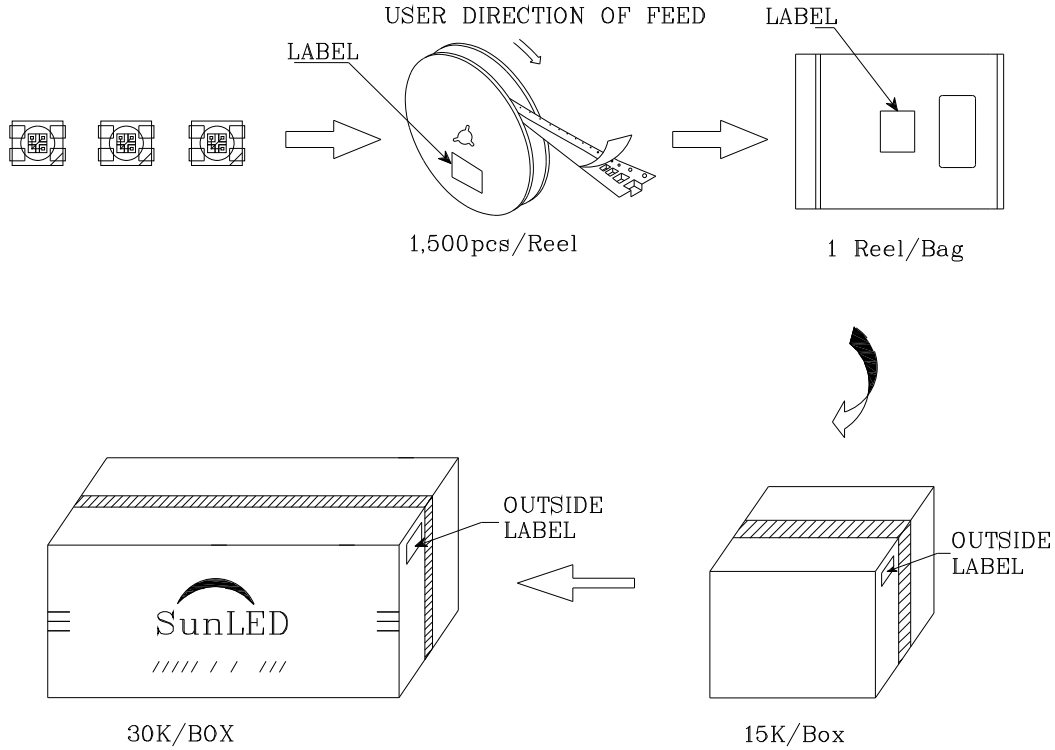

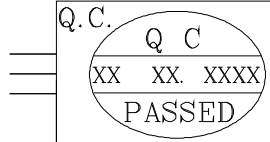
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:


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

ZMDKBBA45W

P/NO : Zxxx45x	
QTY : 1,500 pcs	CODE: XXX
S/N : XX	
LOT NO :	
 XXXXXXXXXXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	