

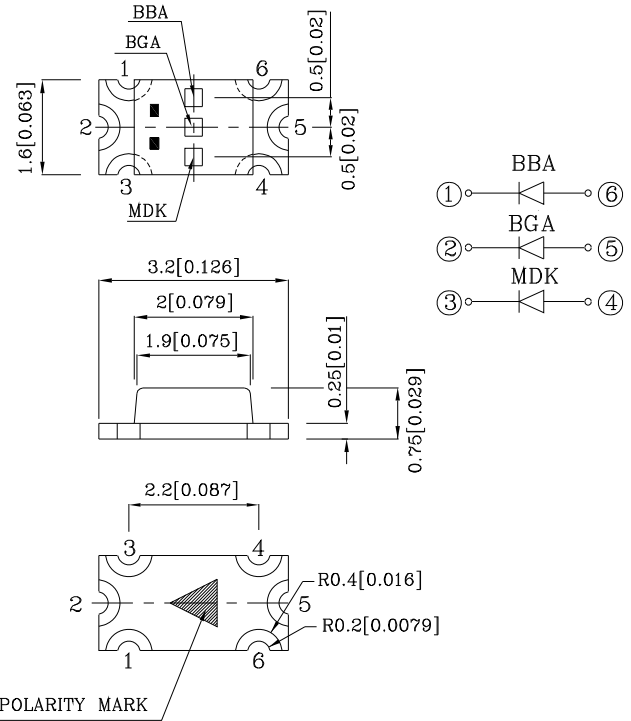
**PRELIMINARY SPEC**

**Features**

- 3.2mmx1.6mm SMT LED, 0.75mm THICKNESS.
- LOW POWER CONSUMPTION.
- ONE BLUE, ONE GREEN AND ONE RED CHIPS IN ONE PACKAGE.
- CAN PRODUCE ANY COLOR IN VISIBLE SPECTRUM, INCLUDING WHITE LIGHT.
- PACKAGE : 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.



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



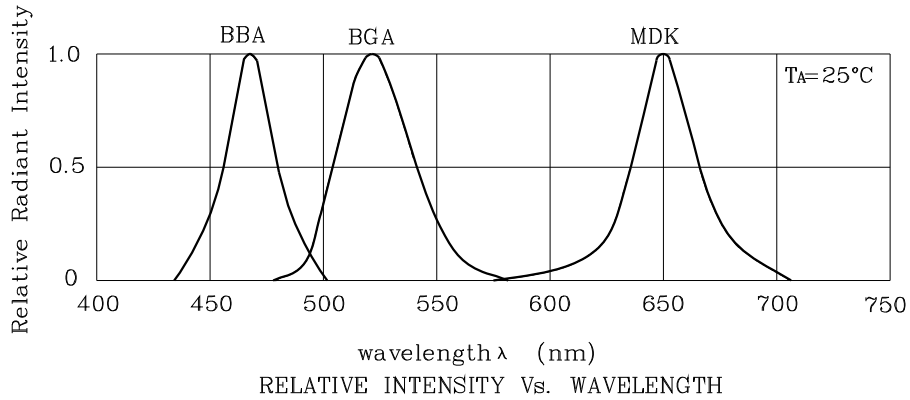
**Notes:**

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

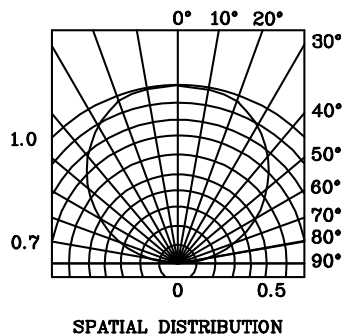
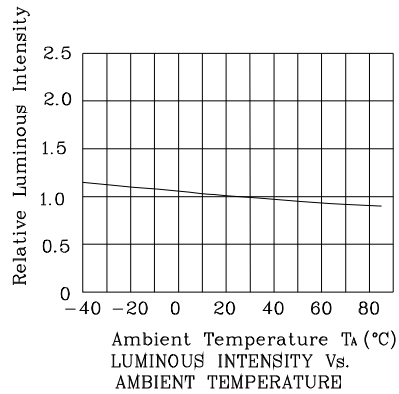
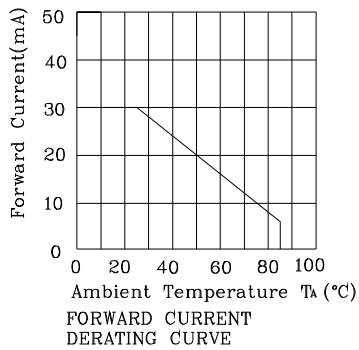
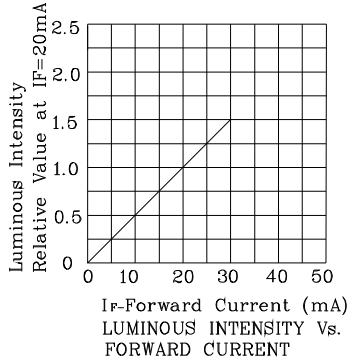
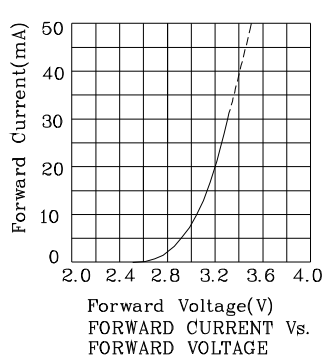
Absolute Maximum Ratings (TA=25°C)		BBA (InGa N)	BGA (InGa N)	MDK (InGa AlP)	Unit
Reverse Voltage	VR	5	5	5	V
Forward Current	IF	30	30	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	100	100	185	mA
Power Dissipation	PT	120	120	75	mW
Electrostatic Discharge Threshold (HBM)		1000	1000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

Operating Characteristics (TA=25°C)		BBA (InGa N)	BGA (InGa N)	MDK (InGa AlP)	Unit
Forward Voltage (Typ.) (IF=20mA)	VF	3.2	3.2	1.95	V
Forward Voltage (Max.) (IF=20mA)	VF	4.0	4.0	2.5	V
Reverse current (Max.) (VR=5V)	IR	10	10	10	uA
Wavelength of Peak Emission (Typ.) (IF=20mA)	$\lambda P$	468	520	650	nm
Wavelength of Dominant emission (Typ.) (IF=20mA)	$\lambda D$	470	525	635	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA)	$\Delta\lambda$	21	35	28	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	C	100	100	35	pF

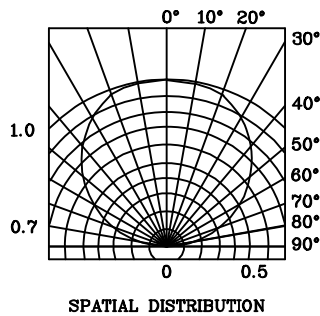
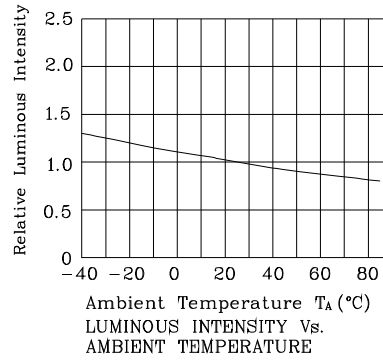
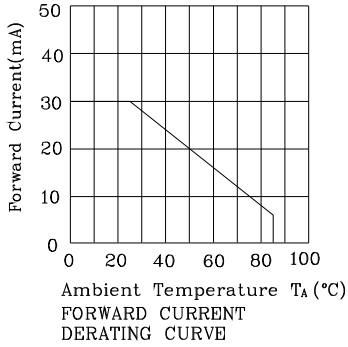
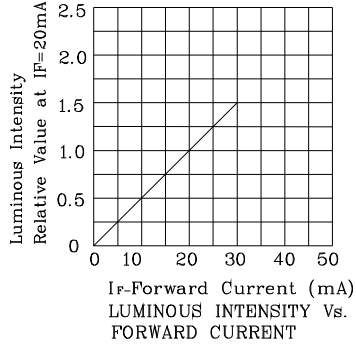
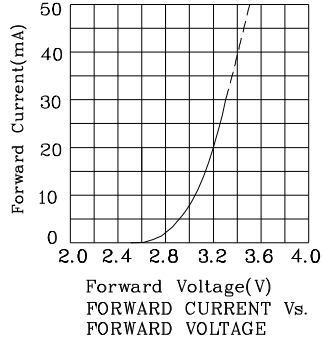
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) med		Wavelength nm $\lambda P$	Viewing Angle 2 $\theta$ 1/2
				min.	typ.		
XZBBABGAMDK55W-6	Blue	InGaN	Water Clear	18	59	468	120°
	Green	InGaN		50	148	520	
	Red	InGaAlP		70	148	650	



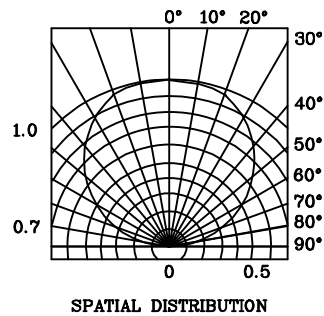
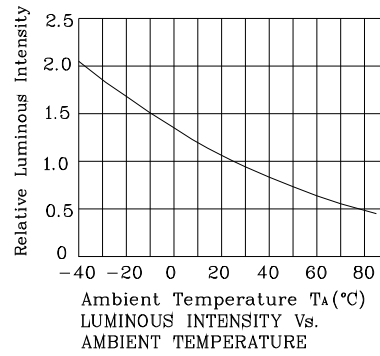
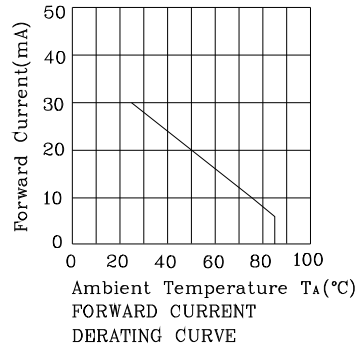
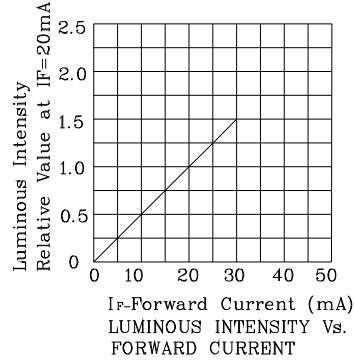
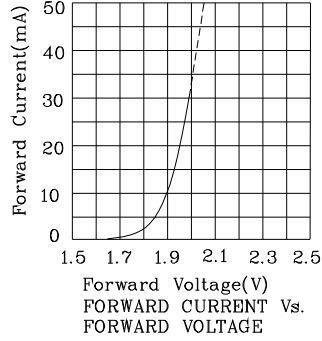
❖ **BBA**



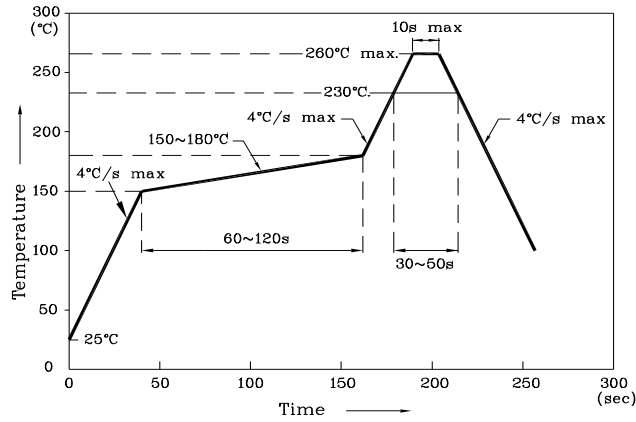
❖ BGA



❖ MDK



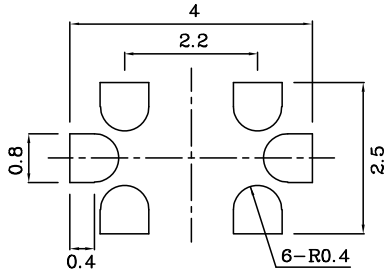
Reflow Soldering Profile For Lead-free SMT Process.



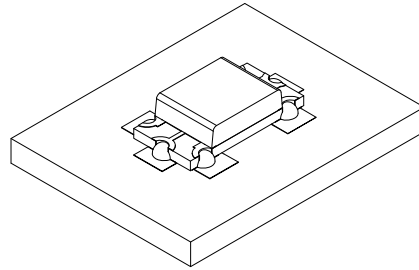
Notes:

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.

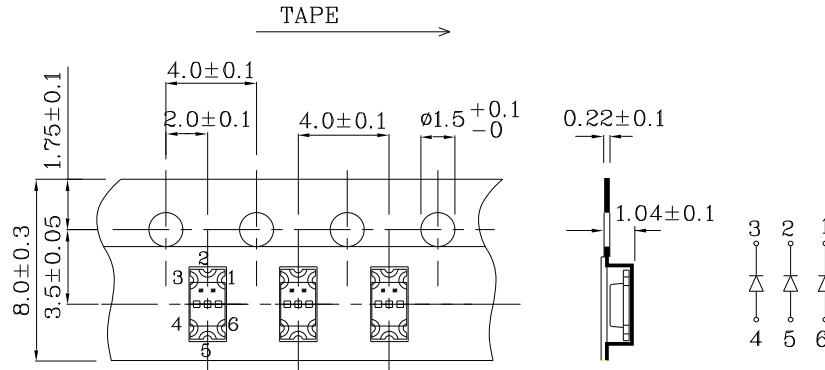
❖ Recommended Soldering Pattern  
(Units : mm; Tolerance: ± 0.1)



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



❖ Tape Specification (Units : mm)



Remarks:

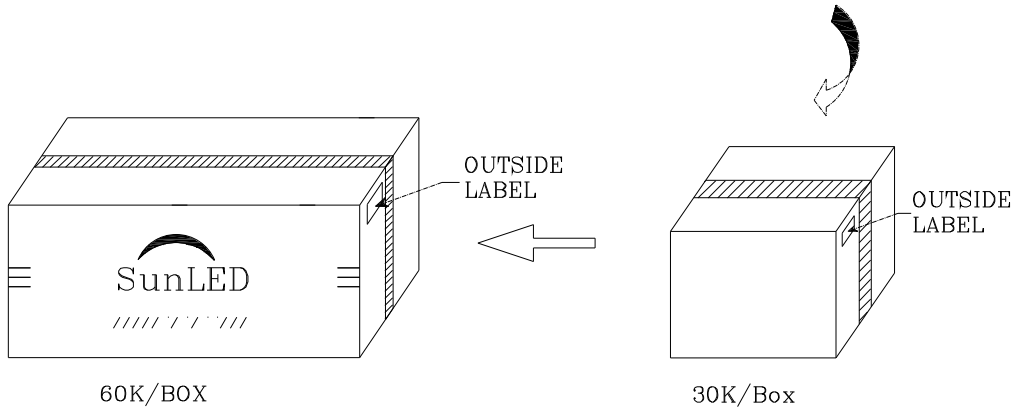
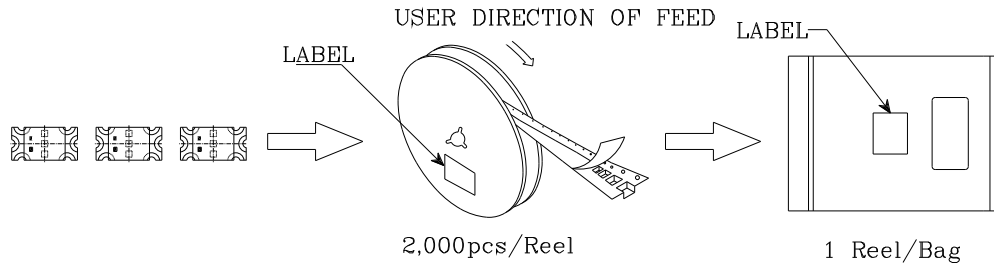
If special sorting is required (e.g. binning based on forward voltage, luminous intensity/ luminous flux or wavelength), the typical accuracy of the sorting process is as follows:


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**

**XZBBABGAMDK55W-6**



P/NO : XZxx55x-6	
QTY : 2,000 pcs	CODE: XXX
S/N : XX	
LOT NO :	
 XXXXXXXXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	