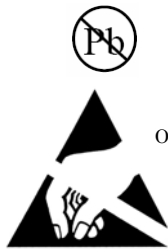


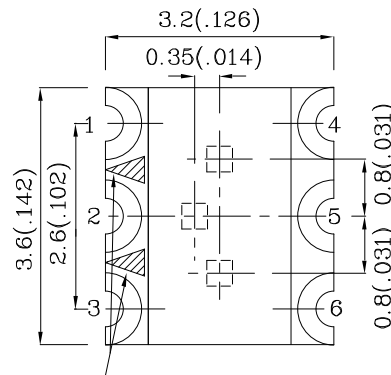
PRELIMINARY SPEC

Features

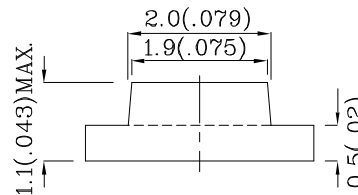
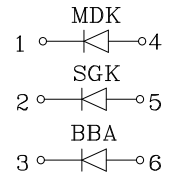
- LOW POWER CONSUMPTION.
- 3.2mmx3.6mm SMT LED, 1.1mm THICKNESS.
- CAN PRODUCE ANY COLOR IN VISIBLE SPECTRUM, INCLUDING WHITE LIGHT.
- ONE RED, ONE GREEN AND ONE BLUE CHIPS IN ONE PACKAGE.
- PACKAGE : 1000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



POLARITY MARK



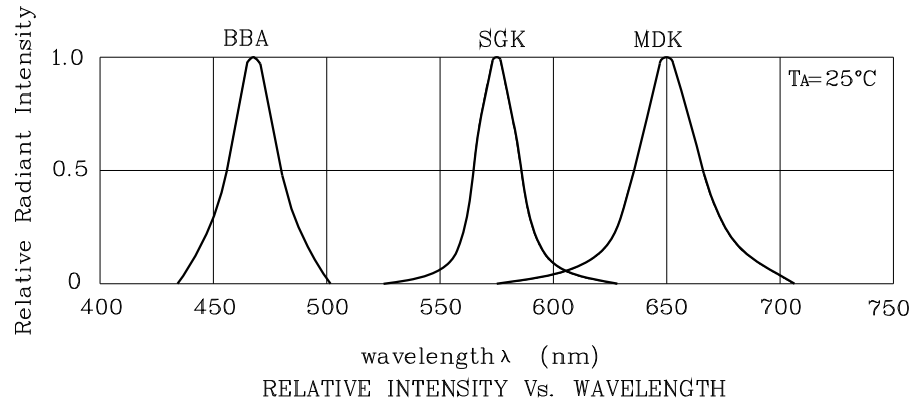
Notes:

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.

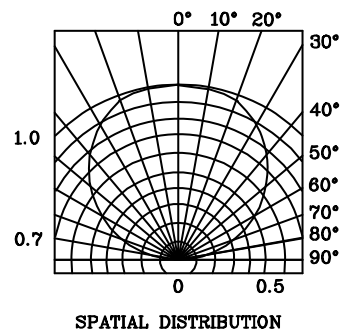
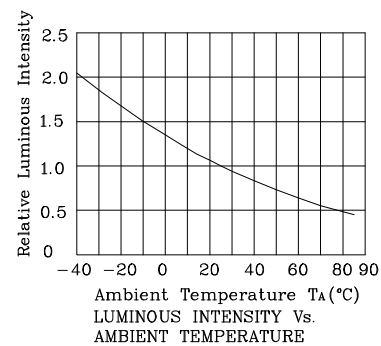
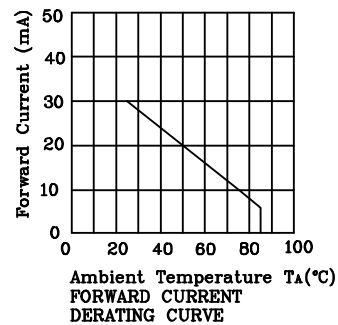
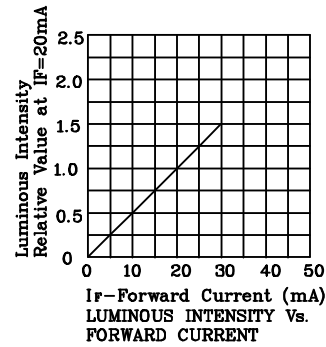
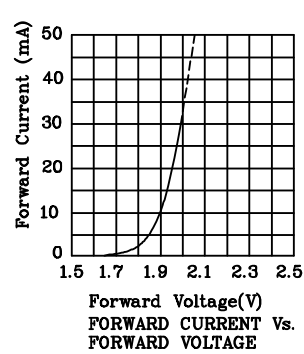
Absolute maximum ratings (TA=25°C)		MDK (InGa AlP)	SGK (InGa AlP)	BBA (InGa N)	Unit
Reverse Voltage	VR	5	5	5	V
Forward Current	IF	30	30	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	185	150	100	mA
Power Dissipation	PT	75	75	120	mW
Electrostatic Discharge Threshold (HBM)		-	-	1000	V
Operating Temperature	TA	-40 ~ +85			°C
Storage Temperature	Tstg	-40 ~ +85			

Operating Characteristics (TA=25°C)		MDK (InGaA IP)	SGK (InGa AlP)	BBA (InGa N)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V _F	1.95	2.1	3.2	V
Forward Voltage (Max.) (I _F =20mA)	V _F	2.5	2.5	4.0	V
Reverse Current (Max.) (V _R =5V)	I _R	10	10	10	uA
Wavelength of Peak Emission (Typ.) (I _F =20mA)	λ _p	650	574	468	nm
Wavelength of Dominant Emission (Typ.) (I _F =20mA)	λ _D	635	570	470	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	Δλ	28	20	21	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	C	35	15	100	pF

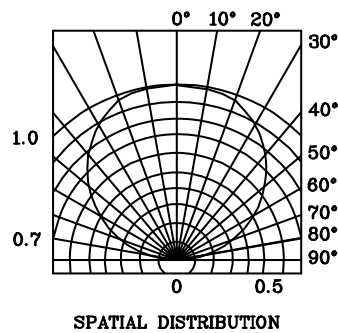
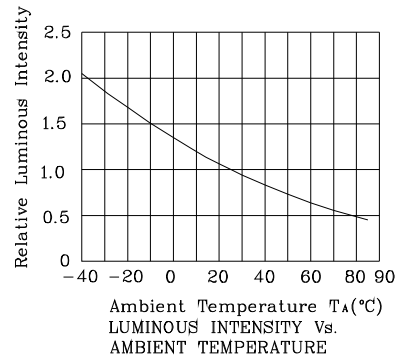
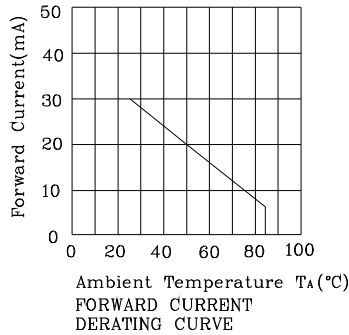
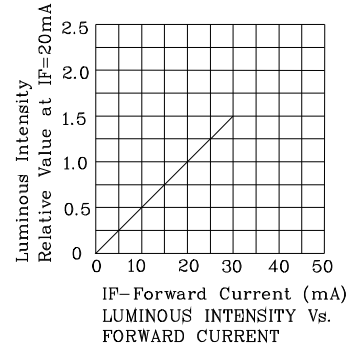
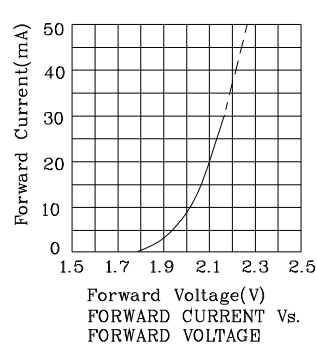
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I _F =20mA) mcd		Wavelength nm λ _P	Viewing Angle 2 θ 1/2
				min.	typ.		
ZMDKSGKBBA61W	Red	InGaAlP	Water Clear	70	148	650	120°
	Green	InGaAlP		18	59	574	
	Blue	InGaN		18	59	468	



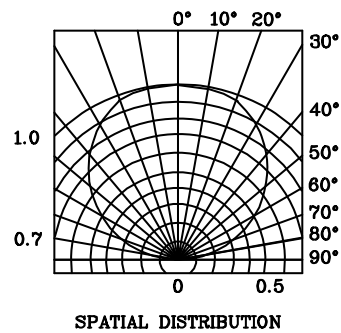
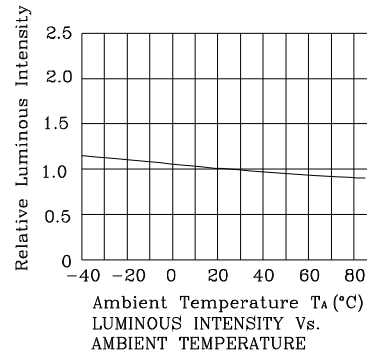
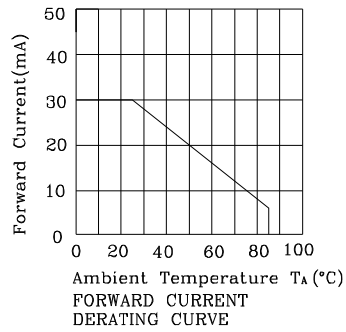
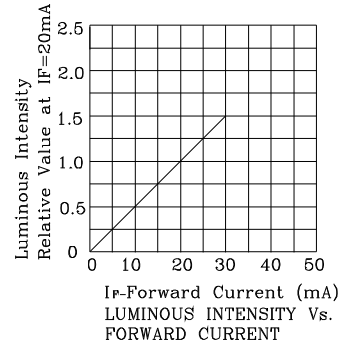
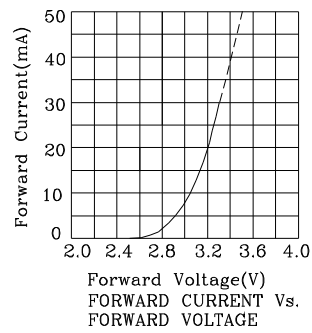
❖ MDK



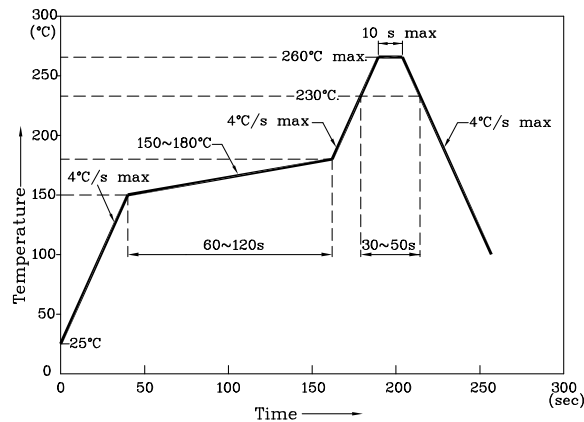
❖ SGK



❖ BBA



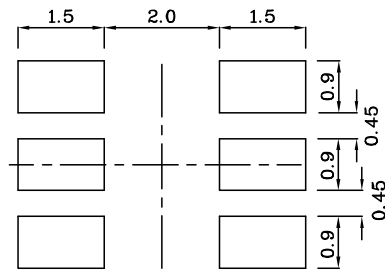
Reflow Soldering Profile For Lead-free SMT Process.



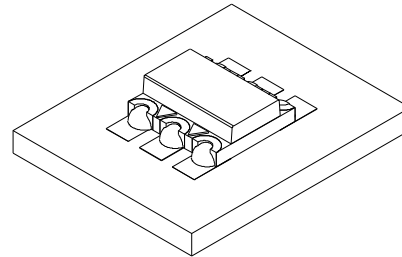
NOTES:

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.

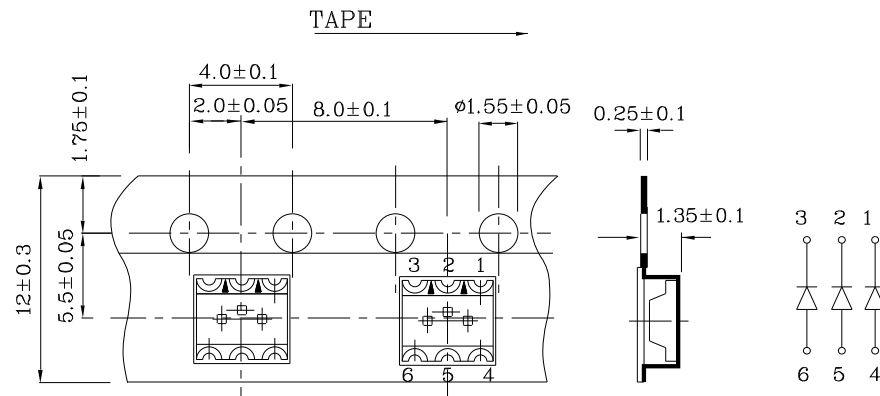
❖ **Recommended Soldering Pattern**
(Units : mm; Tolerance: ± 0.1)



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



❖ **Tape Specification (Units : mm)**



Remarks:

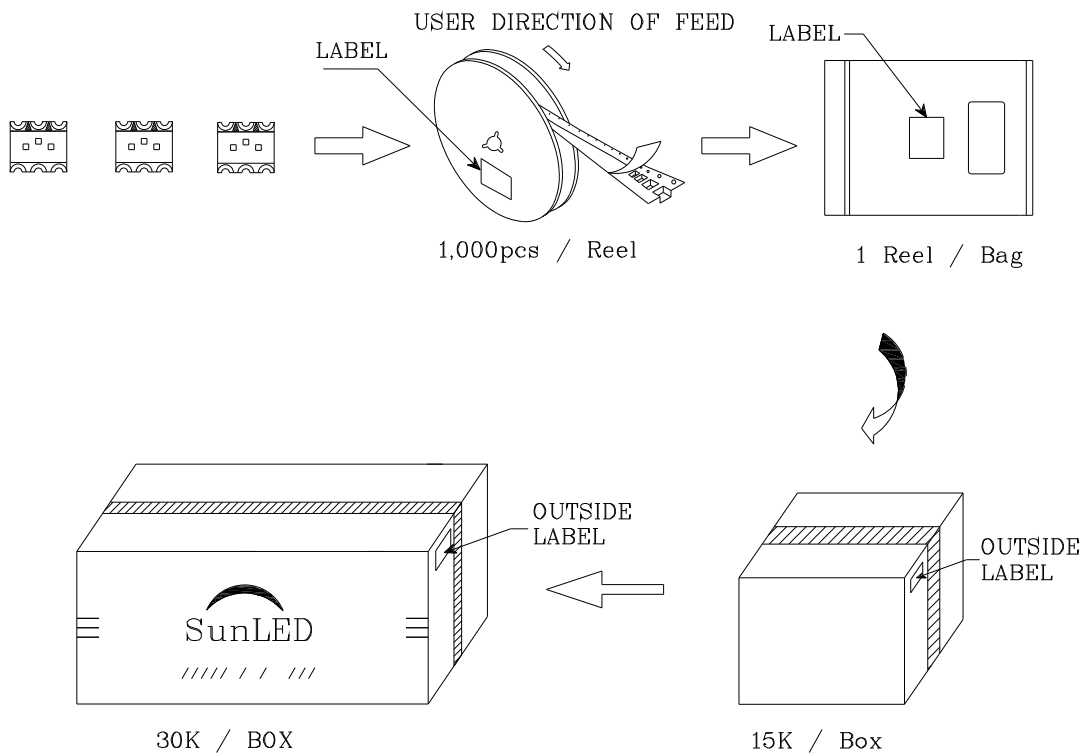
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity/ luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: $\pm 1\text{nm}$
2. Luminous intensity/ Luminous Flux: $\pm 15\%$
3. Forward Voltage: $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS

ZMDKSGKBBA61W





Q C

XX XX XXXX

PASSED

P/NO : Zxx61x	
QTY : 1,000 pcs	CODE: XXX
S/N : XX	
LOT NO:  xxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	