

PRELIMINARY SPEC

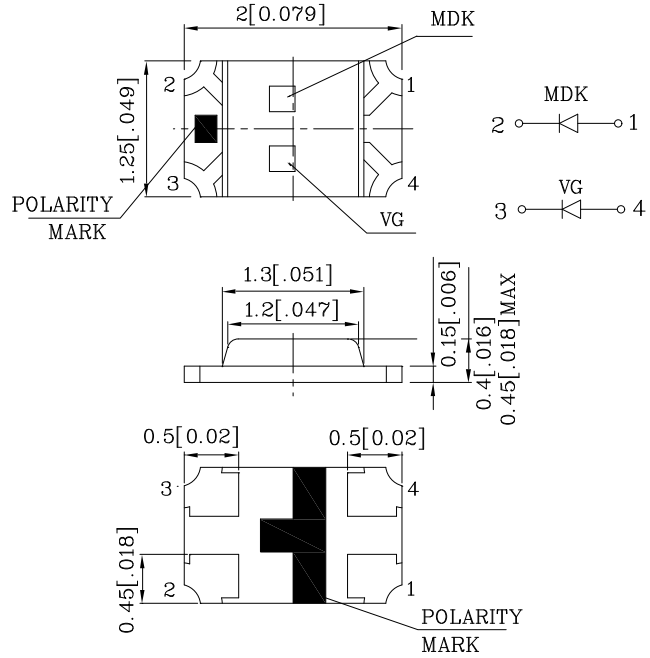
**Features**

- 2.0mmx1.25mm SMT LED, 0.45mm MAX. THICKNESS.
- BI -COLOR, LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- PACKAGE : 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.



Notes:

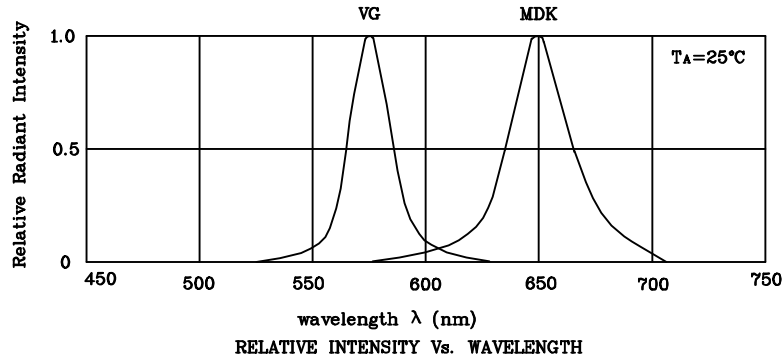
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1(0.004")$  unless otherwise noted.
3. Specifications are subject to change without notice.



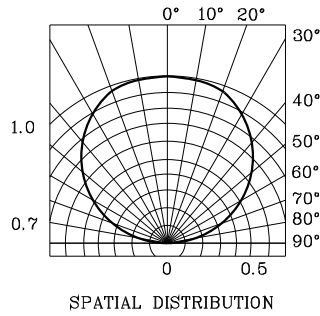
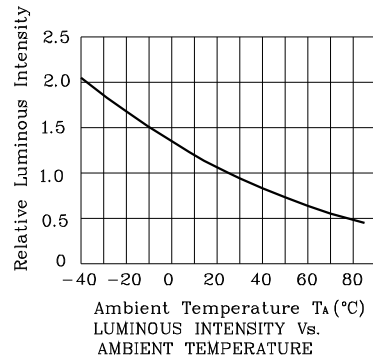
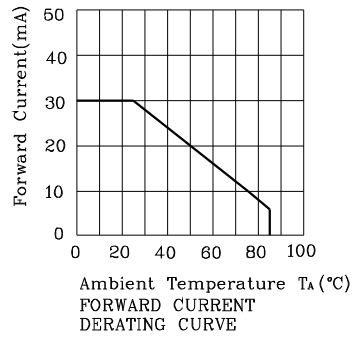
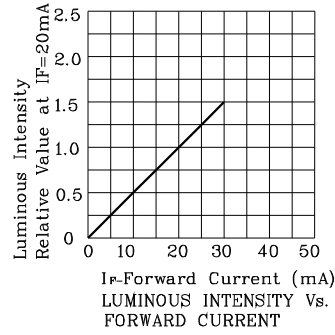
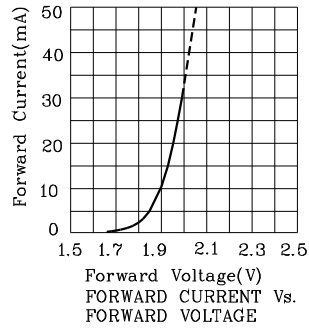
Absolute Maximum Ratings (TA=25°C)		MDK (InGaAlP)	VG (InGaAlP)	Unit
Reverse Voltage	VR	5	5	V
Forward Current	IF	30	30	mA
Forward Current (Peak) 1/10Duty Cycle 0.1ms Pulse Width	iFS	185	150	mA
Power Dissipation	PT	75	75	mW
Operating Temperature	TA	-40 ~ +85		°C
Storage Temperature	Tstg	-40 ~ +85		

Operating Characteristics (TA=25°C)		MDK (InGaAlP)	VG (InGaAlP)	Unit
Forward Voltage (Typ.) (IF=20mA)	VF	1.95	2.1	V
Forward Voltage (Max.) (IF=20mA)	VF	2.5	2.5	V
Reverse Current (Max.) (VR=5V)	IR	10	10	uA
Wavelength of Peak Emission (Typ.) (IF=20mA)	λ P	650	574	nm
Wavelength of Dominant Emission (Typ.) (IF=20mA)	λ D	635	570	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA)	Δλ	28	20	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	C	35	15	pF

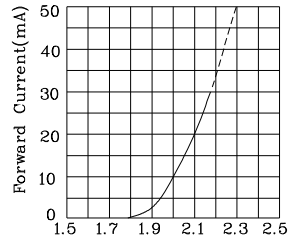
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.		
ZMDKVG54W-4	Red	InGaAlP	Water Clear	70	198	650	120°
	Green	InGaAlP		36	79		



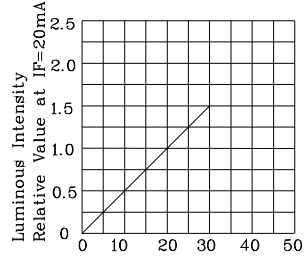
❖ MDK



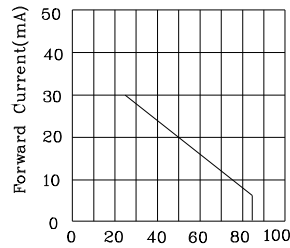
❖ VG



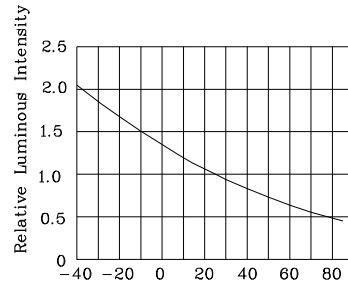
FORWARD CURRENT Vs. FORWARD VOLTAGE



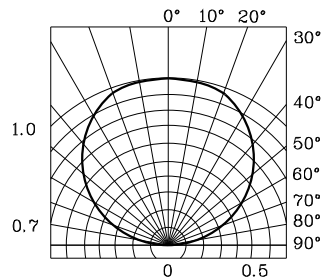
LUMINOUS INTENSITY Vs. FORWARD CURRENT



FORWARD CURRENT DERATING CURVE

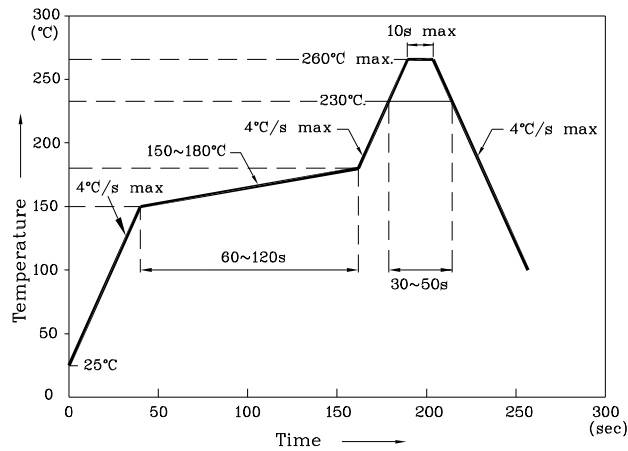


LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

Reflow Soldering Profile For Lead-free SMT Process.

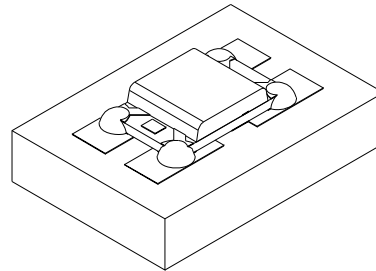
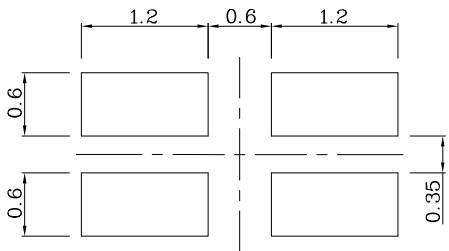


Notes:

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.

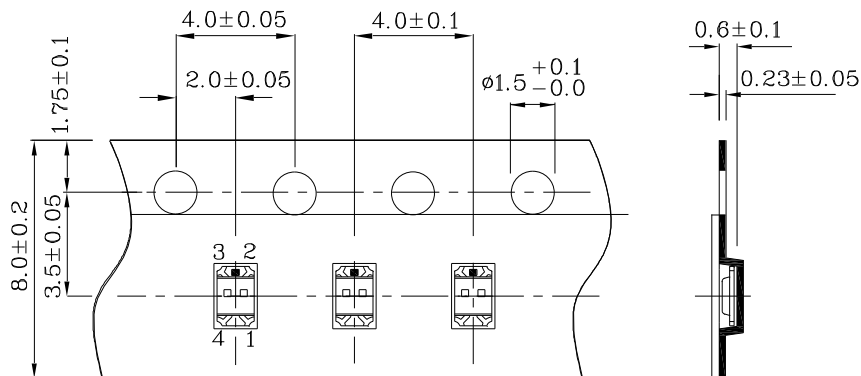
❖ **Recommended Soldering Pattern**  
(Units : mm; Tolerance: ± 0.1)

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



❖ **Tape Specification (Units : mm)**

TAPE



Remarks:

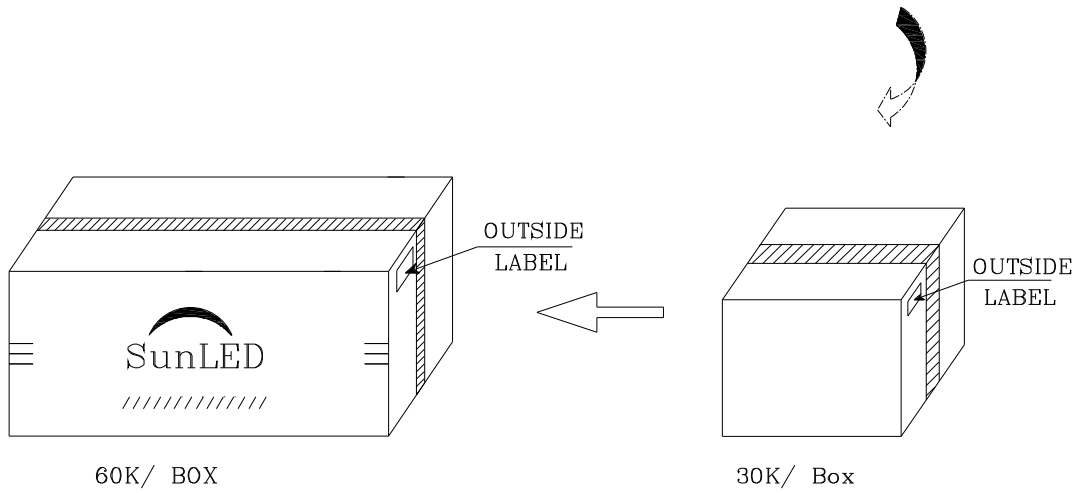
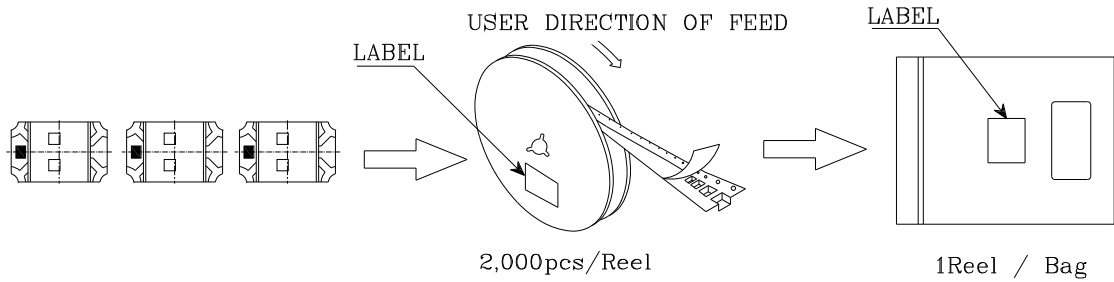

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

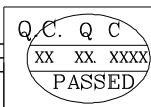

1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

**PACKING & LABEL SPECIFICATIONS**

**ZMDKVG54W-4**

	
P/NO : Zxxx54x-4	
QTY : 2,000 pcs	CODE: XXX
S/N : XX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	