

PRELIMINARY SPEC

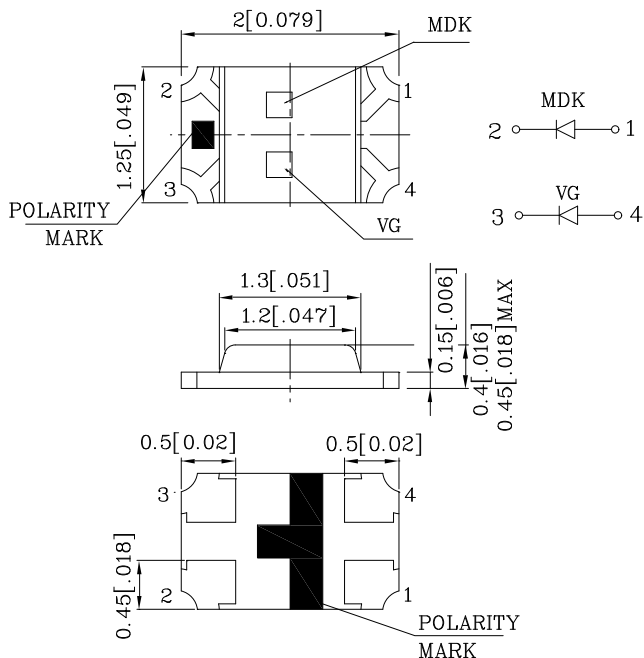
Features

- 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:

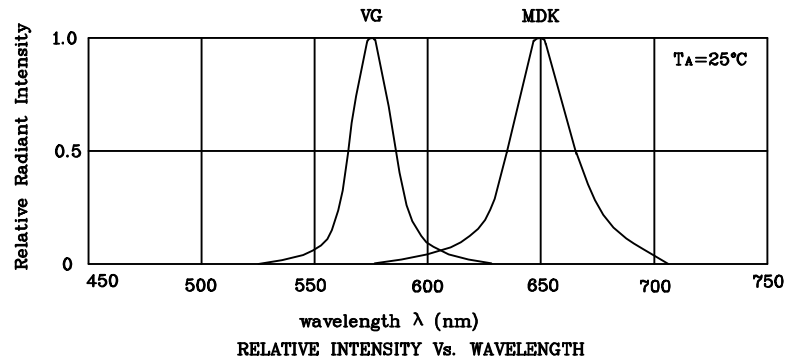
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.1(0.004")$ unless otherwise noted.
- 3.Specifications are subject to change without notice.



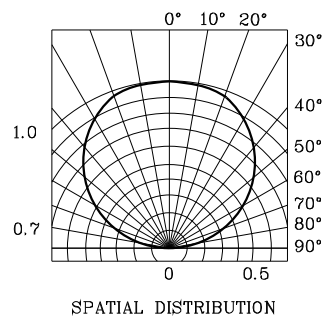
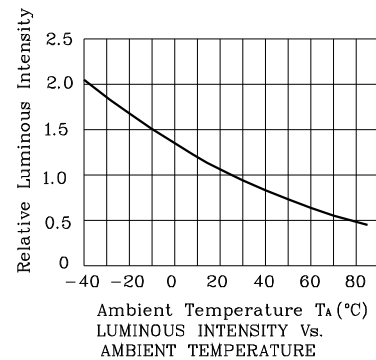
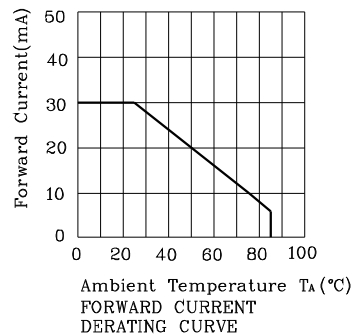
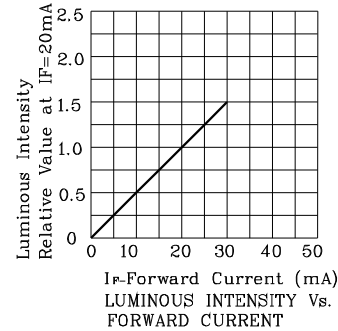
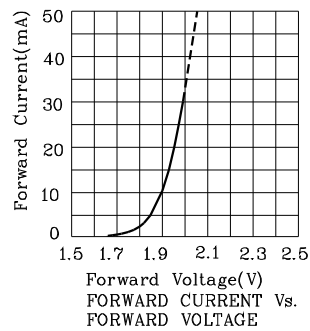
Absolute Maximum Ratings (TA=25°C)		MDK (InGaAlP)	VG (InGaAlP)	Unit
Reverse Voltage	VR	5	5	V
Forward Current	IF	30	30	mA
Forward Current (Peak) 1/10Duty Cycle 0.1ms Pulse Width	iFS	185	150	mA
Power Dissipation	PT	75	75	mW
Operating Temperature	TA	-40 ~ +85		°C
Storage Temperature	Tstg	-40 ~ +85		

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

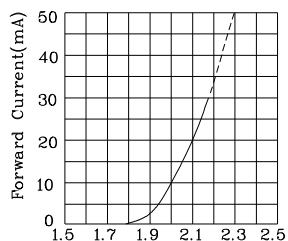
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd	Wavelength nm λ P	Viewing Angle 2 θ 1/2	
				min.	typ.		
ZMDKVG54W-4	Red	InGaAlP	Water Clear	70	198	650	120°
	Green	InGaAlP		36	79		
Published Date : FEB 25,2008		Drawing No :SDSA6209		V1	Checked : B.L.LIU		P.1/5



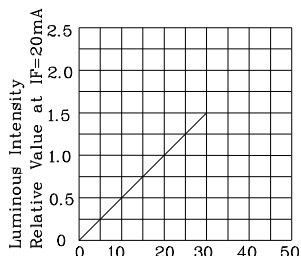
❖ **MDK**



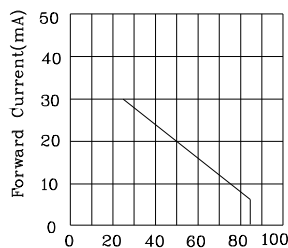
❖ VG



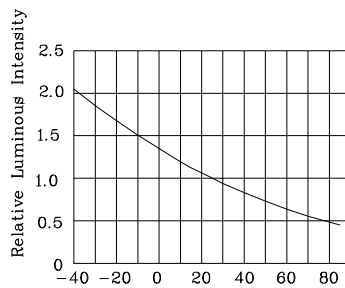
Forward Voltage(V)
FORWARD CURRENT Vs.
FORWARD VOLTAGE



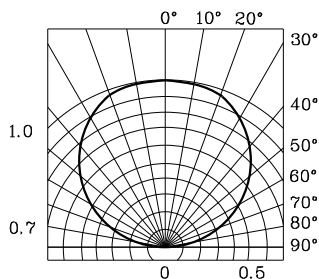
IF-Forward Current (mA)
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



Ambient Temperature Ta (°C)
FORWARD CURRENT
DERATING CURVE

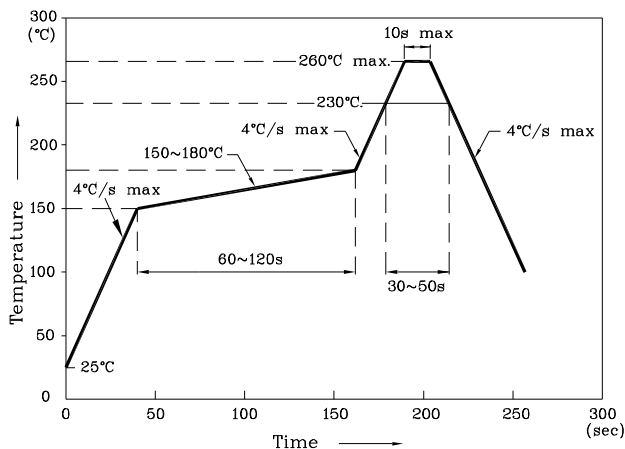


Ambient Temperature Ta (°C)
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

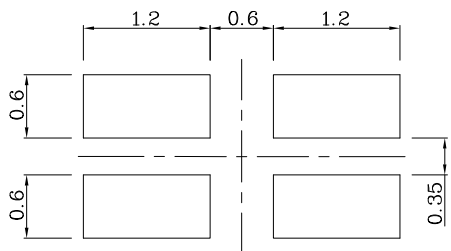
Reflow Soldering Profile For Lead-free SMT Process.



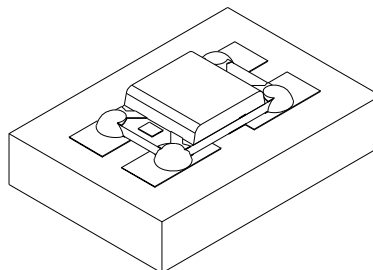
Notes:

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)

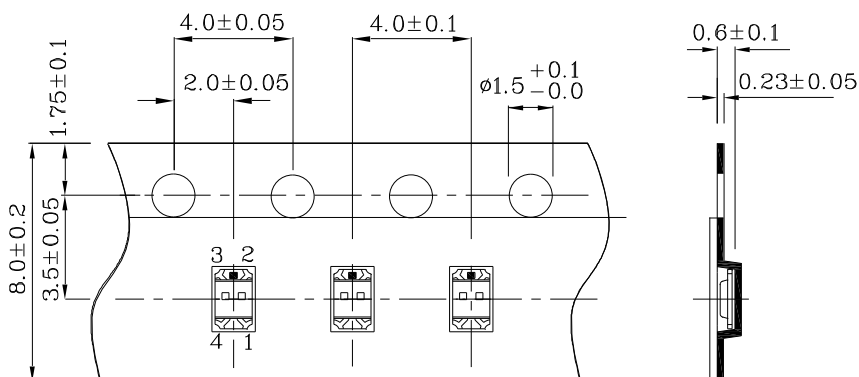


❖ **The device has a single mounting surface. The device must be mounted according to the specifications.**



❖ **Tape Specification (Units : mm)**

TAPE



Remarks:

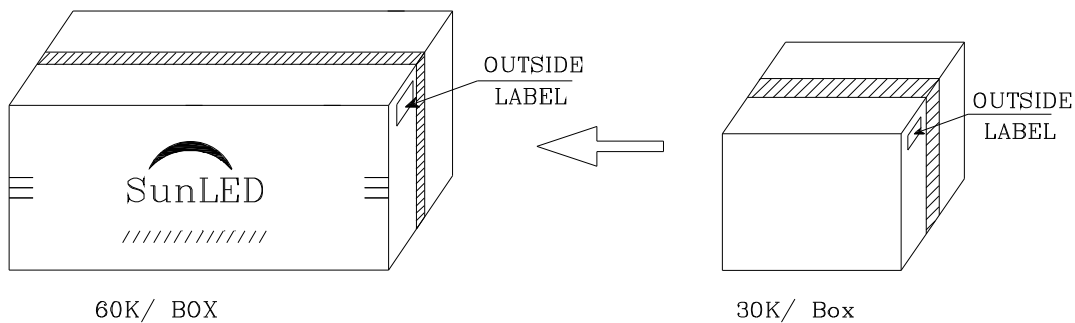
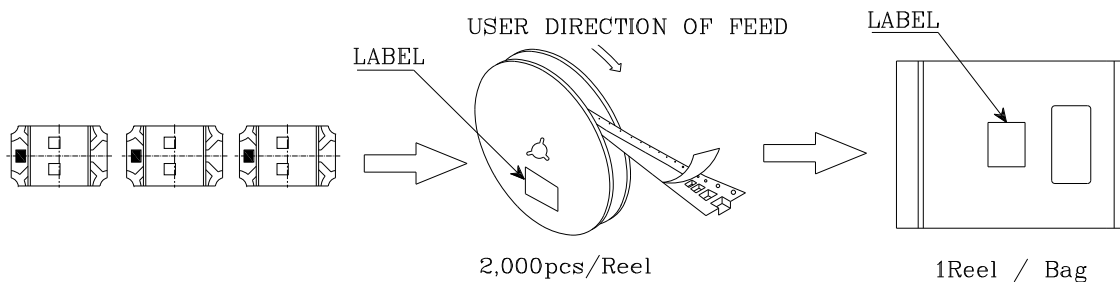
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: $\pm 1\text{nm}$
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

ZMDKVG54W-4



SunLED

Q.C. Q.C.
XX XX XXXX
PASSED

P/NO : Zxxx54x-4

QTY : 2,000 pcs CODE: XXX

S/N : XX

LOT NO:

xxxxxxxxxxxxxxxxxxxx

RoHS Compliant