

PRELIMINARY SPEC

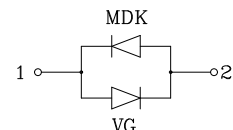
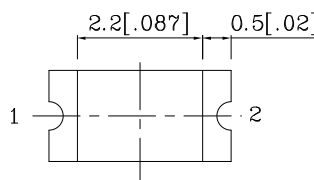
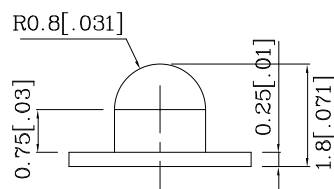
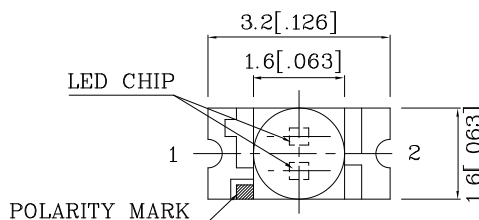
Features

- 3.2mmx1.6mm SMT LED, 1.8mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- PACKAGE : 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.



Notes:

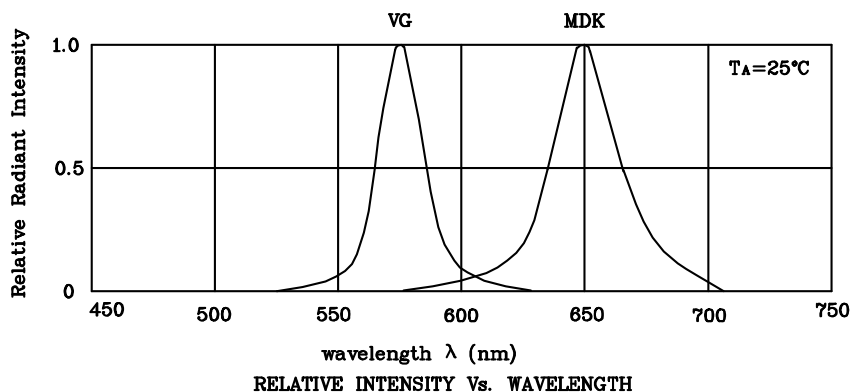
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.1(0.004)$ unless otherwise noted.
3. Specifications are subject to change without notice.



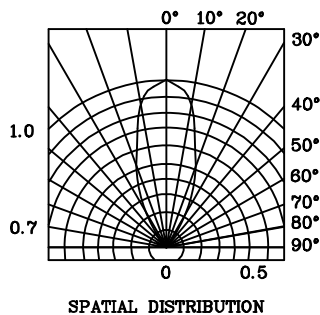
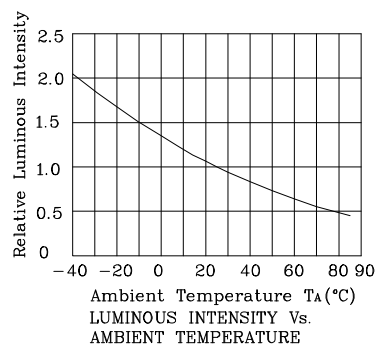
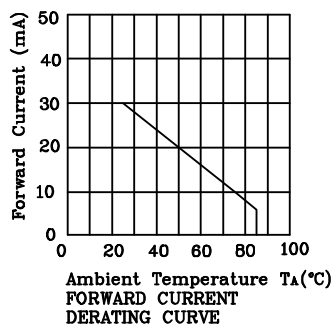
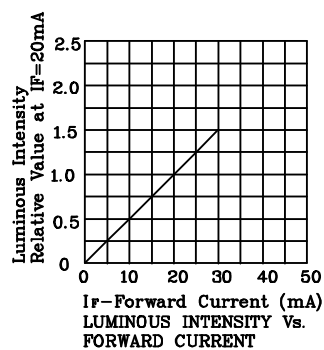
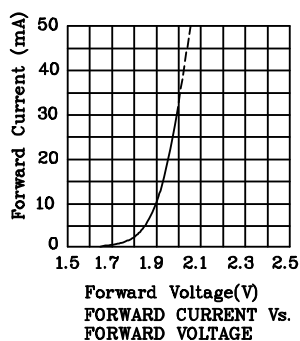
Absolute Maximum Ratings (TA=25°C)		MDK (InGaA IP)	VG (InGaA IP)	Unit
Forward Current	IF	30	30	mA
Forward Current (Peak) 1/10Duty Cycle 0.1ms Pulse Width	iFS	185	150	mA
Power Dissipation	PT	75	75	mW
Operating Temperature	TA	-40 ~ +85		°C
Storage Temperature	Tstg	-40 ~ +85		

Operating Characteristics (TA=25°C)		MDK (InGaA IP)	VG (InGaA IP)	Unit
Forward Voltage (Typ.) (IF=20mA)	VF	1.95	2.1	V
Forward Voltage (Max.) (IF=20mA)	VF	2.5	2.5	V
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)	$\Delta\lambda$	28	20	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	C	35	15	pF

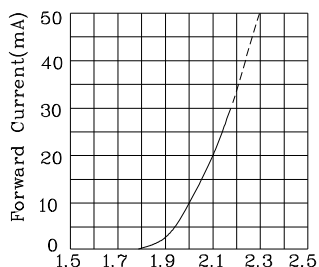
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.		
ZMDKVG55W-7	Red	InGaAlP	Water Clear	110	497	650	40°
	Green	InGaAlP		70	218	574	
Published Date : FEB 25 ,2008		Drawing No : SDSA6235		V1	Checked : B.L.LIU		P.1/5



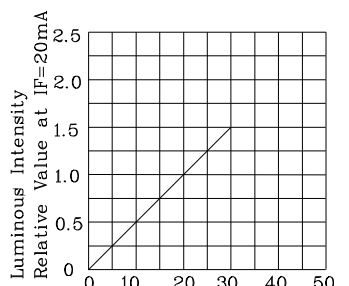
❖ MDK



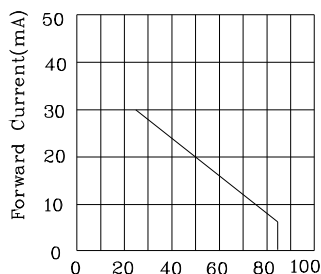
❖ VG



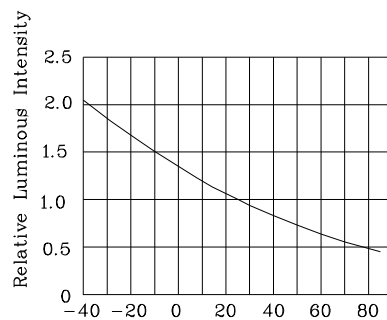
Forward Voltage(V)
FORWARD CURRENT Vs.
FORWARD VOLTAGE



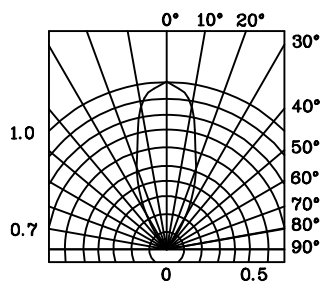
IF-Forward Current (mA)
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



Ambient Temperature TA (°C)
FORWARD CURRENT
DERATING CURVE

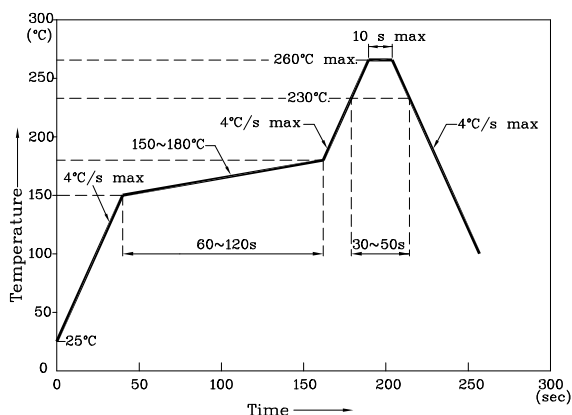


Ambient Temperature TA (°C)
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

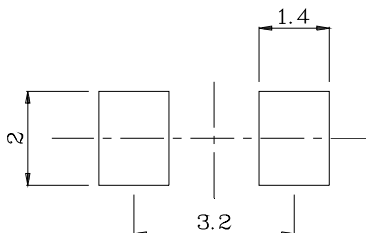
Reflow Soldering Profile For Lead-free SMT Process.



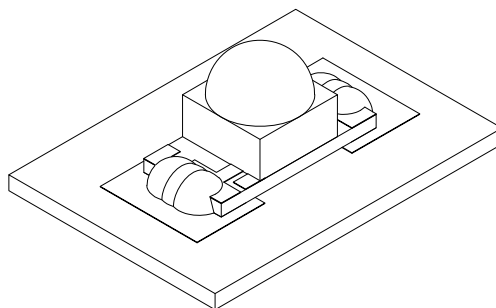
NOTES:

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.

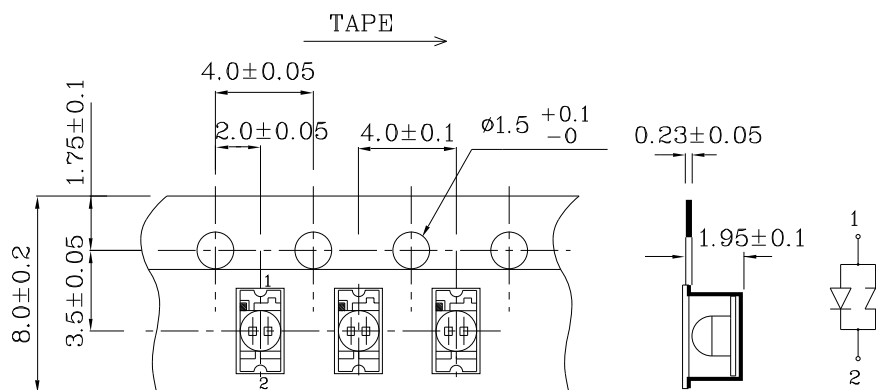
**❖ Recommended Soldering Pattern
(Units : mm; Tolerance: ±0.1)**



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



❖ Tape Specification (Units : mm)



Remarks:

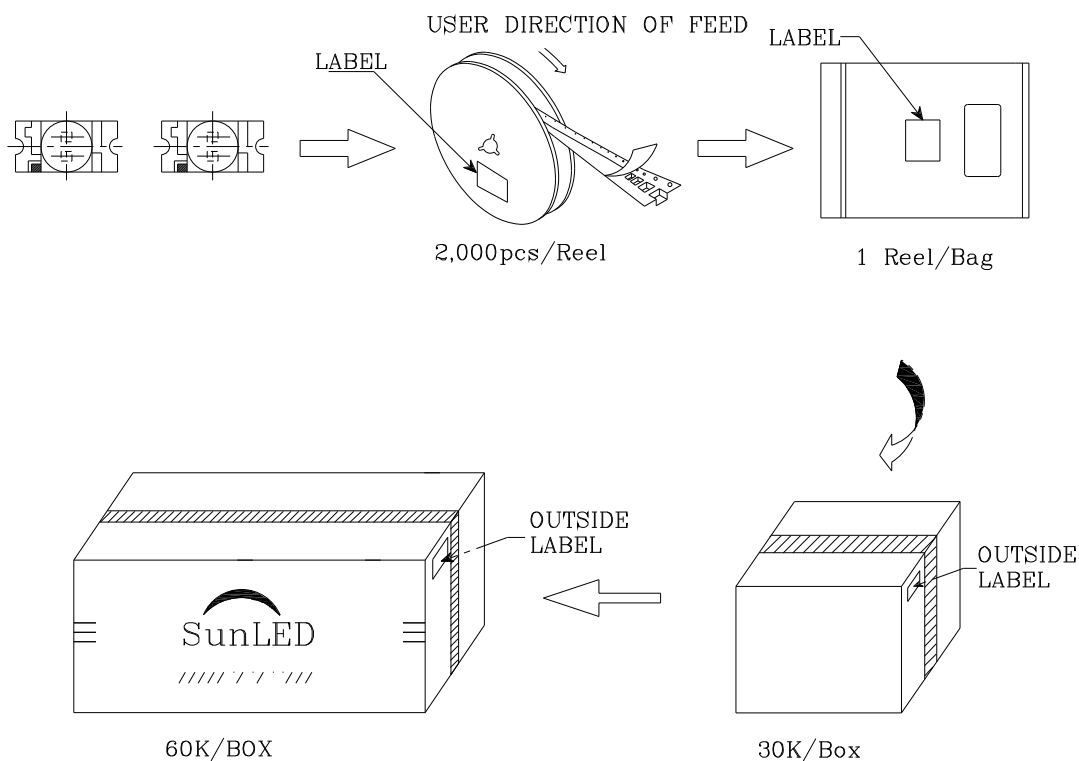
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

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

ZMDKVG55W-7



SunLED

Q.C. Q C

XX XX XXXX

PASSED

P/NO : Zxxx55x-7

QTY : 2,000 pcs CODE: XXX

S/N : XX

LOT NO :

XXXXXXXXXXXXXXXXXXXXXXX

RoHS Compliant