

Part Number: **ZMDKVG57W-1**

3.0x2.5mm SURFACE MOUNT LED LAMP

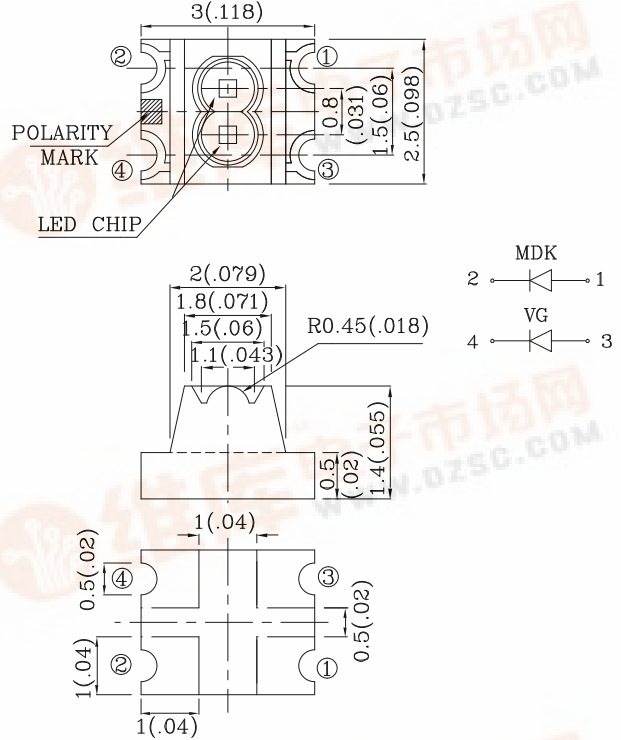
Features

- 3.0mmx2.5mm SMT LED, 1.4mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACK LIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- INNER LENS TYPE
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- PACKAGE : 2000PCS / REEL.
- RoHS COMPLIANT.



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.

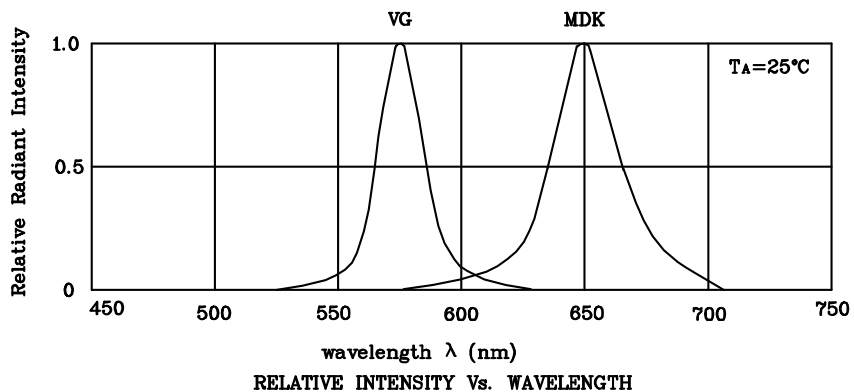


Absolute Maximum Ratings (TA=25°C)		MDK (InGaA IP)	VG (InGaA IP)	Unit
Reverse Voltage	V _R	5	5	V
Forward Current	I _F	30	30	mA
Forward Current (Peak) 1/10Duty Cycle 0.1ms Pulse Width	i _{FS}	185	150	mA
Power Dissipation	P _T	75	75	mW
Operating Temperature	T _A	-40 ~ +85		°C
Storage Temperature	T _{stg}	-40 ~ +85		

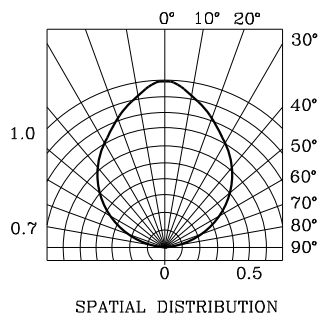
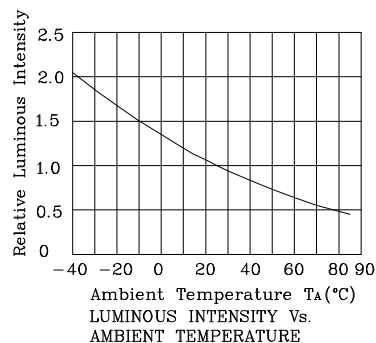
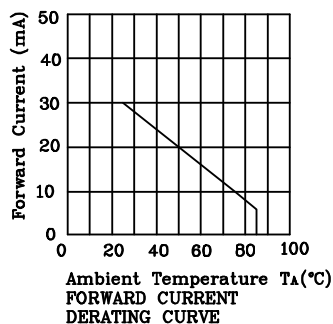
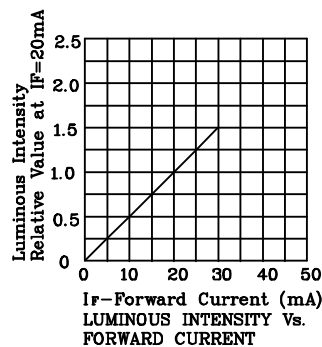
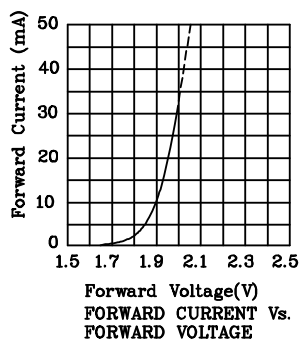
Operating Characteristics (TA=25°C)		MDK (InGaA IP)	VG (InGaA IP)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V _F	1.95	2.1	V
Forward Voltage (Max.) (I _F =20mA)	V _F	2.5	2.5	V
Reverse Current (Max.) (V _R =5V)	I _R	10	10	uA
Wavelength Of Peak Emission (Typ.) (I _F =20mA)	λ P	650	574	nm
Wavelength Of Dominant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

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I _F =20mA) mcd		Wavelength nm λ P	Viewing Angle 2θ 1/2
				min.	typ.		
ZMDKVG57W-1	Red	InGaAlP	Water Clear	110	297	650	100°
	Green	InGaAlP		36	79		

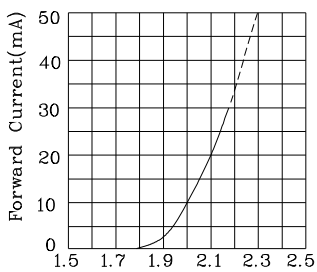




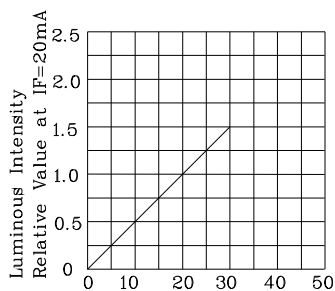
❖ MDK



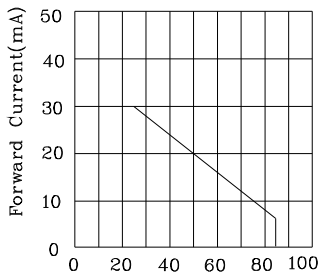
❖ VG



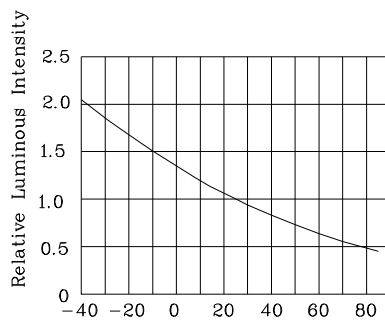
Forward Voltage(V)
FORWARD CURRENT Vs.
FORWARD VOLTAGE



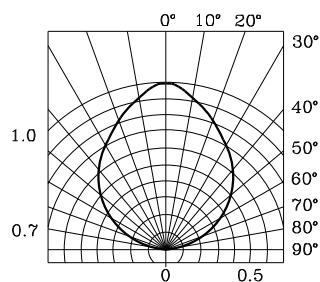
IF-Forward Current (mA)
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



Ambient Temperature T_a (°C)
FORWARD CURRENT
DERATING CURVE

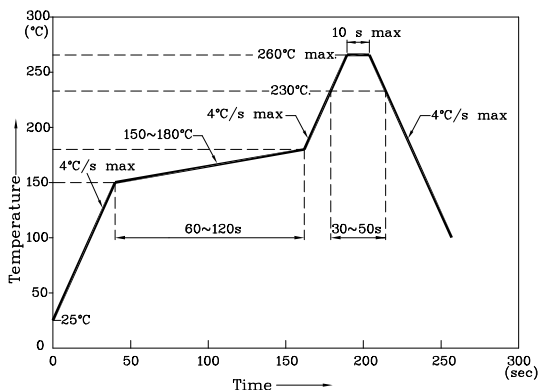


Ambient Temperature T_a (°C)
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

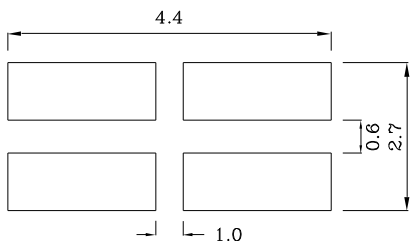
Reflow Soldering Profile For Lead-free SMT Process.



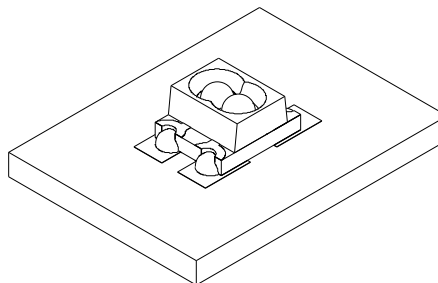
NOTES:

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.

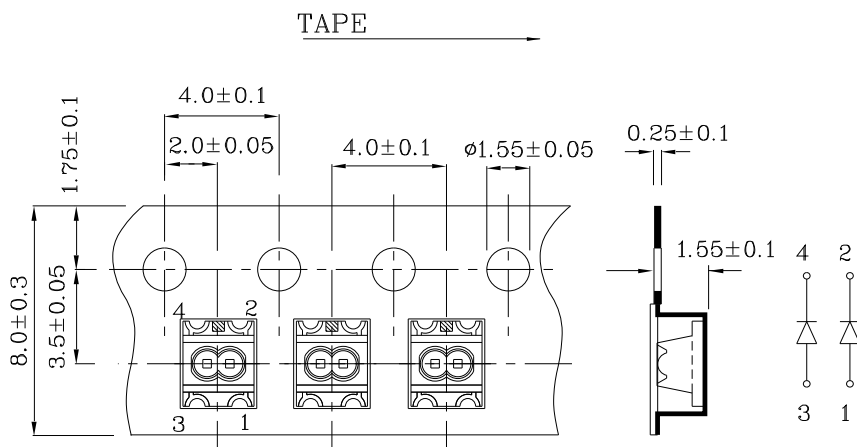
❖ **Recommended Soldering Pattern**
(Units : mm; Tolerance: ±0.1)



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



❖ **Tape Specification (Units : mm)**



Remarks:

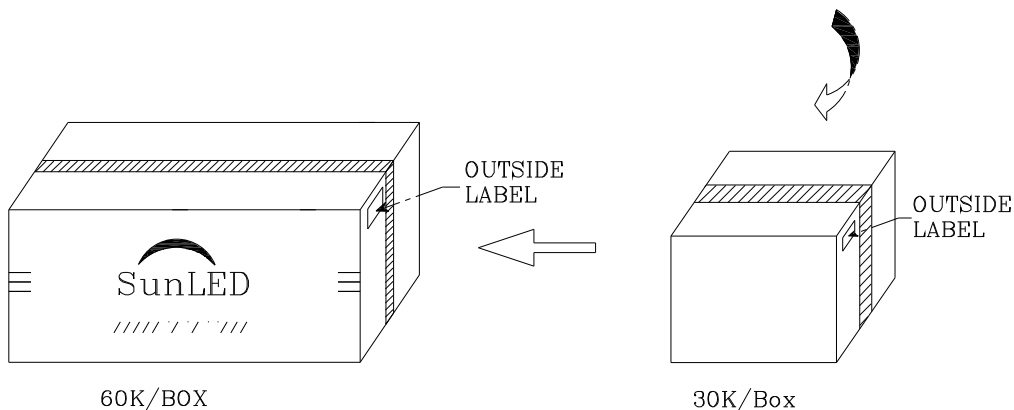
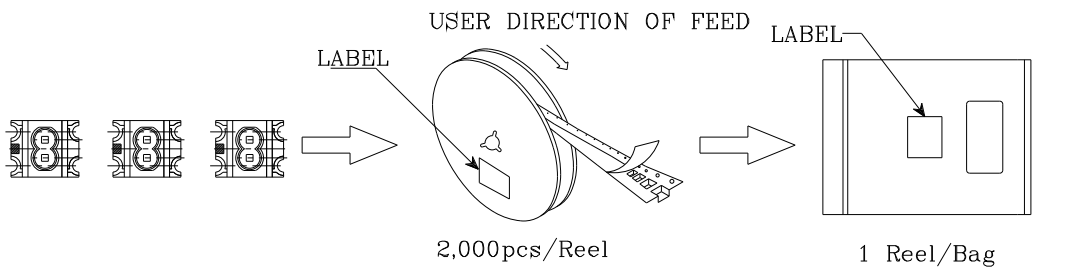
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:


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

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS

ZMDKVG57W-1



P/NO : Zxxx57x-1	
QTY : 2,000 pcs	CODE: XXX
S/N : XX	
LOT NO :	
 XXXXXXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	