

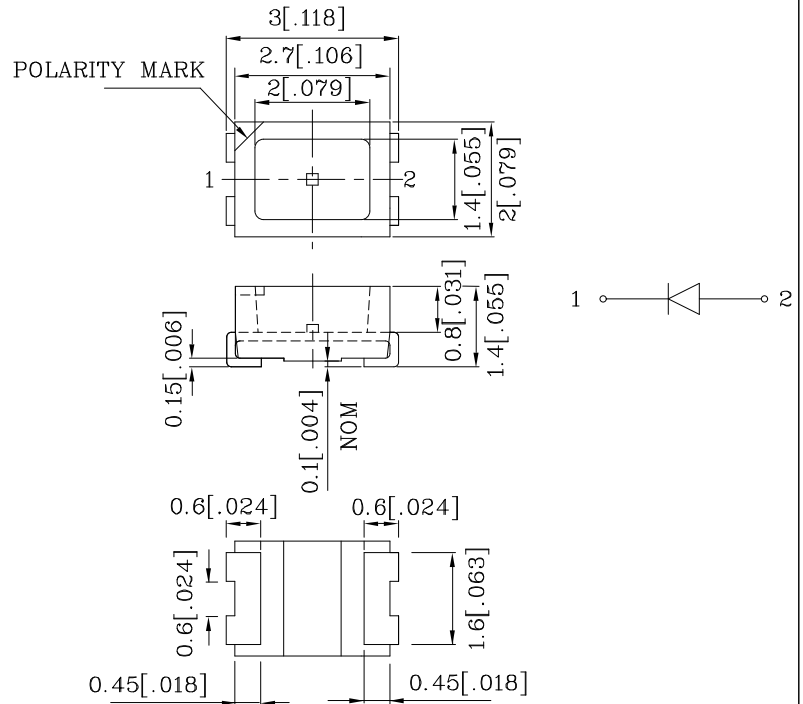
**Features**

- 3.0MM X 2.0MM, 1.4MM HIGH, ONLY MINIMUM SPACE REQUIRED.
- SUITABLE FOR COMPACT OPTOELECTRONIC APPLICATIONS.
- LOW POWER CONSUMPTION.
- PACKAGE : 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.



Notes:

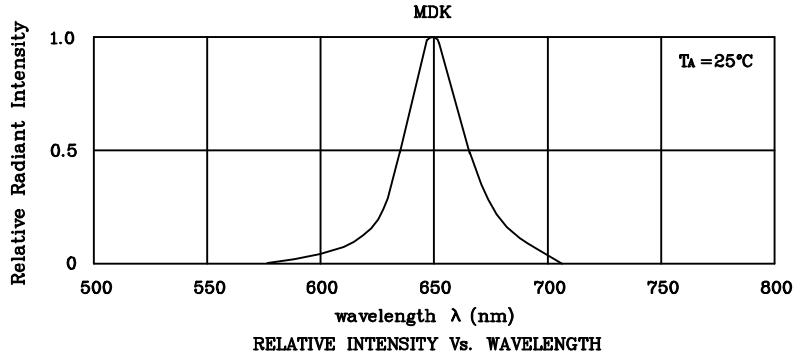
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
3. Specifications are subject to change without notice.



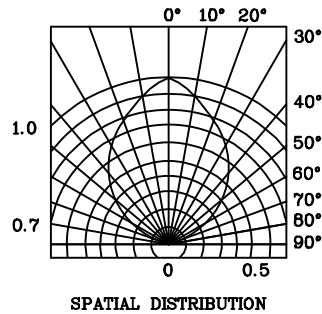
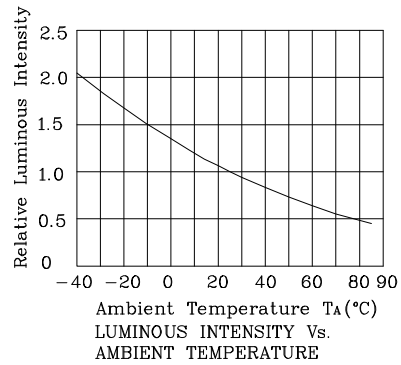
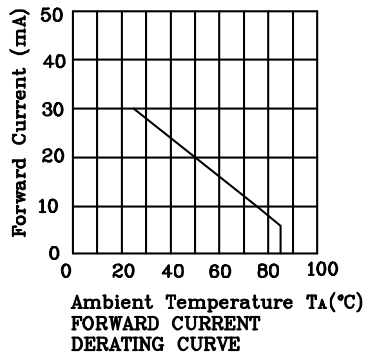
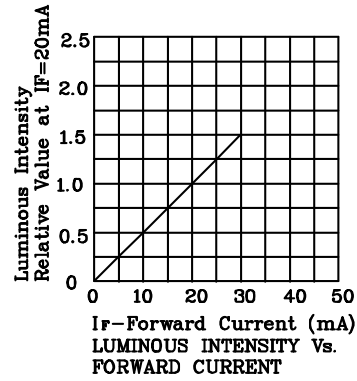
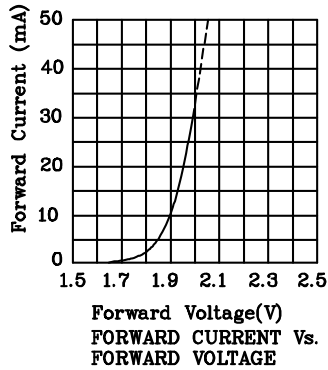
Absolute Maximum Ratings (TA=25°C)		MDK (InGaAlP)	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	185	mA
Power Dissipation	PT	75	mW
Operating Temperature	TA	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	

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

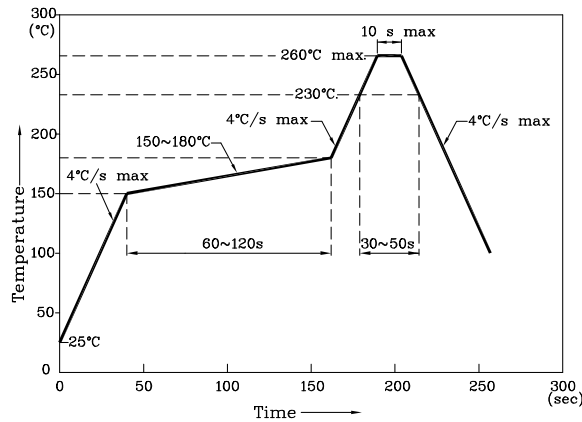
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm $\lambda P$	Viewing Angle 2 $\theta$ 1/2
				min.	typ.		
ZMDK50FW	Red	InGaAlP	Water Clear	70	198	650	90°



❖ MDK



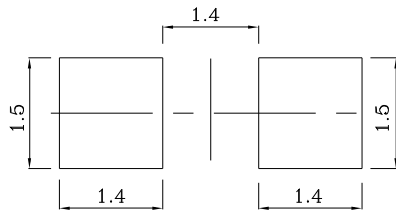
Reflow Soldering Profile For Lead-free SMT Process.



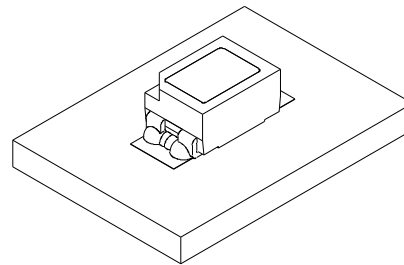
NOTES:

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.

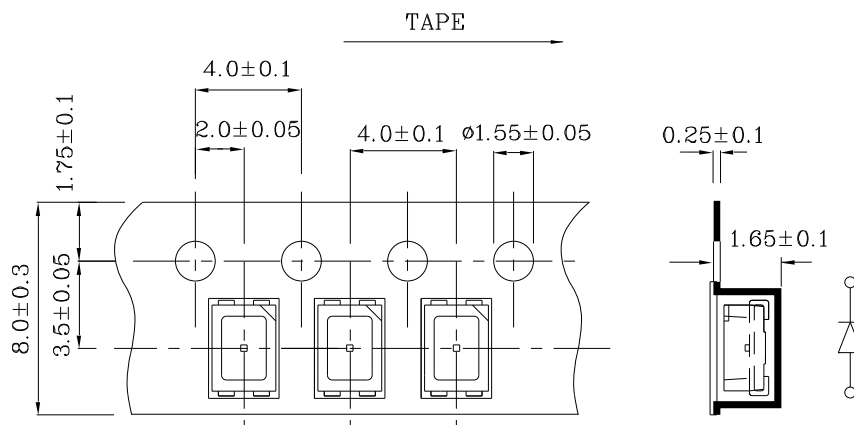
❖ Recommended Soldering Pattern  
(Units : mm; Tolerance:± 0.1)



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



❖ Tape Specification (Units : mm)



Remarks:

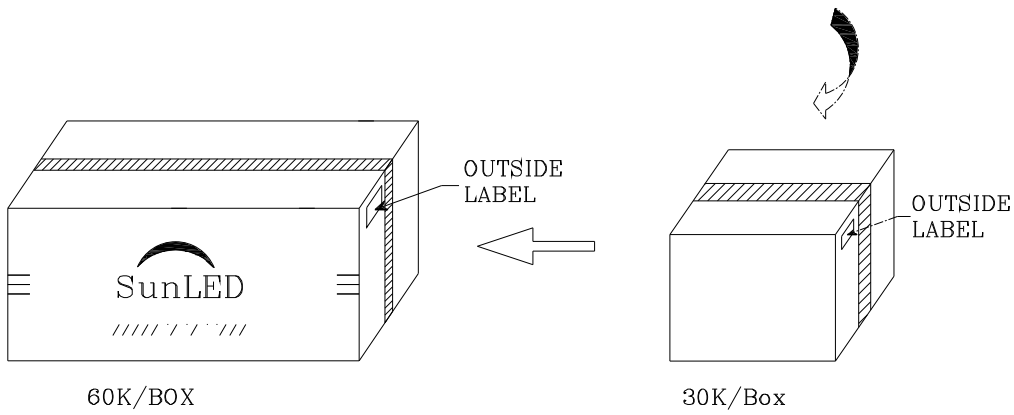
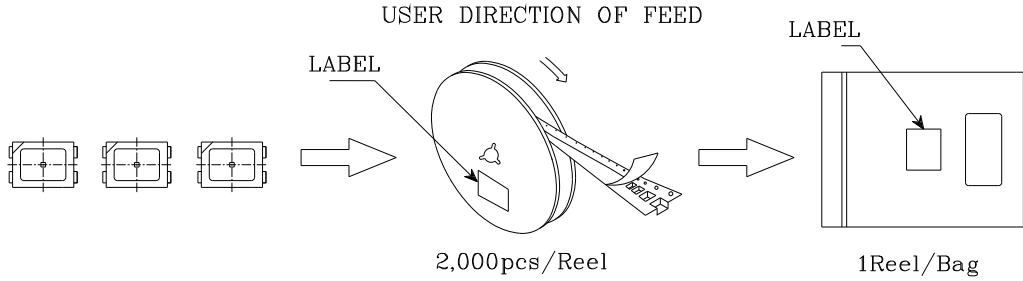
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:


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**

**ZMDK50FW**



P/NO : Zxx50Fx	
QTY : 2,000 pcs	CODE: XXX
S/N : XX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	