

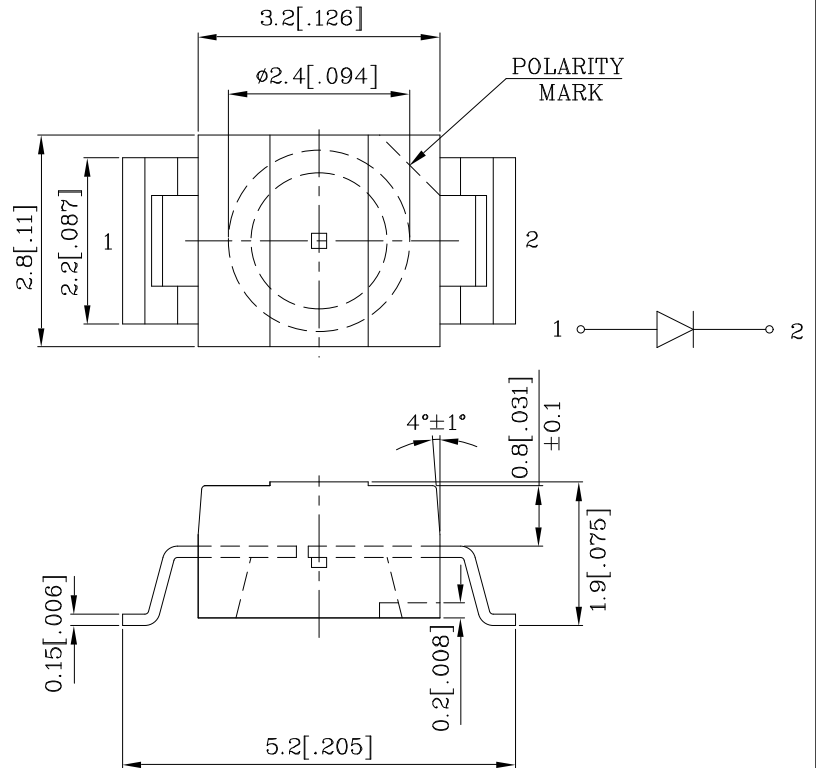
Features

- SINGLE COLOR.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- IDEAL FOR BACKLIGHTING.
- PACKAGE : 1500PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.



Notes:

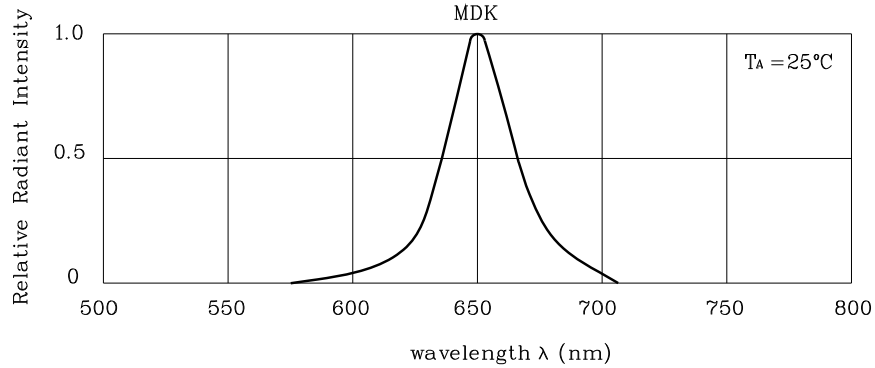
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.
3. Specifications are subject to change without notice.



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	

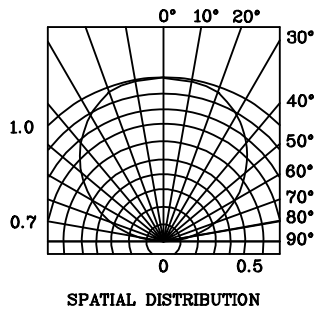
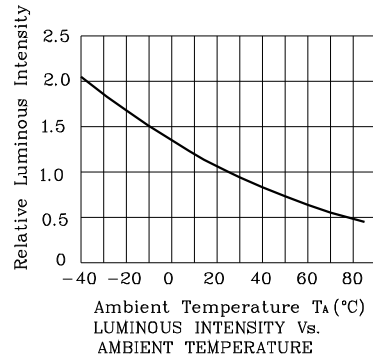
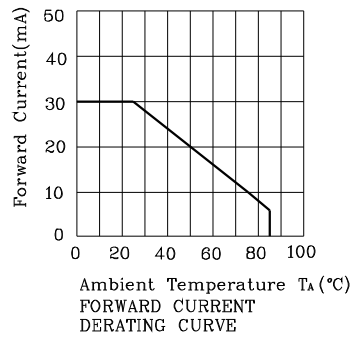
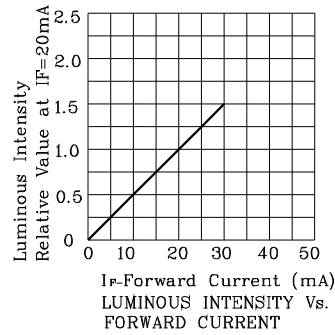
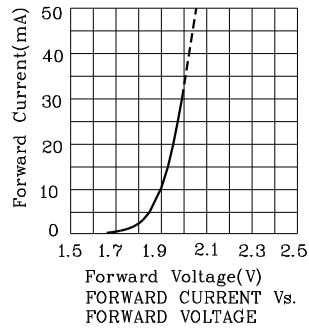
Operating Characteristics (TA=25°C)		MDK (InGaAlP)	Unit
Forward Voltage (Typ.) (IF=20mA)	VF	1.95	V
Forward Voltage (Max.) (IF=20mA)	VF	2.5	V
Reverse Current (Max.) (VR=5V)	IR	10	uA
Wavelength of Peak Emission (Typ.) (IF=20mA)	λp	650	nm
Wavelength of Dominant Emission (Typ.) (IF=20mA)	λD	635	nm
Spectral 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 λP	Viewing Angle 2 θ 1/2
				min.	typ.		
ZMDK45FW-9	Red	InGaAlP	Water Clear	70	198	650	120°
Published Date : FEB 26, 2008 Drawing No : SDSA6378 V1 Checked : B.L.LIU P. 1/4							

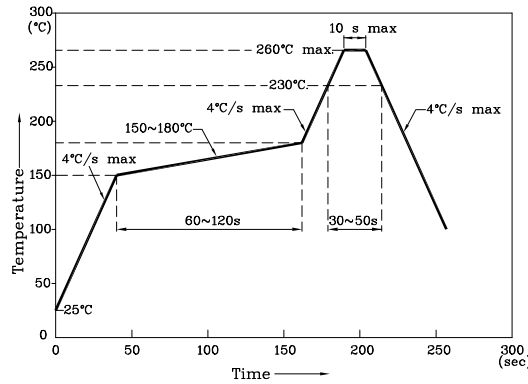


RELATIVE INTENSITY Vs. WAVELENGTH

❖ MDK

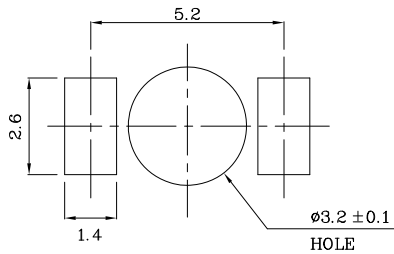


Reflow Soldering Profile For Lead-free SMT Process.

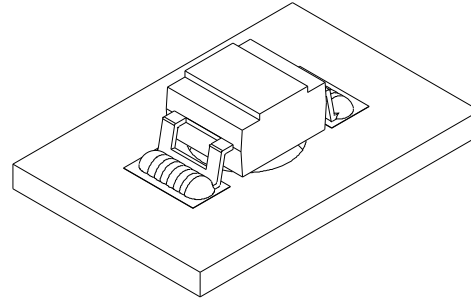


- NOTES:
1. Maximum soldering temperature should not exceed 260°C.
 2. Recommended reflow temperature: 145°C-260°C.
 3. Do not put stress to the epoxy resin during high temperatures conditions.

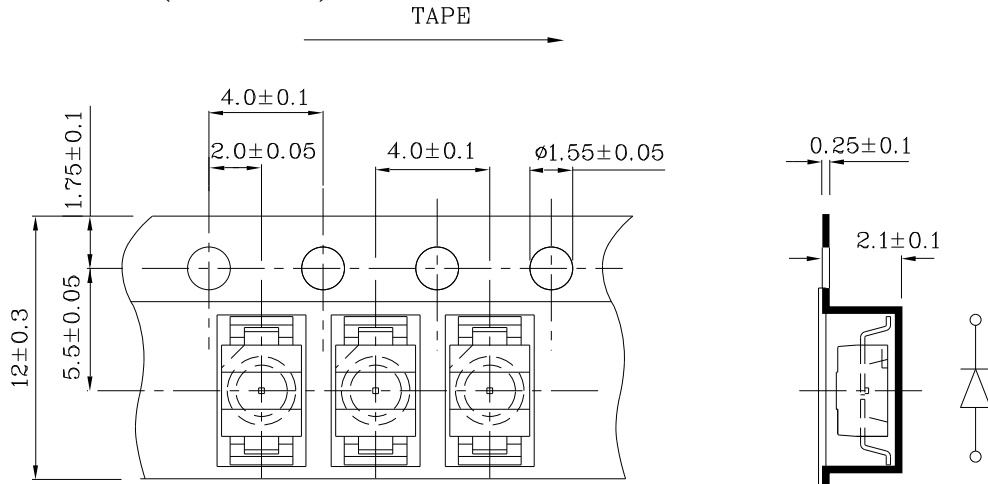
❖ **Recommended Soldering Pattern**
(Units : mm; Tolerance: ±0.1)



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



❖ **Tape Specification (Units : mm)**



Remarks:

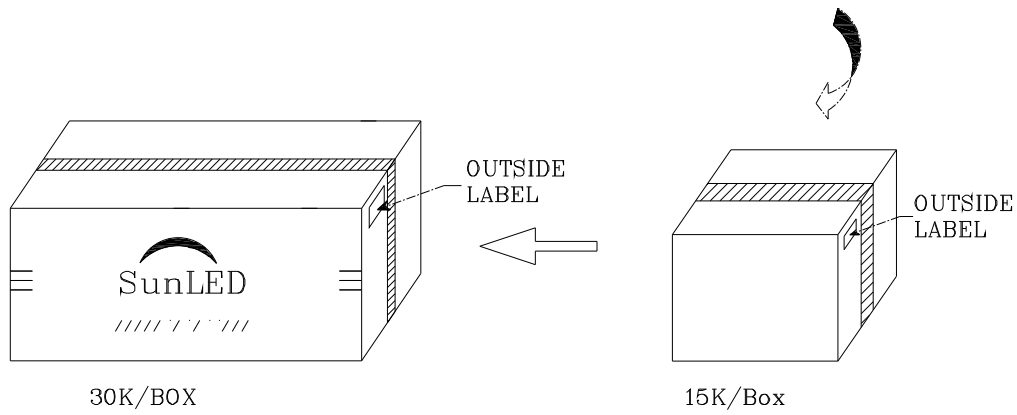
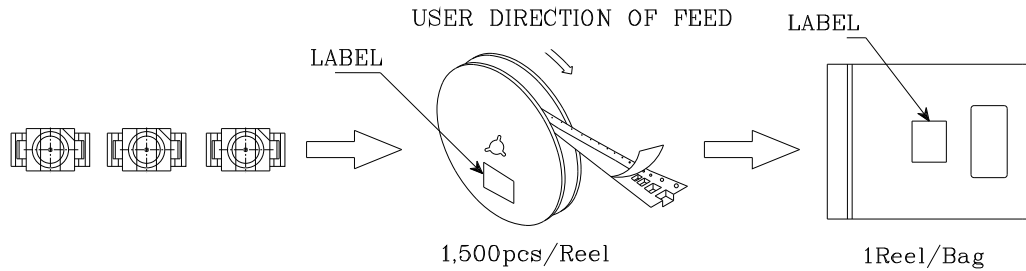

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

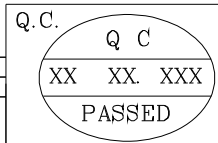

1. Wavelength: +/-1nm
2. Luminous intensity / luminous flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS

ZMDK45FW-9

	
P/NO : Zxx45x9	
QTY : 1,500 pcs	CODE: XXX
S/N : XX	
LOT NO:	
 XXXXXXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	