

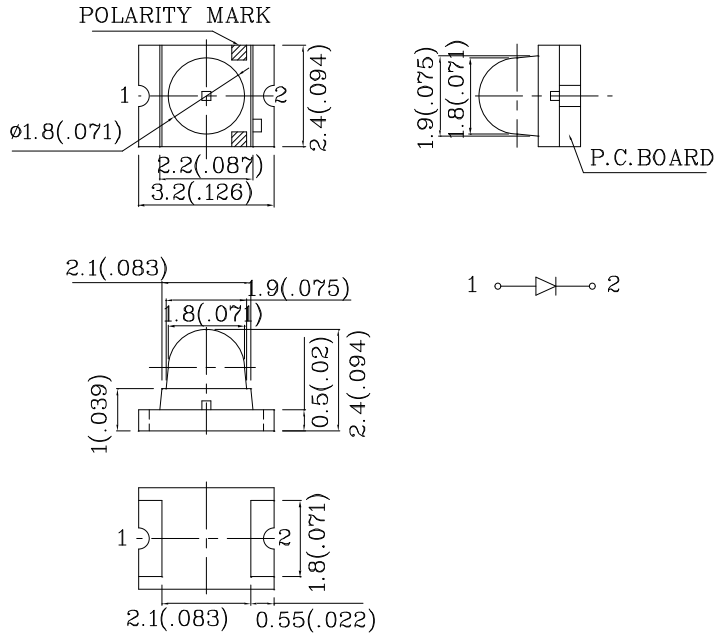
Features

- 3.2x2.4mm SMT LED, 2.4mm THICKNESS.
- LOW POWER CONSUMPTION.
- IDEAL FOR BACK LIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 1500PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.



Notes:

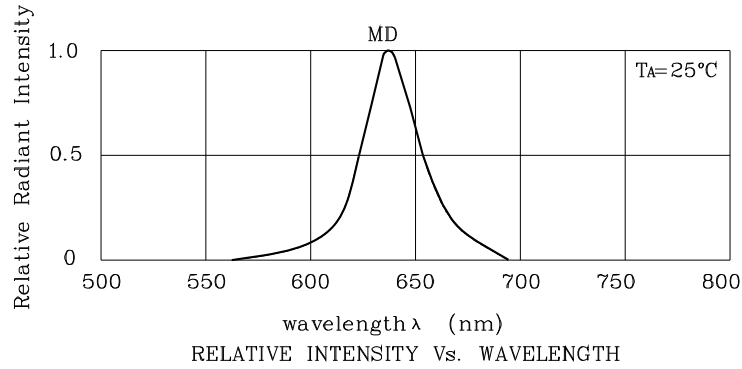
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.1(0.004)$ " unless otherwise noted.
3. Specifications are subject to change without notice.



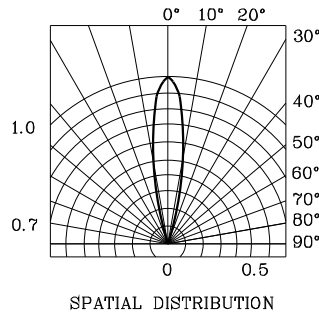
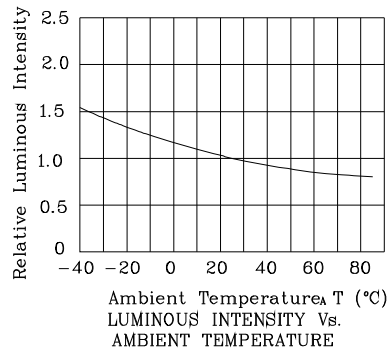
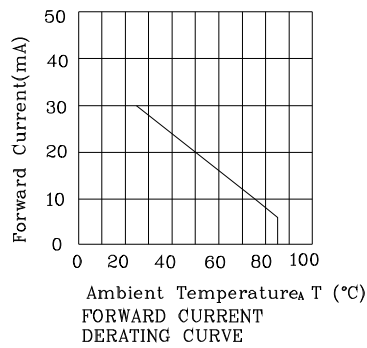
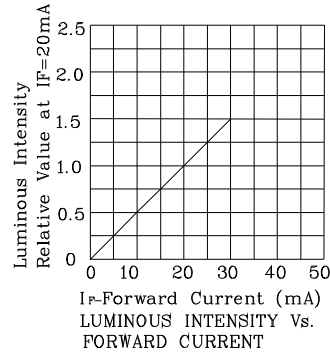
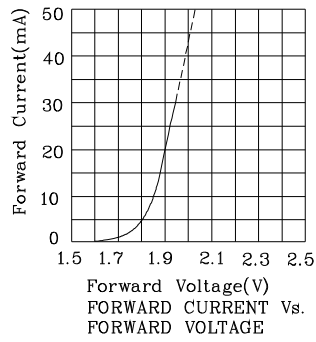
Absolute Maximum Ratings (TA=25°C)		MD (InGaAlP)	Unit
Reverse Voltage	V _R	5	V
Forward Current	I _F	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i _{FS}	185	mA
Power Dissipation	P _T	75	mW
Operating Temperature	T _A	-40 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +85	

Operating Characteristics (TA=25°C)		MD (InGaAlP)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V _F	1.9	V
Forward Voltage (Max.) (I _F =20mA)	V _F	2.5	V
Reverse Current (Max.) (V _R =5V)	I _R	10	uA
Wavelength Of Peak Emission (Typ.) (I _F =20mA)	λ P	640	nm
Wavelength Of Dominant Emission (Typ.) (I _F =20mA)	λ D	628	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	Δλ	27	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	C	45	pF

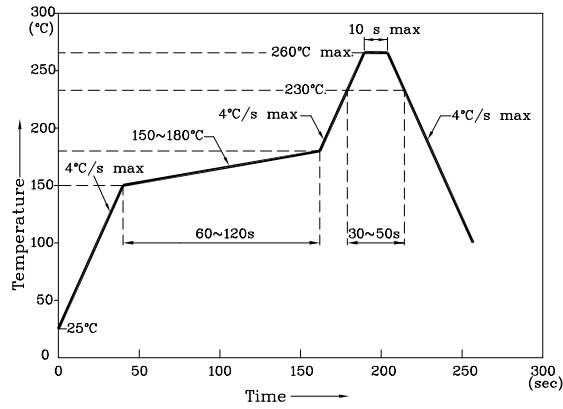
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I _F =20mA) mcd		Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.		
ZMD78W	Red	InGaAlP	Water Clear	650	1195	640	20°



❖ MD



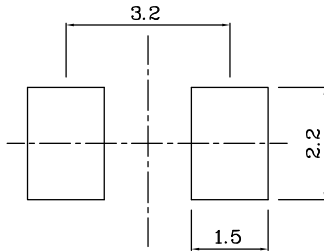
Reflow Soldering Profile For Lead-free SMT Process.



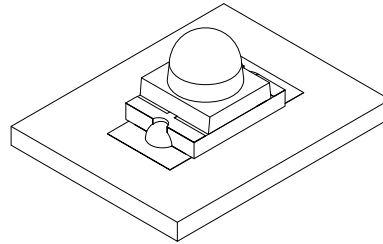
NOTES:

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.

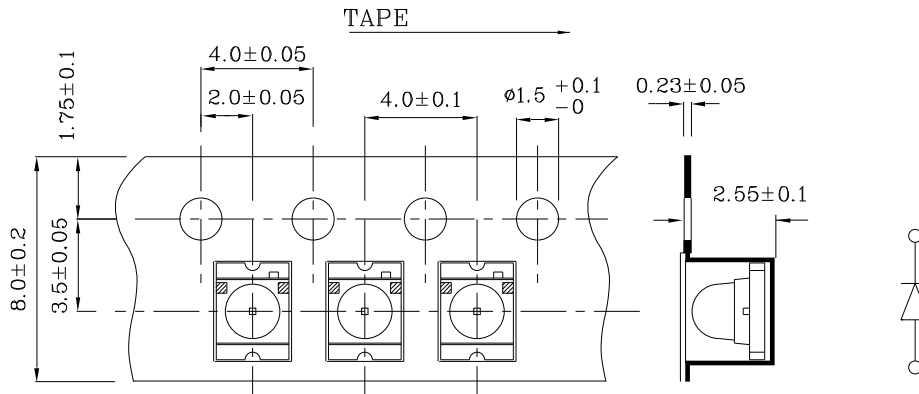
❖ Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



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



❖ Tape Specification (Units : mm)



Remarks:

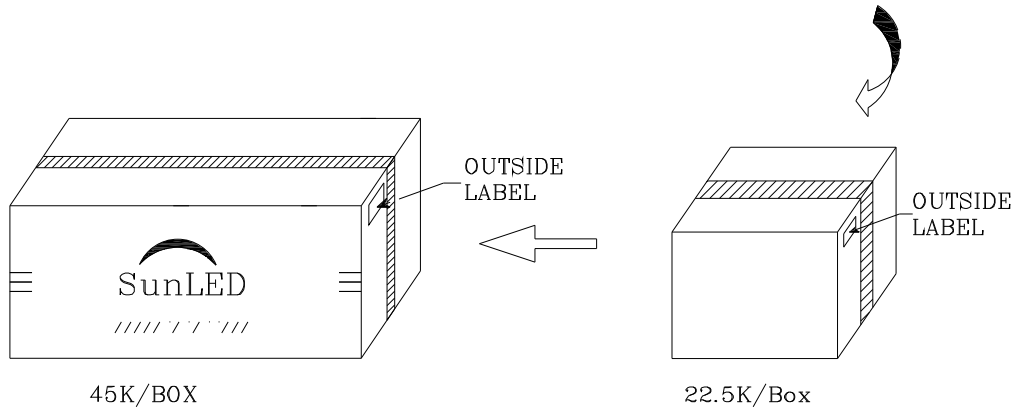
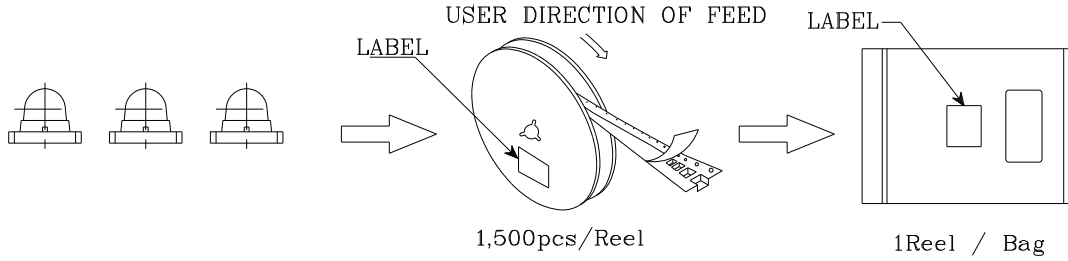

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

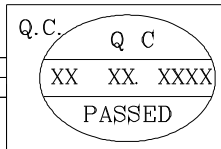

1. Wavelength: +/-1nm
2. Luminous intensity / luminous flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS

ZMD78W

	
P/NO : Zxxx78x	
QTY : 1,500 pcs	CODE: XXX
S/N : XX	
LOT NO:	
 <p>XXXXXXXXXXXXXXXXXXXX</p>	
RoHS Compliant	