

PRELIMINARY SPEC

**Features**

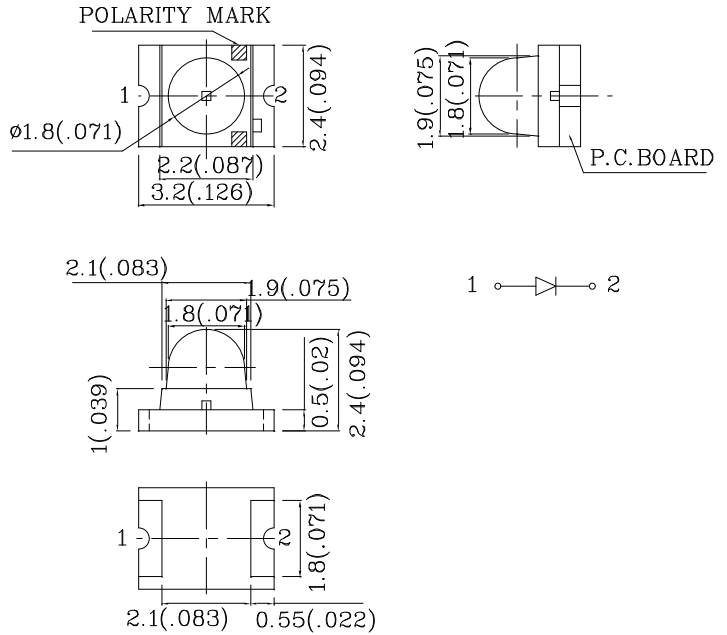
- 3.2x2.4mm SMT LED, 2.4mm THICKNESS.
- LOW POWER CONSUMPTION.
- IDEAL FOR BACK LIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 1500PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

Notes:

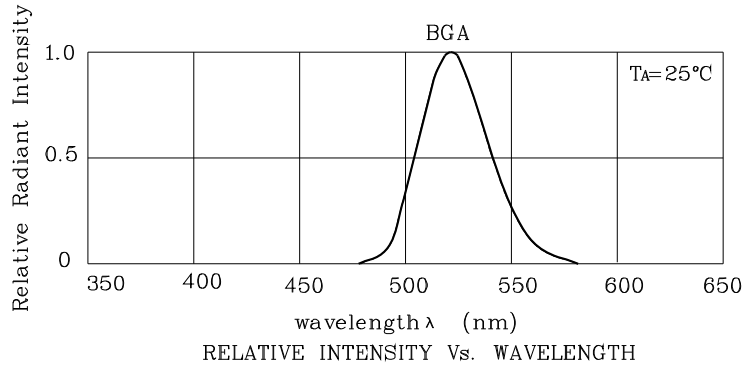
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1(0.004)$ " unless otherwise noted.
3. Specifications are subject to change without notice.



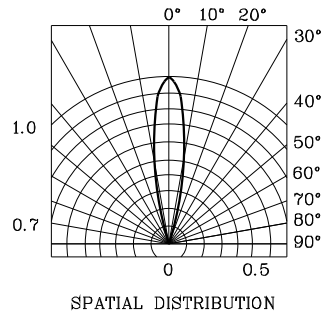
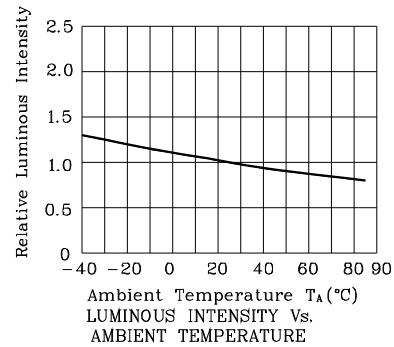
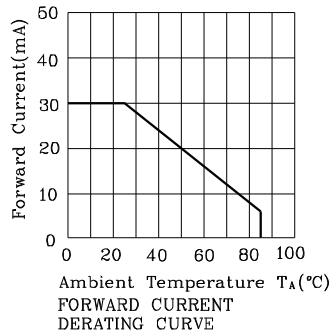
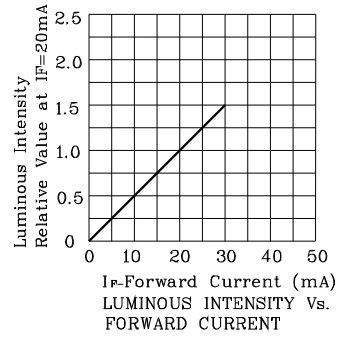
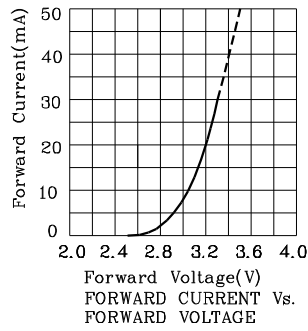
Absolute Maximum Ratings (TA=25°C)		BGA (InGaN)	Unit
Reverse Voltage	V <sub>R</sub>	5	V
Forward Current	I <sub>F</sub>	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i <sub>FS</sub>	100	mA
Power Dissipation	P <sub>T</sub>	120	mW
Operating Temperature	T <sub>A</sub>	-40 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +85	
Electrostatic Discharge Threshold (HBM)		1000	V

Operating Characteristics (TA=25°C)		BGA (InGaN)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	3.2	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	4.0	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	I <sub>R</sub>	10	uA
Wavelength Of Peak Emission (Typ.) (I <sub>F</sub> =20mA)	λ <sub>P</sub>	520	nm
Wavelength Of Dominant Emission (Typ.) (I <sub>F</sub> =20mA)	λ <sub>D</sub>	525	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	Δλ	35	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	C	100	pF

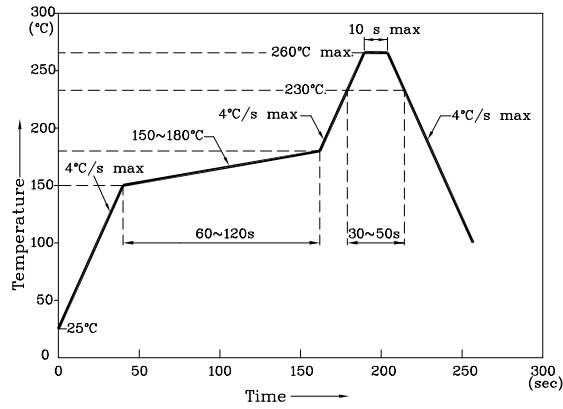
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I <sub>F</sub> =20mA) mcd		Wavelength nm λ <sub>P</sub>	Viewing Angle 2 θ 1/2
				min.	typ.		
XZBGA78W	Green	InGaN	Water Clear	480	995	520	20°
Published Date : JAN 22, 2008      Drawing No : XDSA9249      V2      Checked : B.L.LIU      P.1/4							



❖ BGA



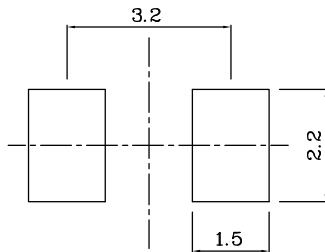
Reflow Soldering Profile For Lead-free SMT Process.



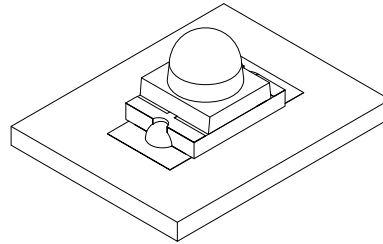
NOTES:

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.

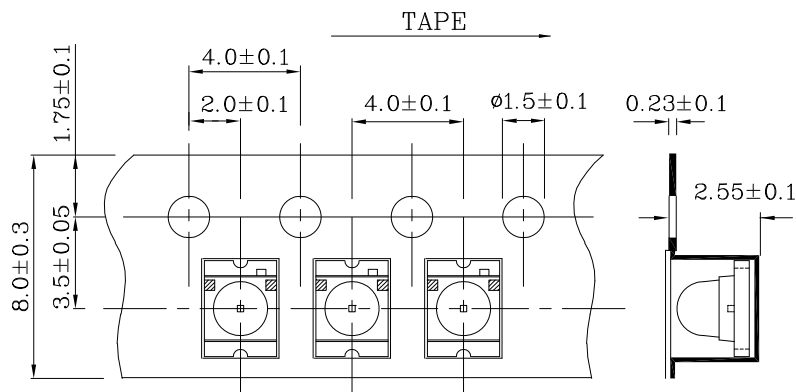
❖ Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



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



❖ Tape Specification (Units : mm)



Remarks:

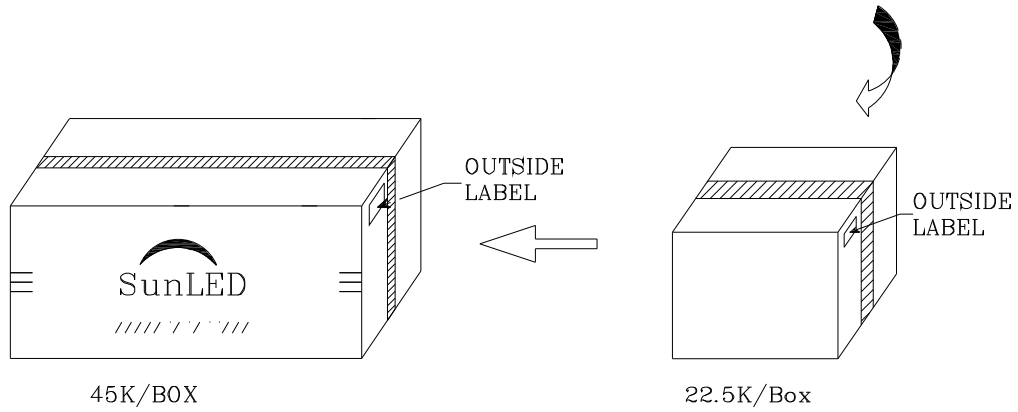
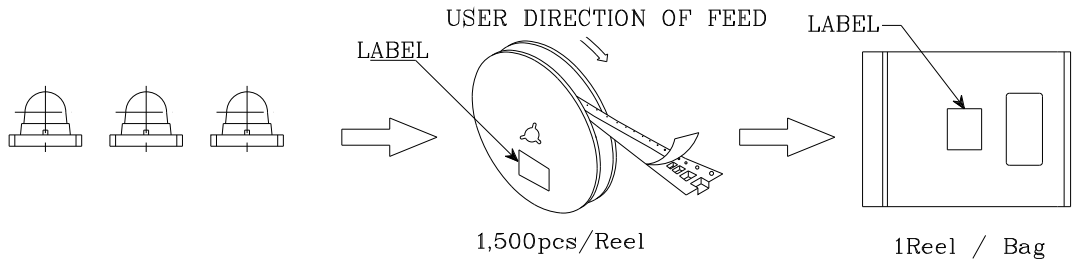

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

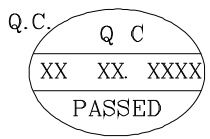

1. Wavelength: +/-1nm
2. Luminous intensity / luminous flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

**PACKING & LABEL SPECIFICATIONS**

**XZBGA78W**

	
P/NO : XZxxx78x	
QTY : 1,500 pcs	CODE: XXX
S/N : XX	
LOT NO:	
 XXXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	