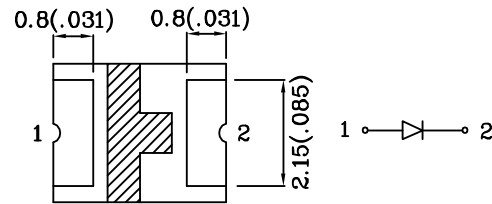
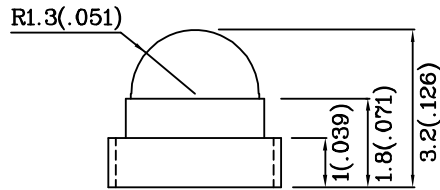
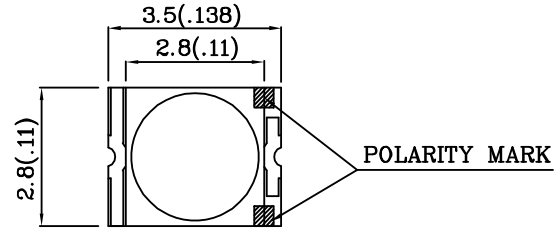


### Features

- Single color.
- Suitable for all SMT assembly and solder process.
- Ideal for backlighting.
- Available on tape and reel.
- Package : 500pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.



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



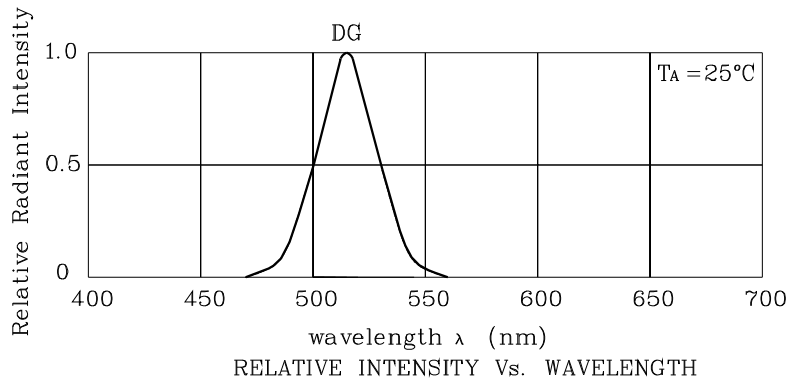
### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008)$ " unless otherwise noted.
3. Specifications are subject to change without notice.

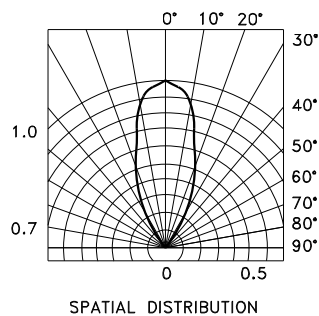
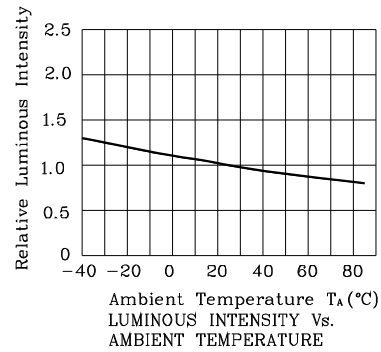
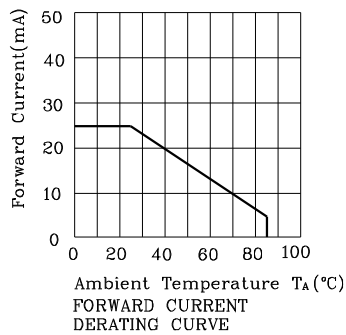
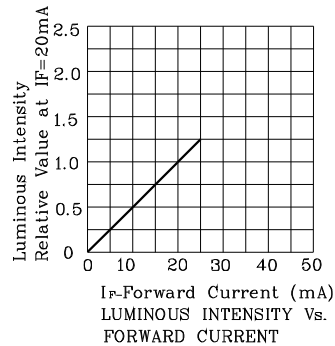
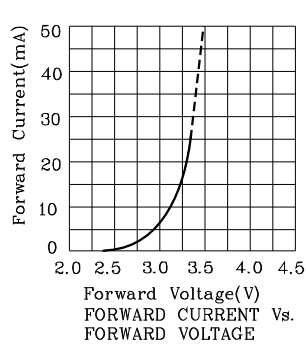
Absolute Maximum Ratings (TA=25°C)		DG (InGaN)	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	25	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	150	mA
Power Dissipation	PD	102.5	mW
Operating Temperature	TA	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	

Operating Characteristics (TA=25°C)		DG (InGaN)	Unit
Forward Voltage (Typ.) (IF=20mA)	VF	3.3	V
Forward Voltage (Max.) (IF=20mA)	VF	4.1	V
Reverse Current (Max.) (VR=5V)	IR	50	uA
Wavelength of Peak Emission (Typ.) (IF=20mA)	$\lambda P$	515	nm
Wavelength of Dominant Emission (Typ.) (IF=20mA)	$\lambda D$	525	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA)	$\Delta\lambda$	30	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	C	45	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=30mA) mcd		Wavelength nm $\lambda P$	Viewing Angle 2 $\theta$ 1/2
				min.	typ.		
XZDG45W-2	Green	InGaN	Water Clear	480	1395	515	40°
Published Date :JUN 30, 2010      Drawing No : XDSB4746      V1      Checked : B.L.LIU      P.1/4							

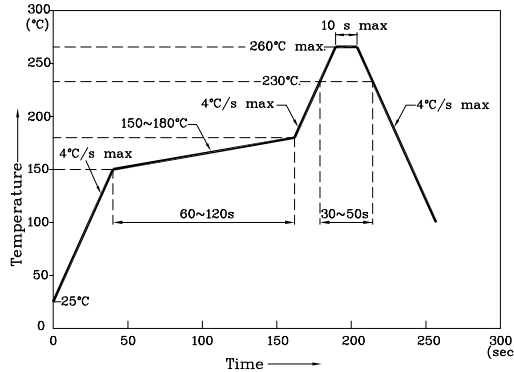


❖ DG



**Reflow soldering is recommended and the soldering profile is shown below.  
Other soldering methods are not recommended as they might cause damage to the product.**

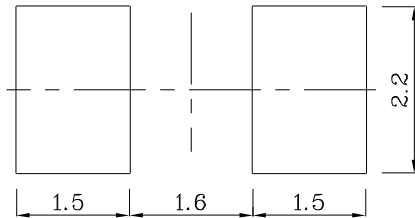
Reflow Soldering Profile For Lead-free SMT Process.



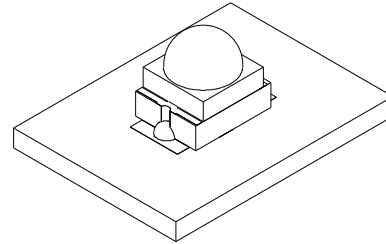
NOTES:

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.

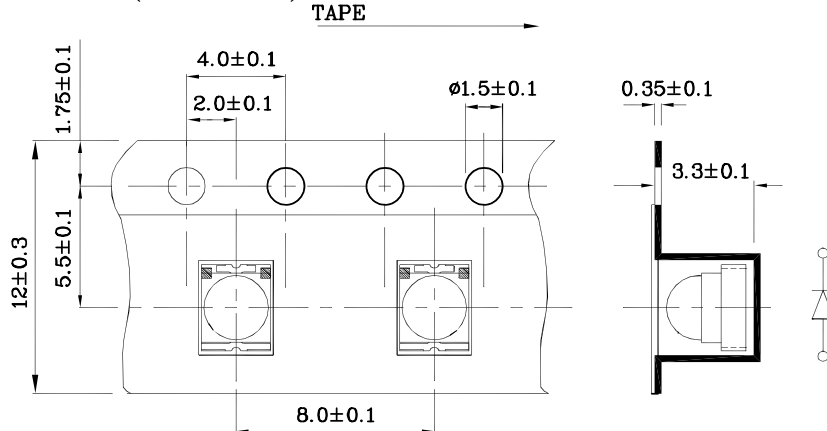
❖ Recommended Solering Pattern  
(Units : mm; Tolerance:± 0.1)



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



❖ Tape Specification (Units : mm)



Remarks:

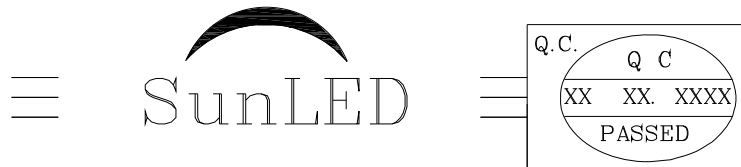
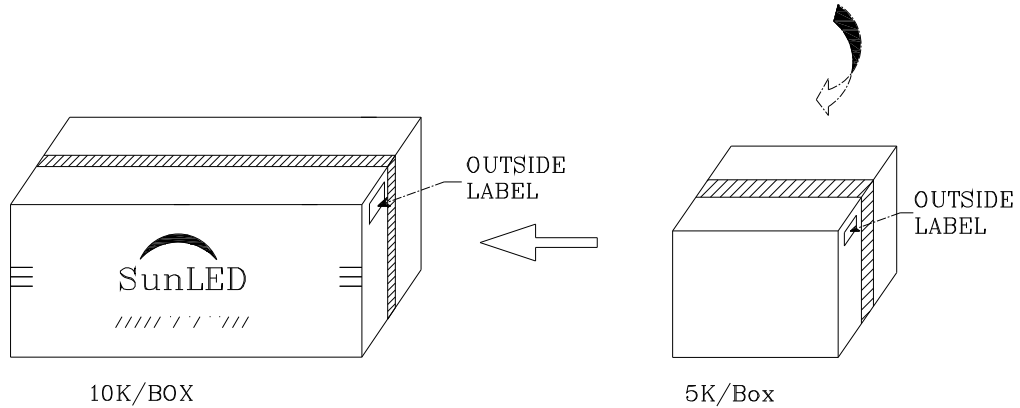
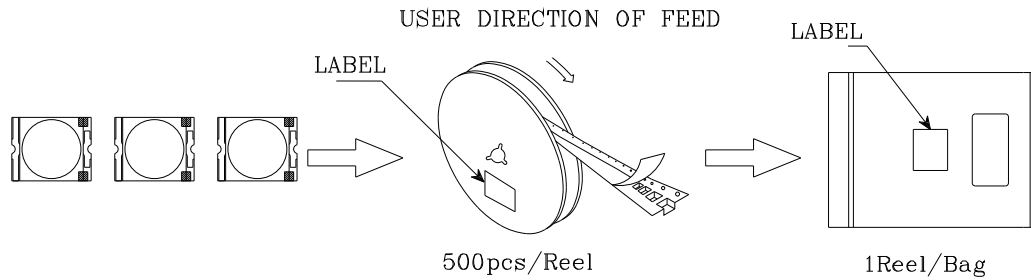
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity/ luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:


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**

**XZDG45W-2**



P/NO : XZxx45x-2	
QTY : 500 pcs	CODE: XXX
S/N : XX	
LOT NO:	
 XXXXXXXXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	