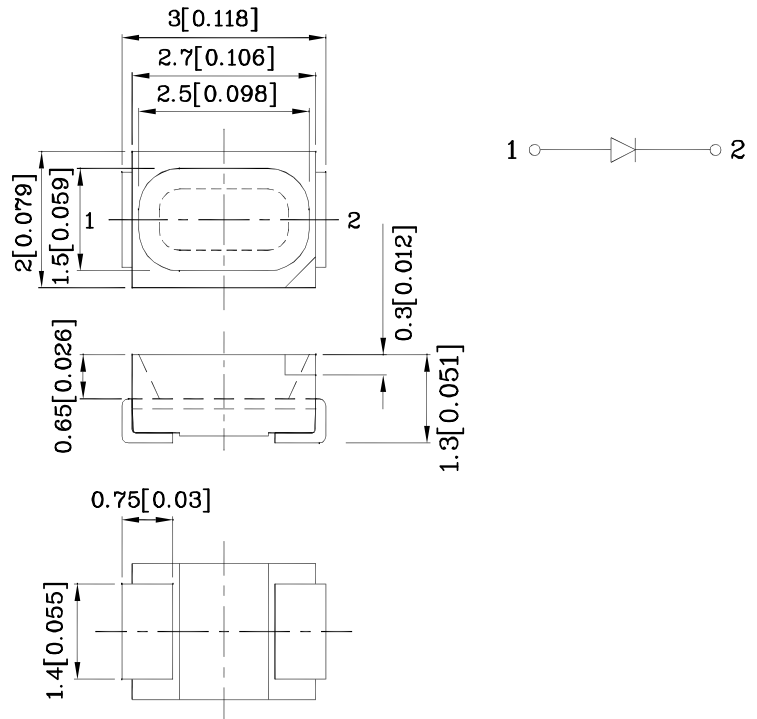


**Features**

- 3.0mm x 2.0mm, 1.3mm high, only minimum space required.
- Suitable for compact optoelectronic applications.
- Low power consumption.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 4.
- RoHS compliant.



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



Notes:

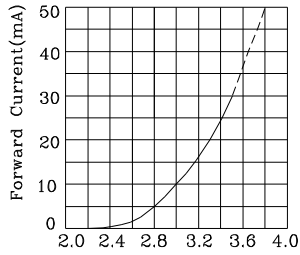
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.2(0.008") unless otherwise noted.
3. Specifications are subject to change without notice.

Absolute maximum ratings (TA=25°C)		CWD (InGaN)	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	150	mA
Power Dissipation	Pd	120	mW
Operating Temperature	TA	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	

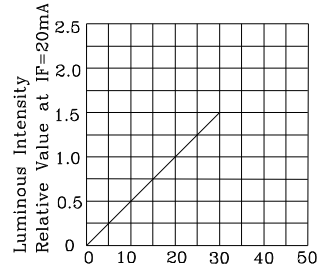
Operating Characteristics (TA=25°C)		CWD (InGaN)	Unit
Forward Voltage (Typ.) (IF=20mA)	VF	3.3	V
Forward Voltage (Max.) (IF=20mA)	VF	4.0	V
Reverse Current (Max.) (VR=5V)	IR	50	uA
Chromaticity Coordinates (Typ.)	X	0.31	
	Y	0.31	
Capacitance (Typ.) (VF=0V, f=1MHz)	C	100	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Viewing Angle 2 θ 1/2
				min.	typ.	
XZCWD105W	White	InGaN	Water Clear	480	795	125°

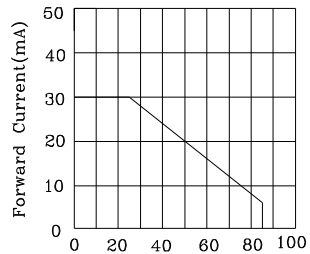
❖ CWD



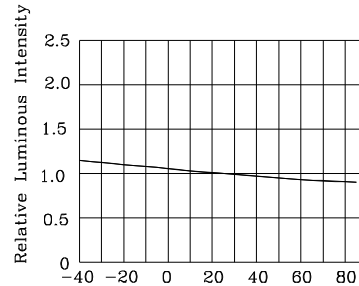
Forward Voltage(V)  
 FORWARD CURRENT Vs.  
 FORWARD VOLTAGE



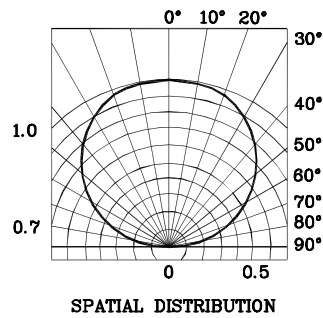
$I_F$ -Forward Current (mA)  
 LUMINOUS INTENSITY Vs.  
 FORWARD CURRENT



Ambient Temperature  $T_A$  (°C)  
 FORWARD CURRENT  
 DERATING CURVE



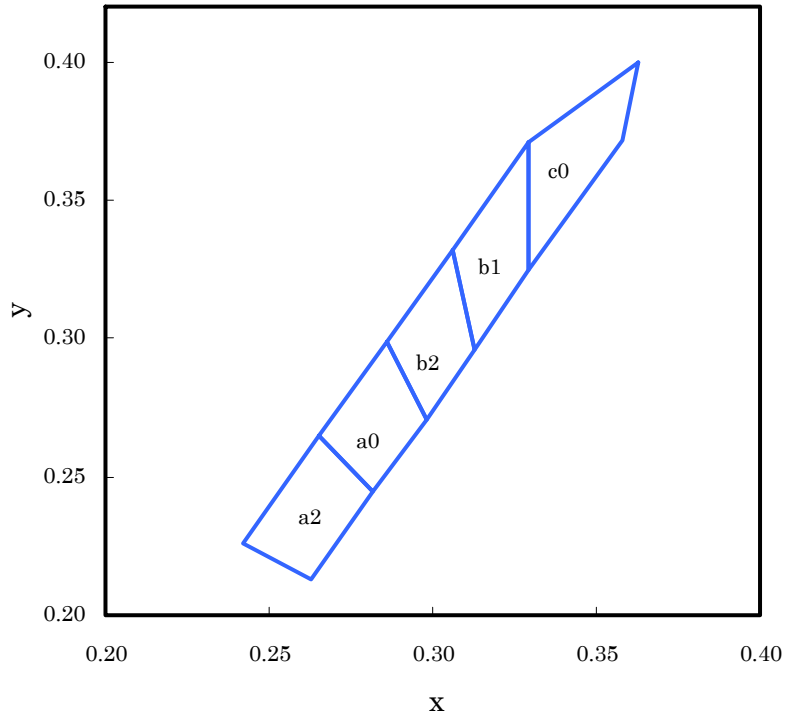
Ambient Temperature  $T_A$  (°C)  
 LUMINOUS INTENSITY Vs.  
 AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

**XZCWD105W**

**White CIE**

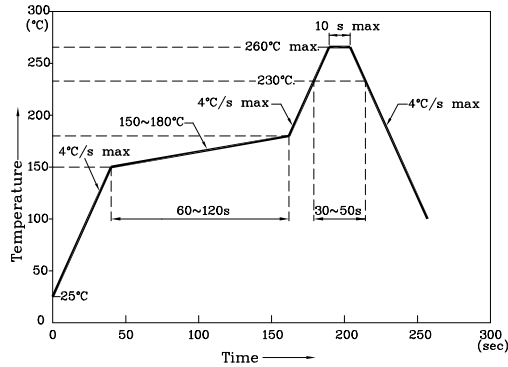


	x	y		x	y		x	y
a2	0.263	0.213	a0	0.282	0.245	b2	0.298	0.271
	0.282	0.245		0.298	0.271		0.313	0.296
	0.265	0.265		0.286	0.299		0.306	0.332
	0.242	0.226		0.265	0.265		0.286	0.299
b1	0.313	0.296	c0	0.329	0.325			
	0.329	0.325		0.358	0.372			
	0.329	0.371		0.363	0.400			
	0.306	0.332		0.329	0.371			

Notes:  
Shipment may contain more than one chromaticity regions.  
Orders for single chromaticity region are generally not accepted.  
Measurement tolerance of the chromaticity coordinates is  $\pm 0.01$ .

**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.**

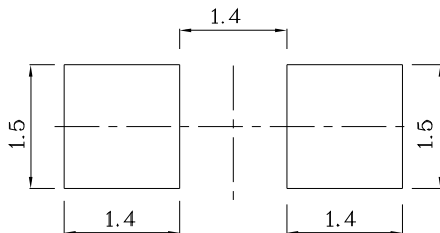
Reflow Soldering Profile For Lead-free SMT Process.



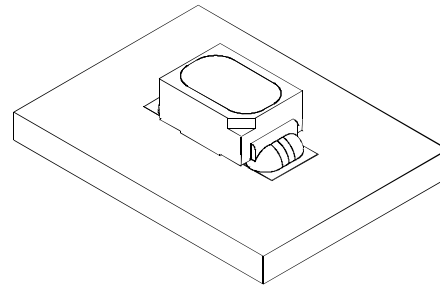
NOTES:

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.

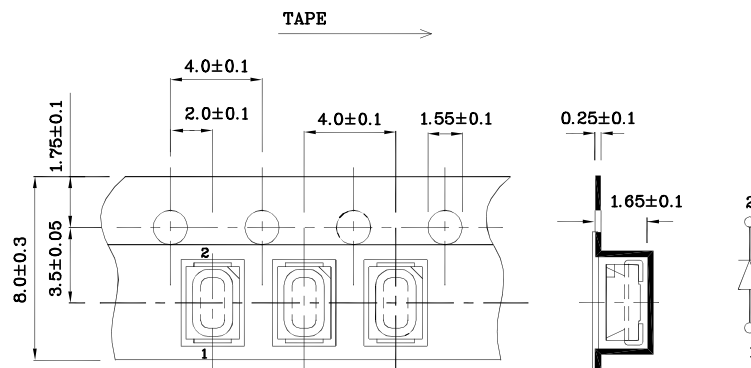
❖ **Recommended Soldering Pattern**  
(Units : mm; Tolerance: ±0.1)



❖ **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 chromaticity), the typical accuracy of the sorting process is as follows:

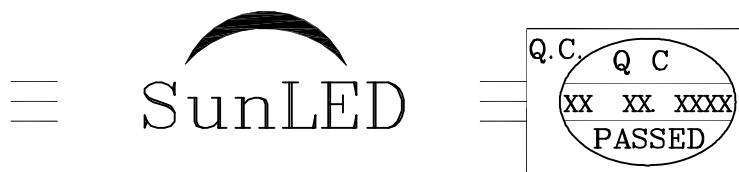
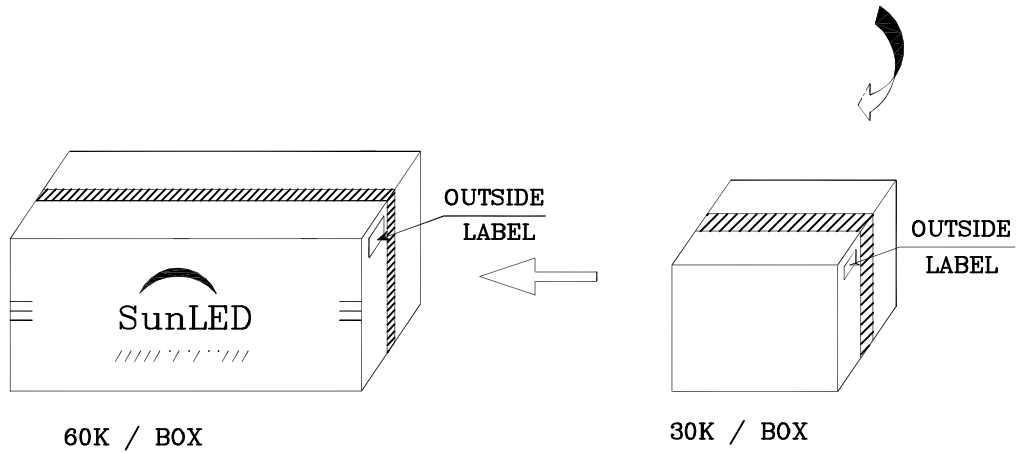
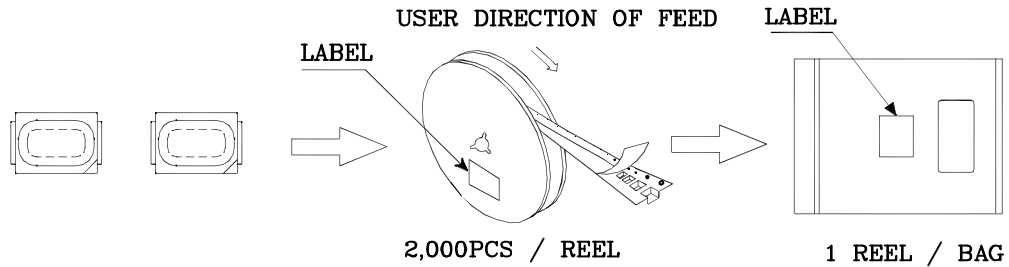
1. Measurement tolerance of the chromaticity coordinates is ±0.01.
2. Luminous intensity/ luminous flux: +/-15%.
3. Forward Voltage: +/-0.1V.


Note: Accuracy may depend on the sorting parameters.



**PACKING & LABEL SPECIFICATIONS**

**XZCWD105W**



P/NO : XZxxx105x	
QTY : 2,000 pcs	CODE: XXX
S/N : XX	
LOT NO :	
 XXXXXXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	