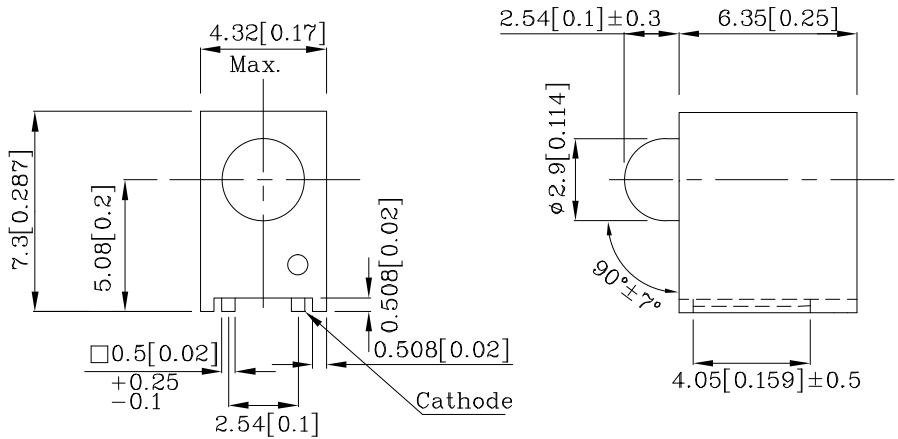


### Features

- Black casing provides superior contrast
- Reliable & robust
- Standard Package: 500pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- Housing UL rating:94V-0.
- Housing material: PPA
- High temperature resistant housing.
- High glass transition temperature epoxy.
- RoHS compliant.



### Package Schematics



#### Notes:

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

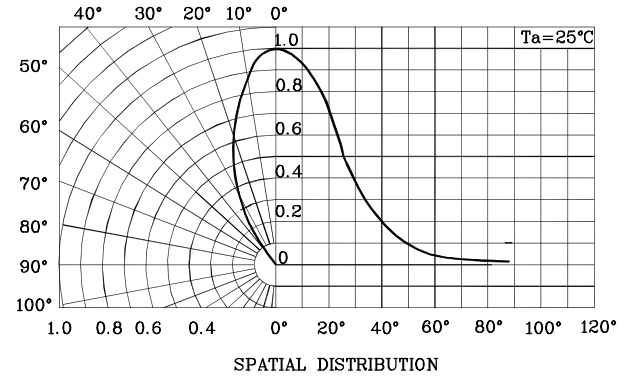
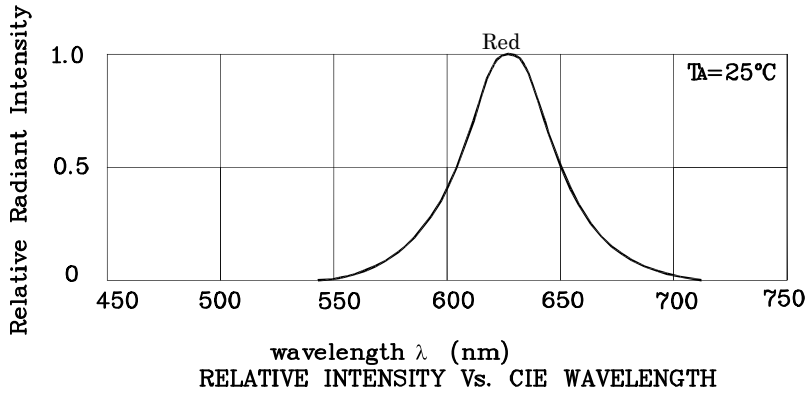
Absolute Maximum Ratings (T <sub>A</sub> =25°C)		Red (GaAsP/GaP)	Unit
Reverse Voltage	V <sub>R</sub>	5	V
Forward Current	I <sub>F</sub>	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i <sub>FS</sub>	160	mA
Power Dissipation	P <sub>D</sub>	75	mW
Operating Temperature	T <sub>A</sub>	-40 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +85	

A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

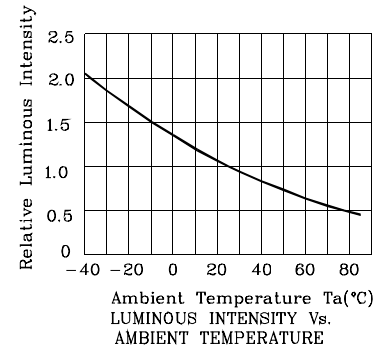
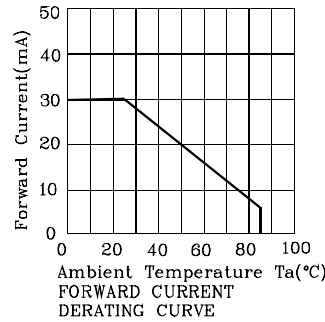
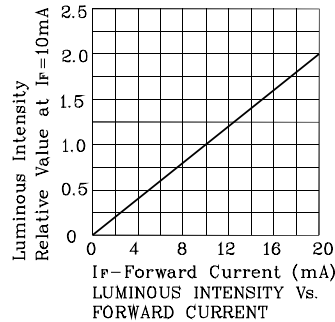
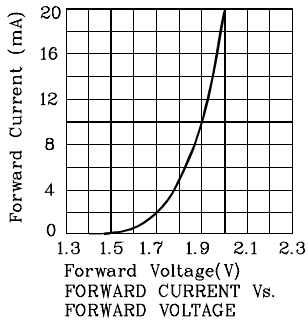
Operating Characteristics (T <sub>A</sub> =25°C)		Red (GaAsP/GaP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	V <sub>F</sub>	1.9	V
Forward Voltage (Max.) (I <sub>F</sub> =10mA)	V <sub>F</sub>	2.5	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	I <sub>R</sub>	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λ <sub>P</sub>	627*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λ <sub>D</sub>	617*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)	Δλ	45	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	C	15	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I <sub>F</sub> =10mA) mcd		Wavelength CIE127-2007* nm λ <sub>P</sub>	Viewing Angle 2θ 1/2
				min.	typ.		
XNK1LUR11DSMD	Red	GaAsP/GaP	Red Diffused	12 10*	29 19*	627*	50°

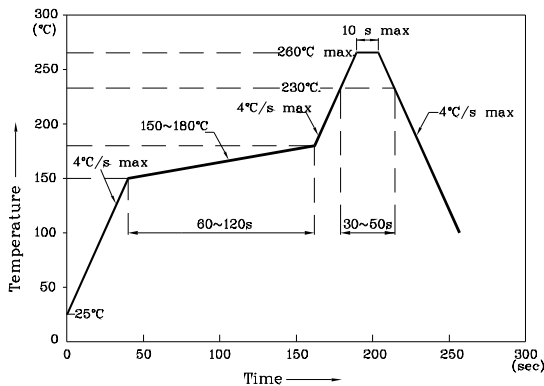
\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.



◆ Red



Reflow Soldering Profile for SMD Products (Pb-Free Components)



NOTES:

1. We recommend the reflow temperature 245 $^\circ\text{C}$  (+/-5 $^\circ\text{C}$ ). The maximum soldering temperature should be limited to 260 $^\circ\text{C}$ .
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. No more than once.

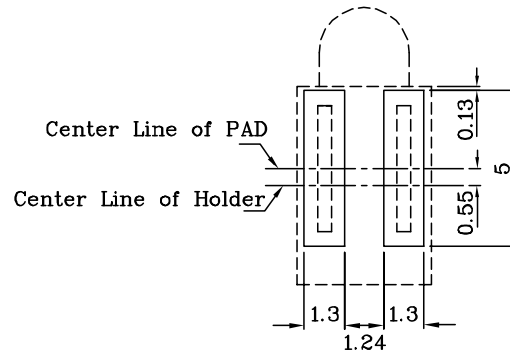
Remarks:

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:

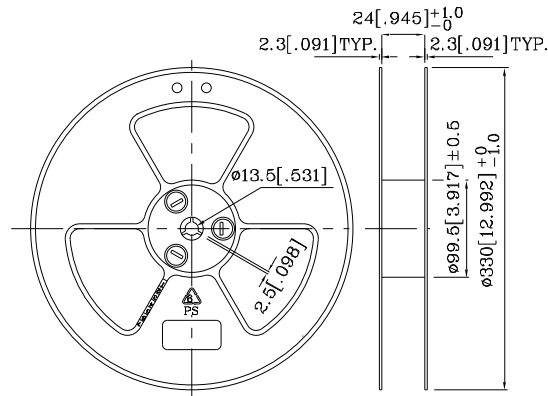
1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

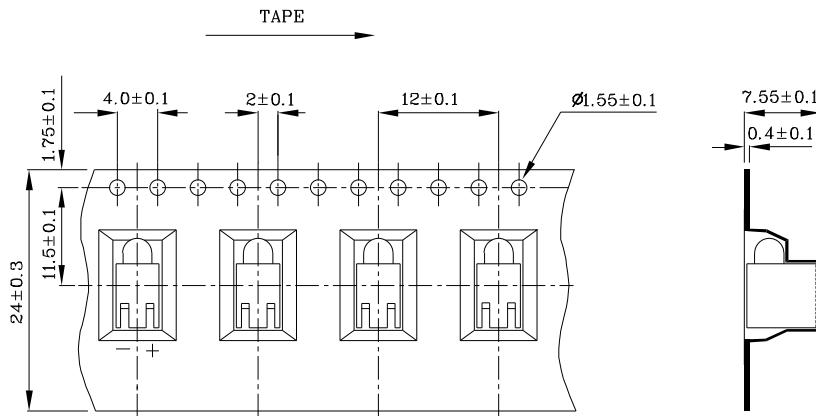
❖ Recommended Soldering Pattern  
(Units: mm ; Tolerance:  $\pm 0.1$ )



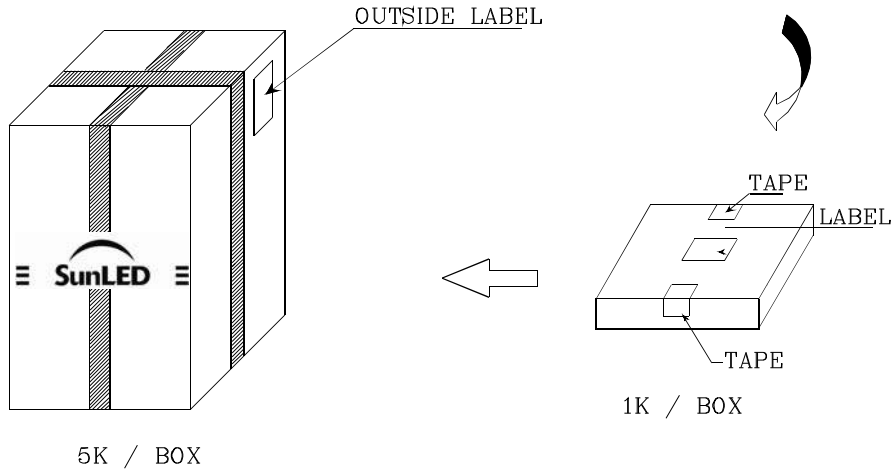
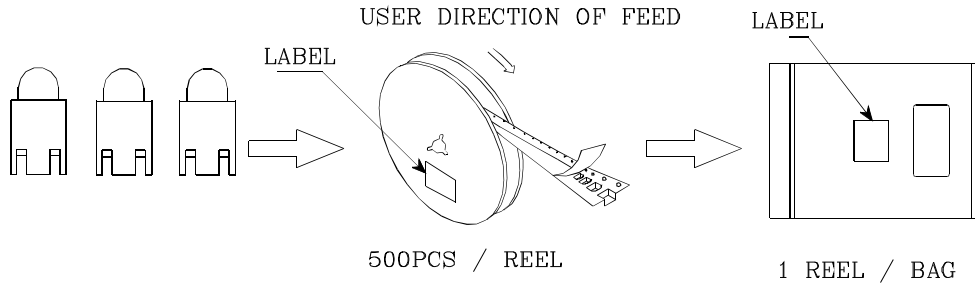

❖ Reel Dimension

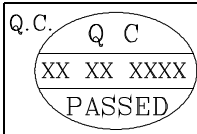



❖ Tape Specification (Units : mm)



**PACKING & LABEL SPECIFICATIONS**


P/NO : XNK1Lxx11x
QTY : 500 pcs      CODE: XXX
S/N : XX
LOT NO:  XXXXXXXXXXXXXXXX
RoHS Compliant

**TERMS OF USE**

1. Data presented in this document reflect statistical figures and should be treated as technical reference only.
2. Contents within this document are subject to improvement and enhancement changes without notice.
3. The product(s) in this document are designed to be operated within the electrical and environmental specifications indicated on the datasheet.  
User accepts full risk and responsibility when operating the product(s) beyond their intended specifications.
4. The product(s) described in this document are intended for electronic applications in which a person's life is not reliant upon the LED. Please consult with a SunLED representative for special applications where the LED may have a direct impact on a person's life.
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