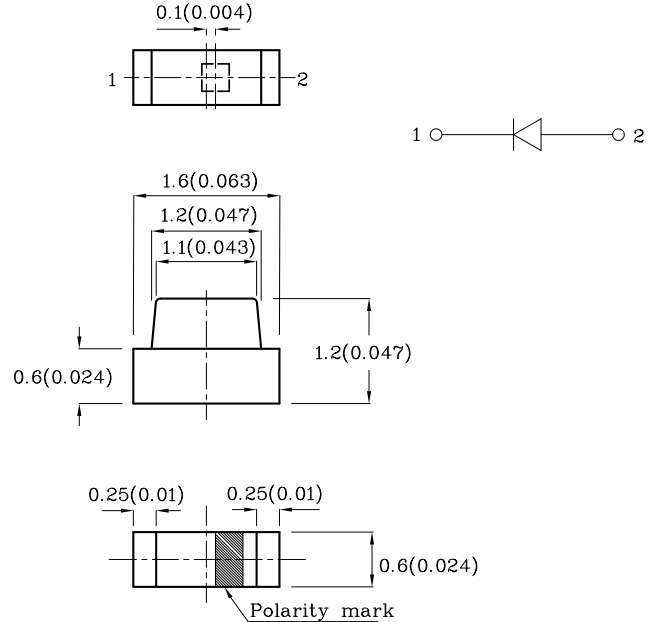


Features

- Long life and robust package
- Standard Package: 2,000 pcs / Reel
- MSL (Moisture Sensitivity Level): 3
- Halogen-free
- RoHS compliant



Package Schematics



Absolute Maximum Ratings ($T_A=25^\circ\text{C}$)		THI (GaAlAs)	Unit
Reverse Voltage	V_R	5	V
Forward Current	I_F	50	mA
Forward Current (Peak) 1/100 Duty Cycle 10 μs Pulse Width	I_{FP}	1200	mA
Power Dissipation	P_D	85	mW
Operating Temperature	T_A	-40 ~ +85	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 ~ +85	

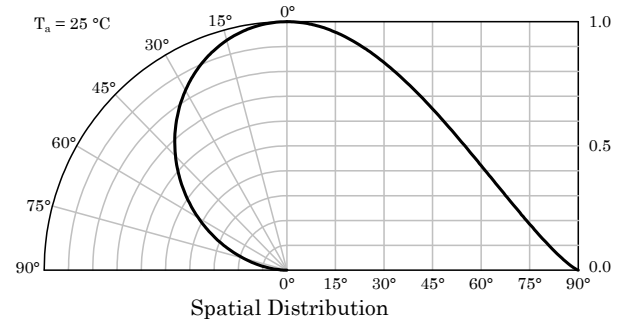
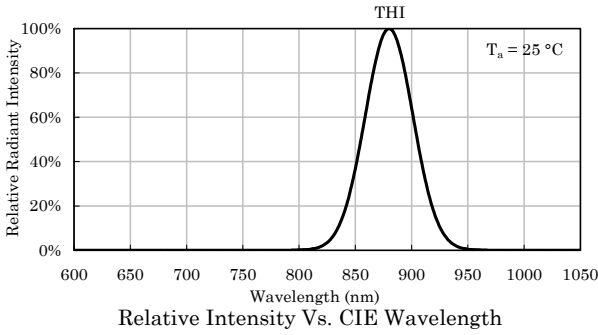
A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

Operating Characteristics ($T_A=25^\circ\text{C}$)		THI (GaAlAs)	Unit
Forward Voltage (Typ.) ($I_F=20\text{mA}$)	V_F	1.3	V
Forward Voltage (Max.) ($I_F=20\text{mA}$)	V_F	1.6	V
Reverse Current (Max.) ($V_R=5\text{V}$)	I_R	10	μA
Wavelength of Peak Emission CIE127-2007* (Typ.) ($I_F=20\text{mA}$)	λ_P	880*	nm
Spectral Line Full Width At Half-Maximum (Typ.) ($I_F=20\text{mA}$)	$\Delta\lambda$	50	nm

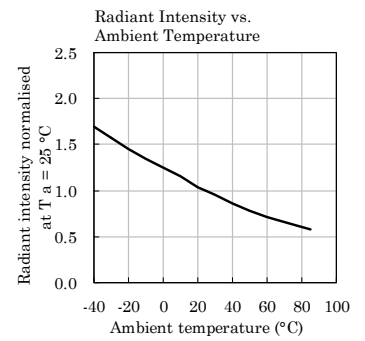
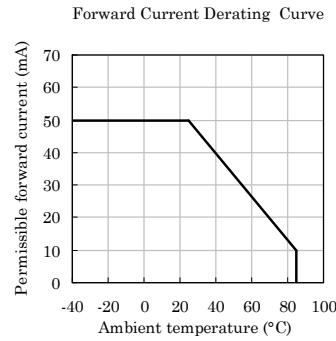
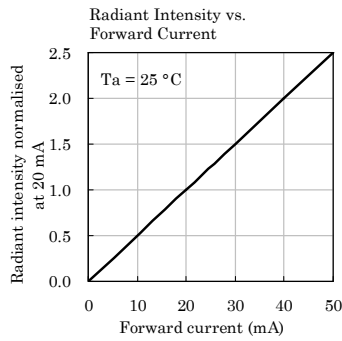
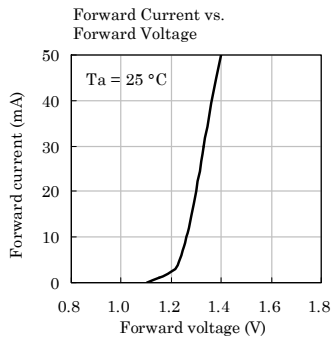
Part Number	Emitting Material	Lens-color	Radiant Intensity CIE127-2007* ($P_o=\text{mW/sr}$) @ 20mA			Wavelength CIE127-2007* nm λ_P		Viewing Angle 20 1/2
			Code.	Min.	Max.			
XZTHI87W	GaAlAs	Water Clear	AK	0.8*	1.2*	880*	110°	

*Radiant Intensity value and wavelength are in accordance with CIE127-2007 standards.

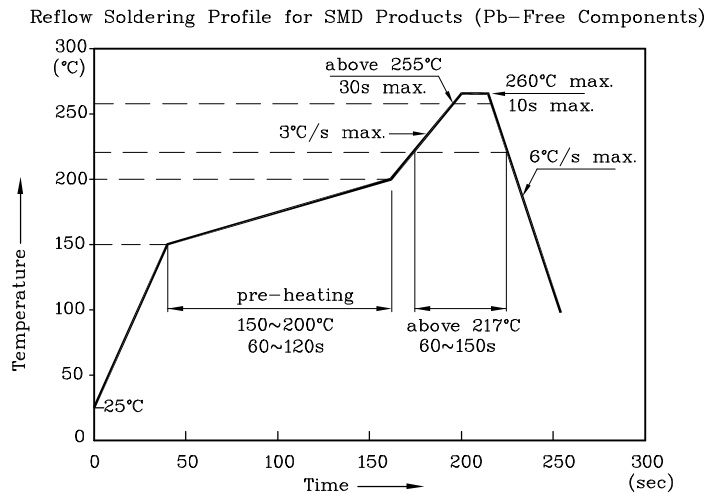
Listed bin codes represent the possible range for this LED. Actual bin codes received will be based upon production yields.



◆ THI



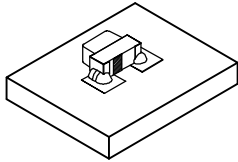
LED is recommended for reflow soldering and soldering profile is shown below.



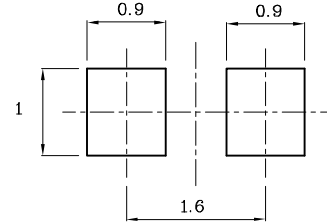
Notes:

1. All temperatures refer to the center of the package, measured on the package body surface facing up during reflow.
2. Do not apply any stress to the LED during high temperature conditions.
3. Maximum number of soldering passes: 2

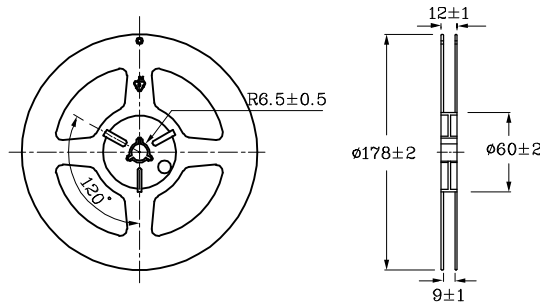
❖ The device has a single mounting surface.
The device must be mounted according to the specifications.



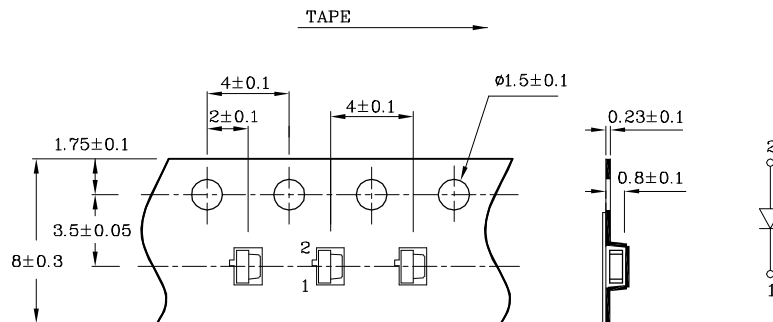
❖ Recommended Soldering Pattern
(Units : mm; Tolerance: ± 0.1)



❖ Reel Dimension (Units : mm)



❖ Tape Specification (Units : mm)



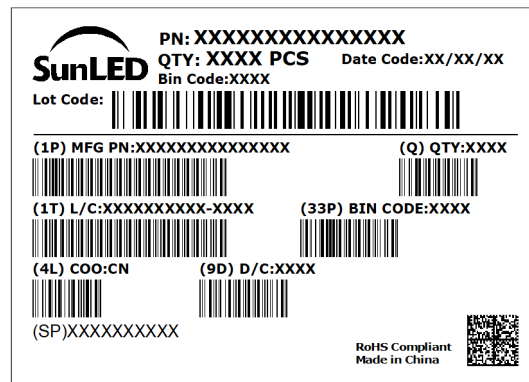
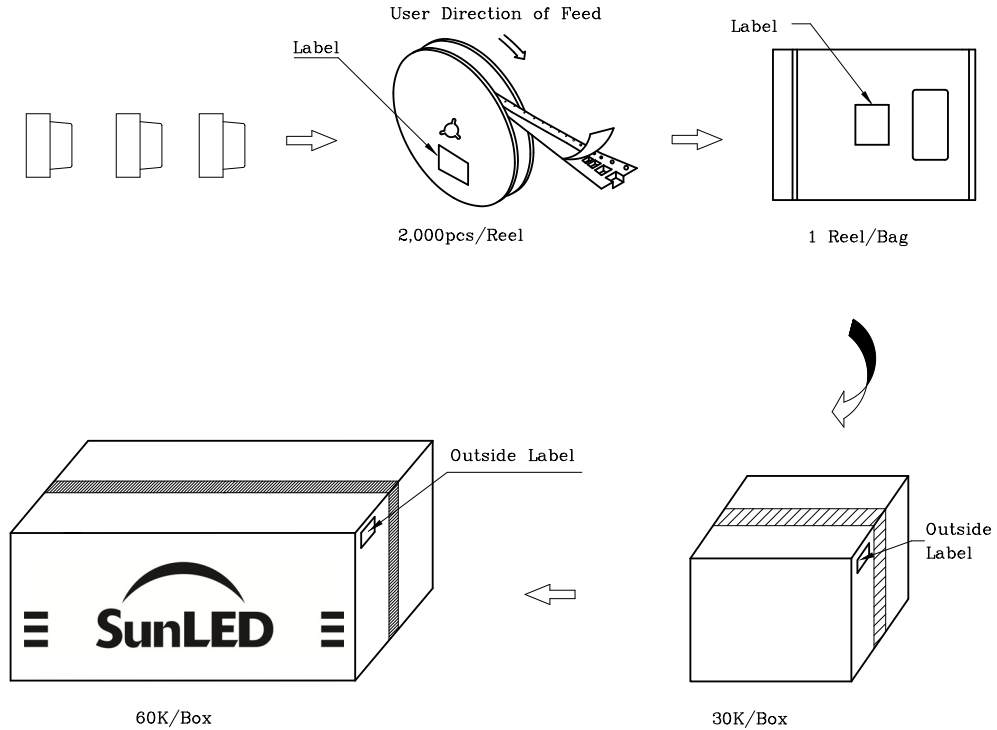
Remarks:

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

1. Radiant Intensity / Luminous Flux: $\pm 15\%$
2. Forward Voltage: $\pm 0.1V$

Note: Accuracy may depend on the sorting parameters

Packing & Label Specifications



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2. Contents within this document are subject to improvement and enhancement changes without notice.
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