

SPECIFICATION

R&D



1. Description

1.1 General Description

LED, , : 3.0mmX1.4mmX0.7mm

1.2 Features

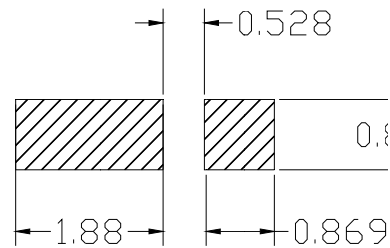
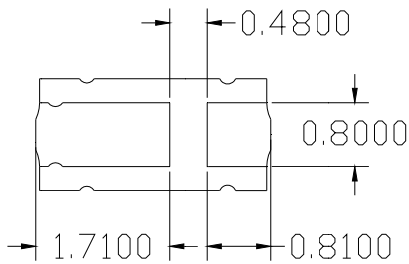
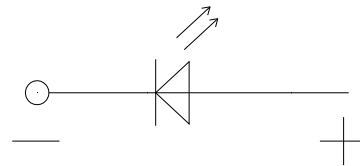
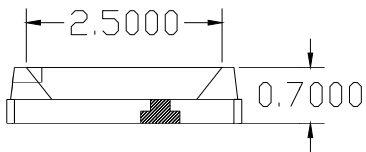
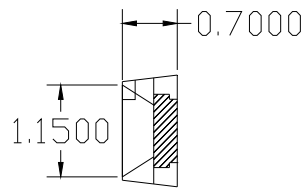
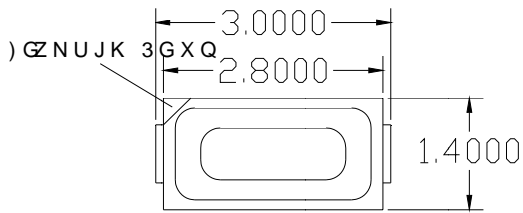
SM

Level 3

RoHS

1.3 Application

1.4 Package Dimension 7-up.



5 H F R P Q G H R G L V G L Q J S

Notes =# Æ

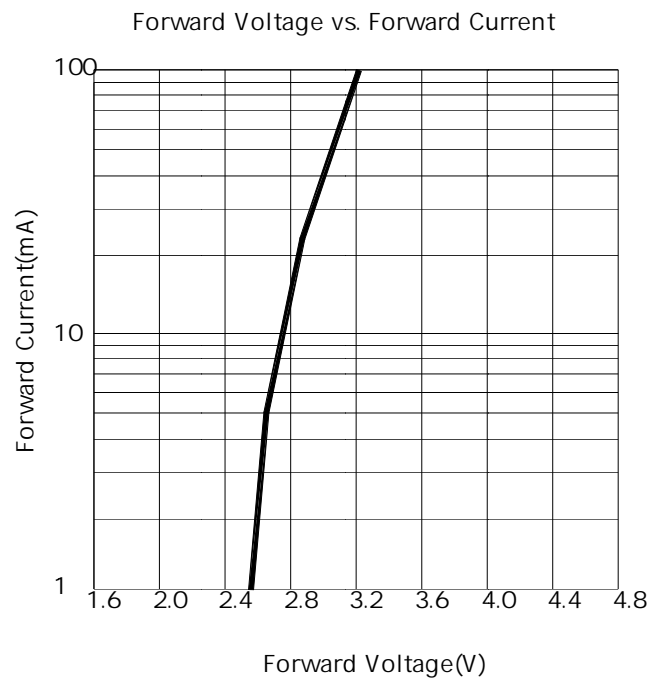
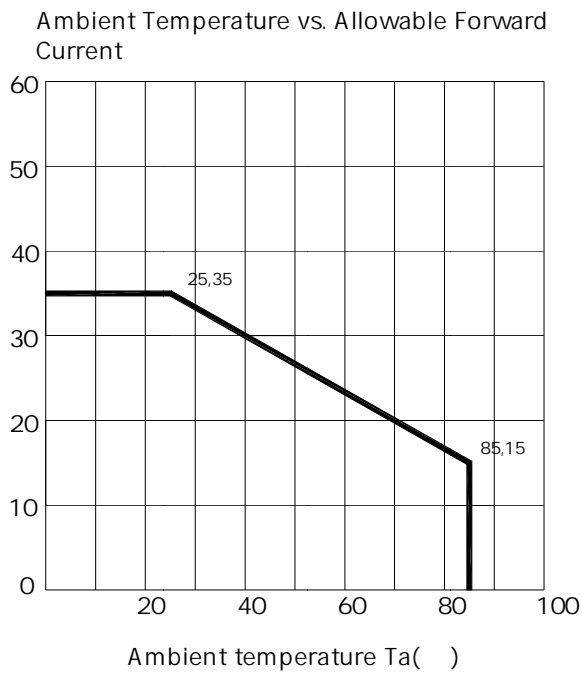
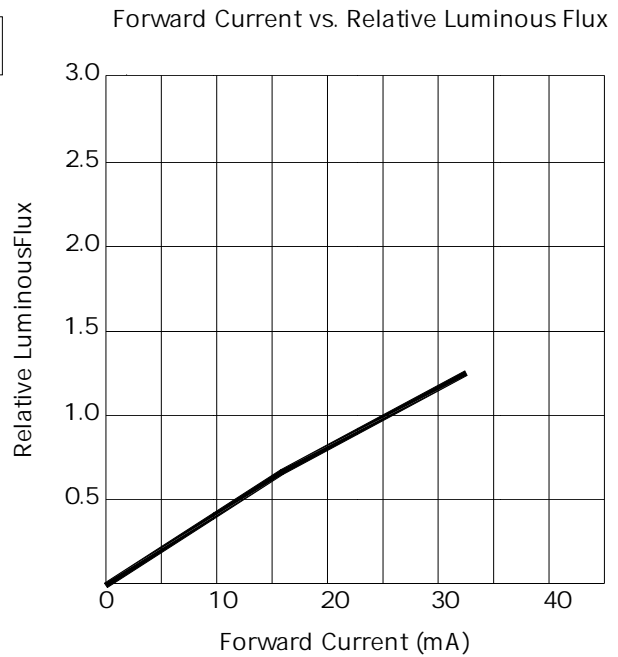
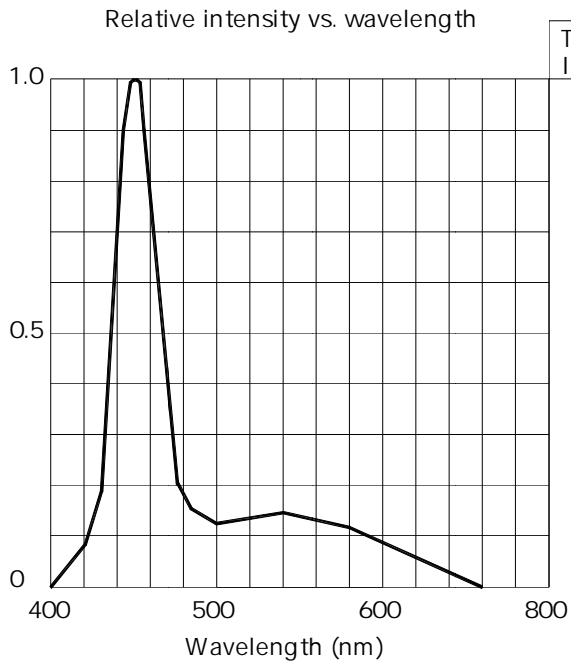
All dimensions units are millimeters v ? p . =# < f p"!2©

All dimensions tolerances are r0.1mm unless otherwise noted.Lš(a =# L , v ? p . ç \$

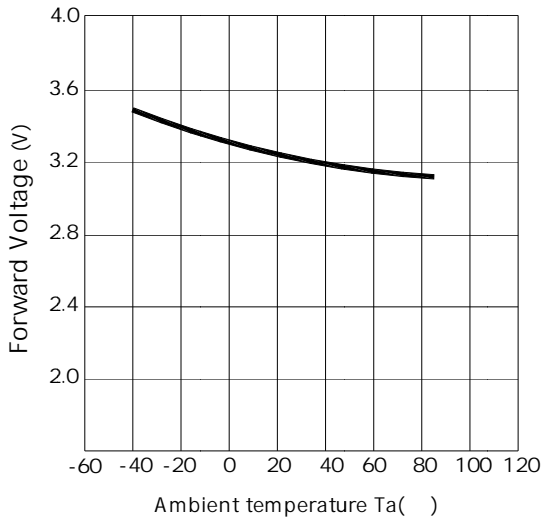
1.5 Product Parameters

0. 1ms,

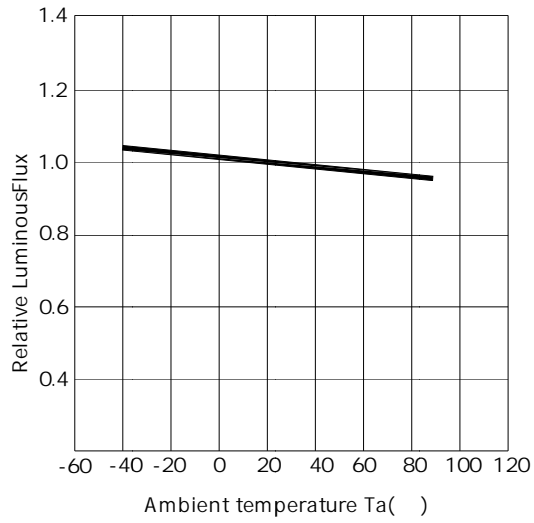
1.7 Typical Optical Characteristics Curves



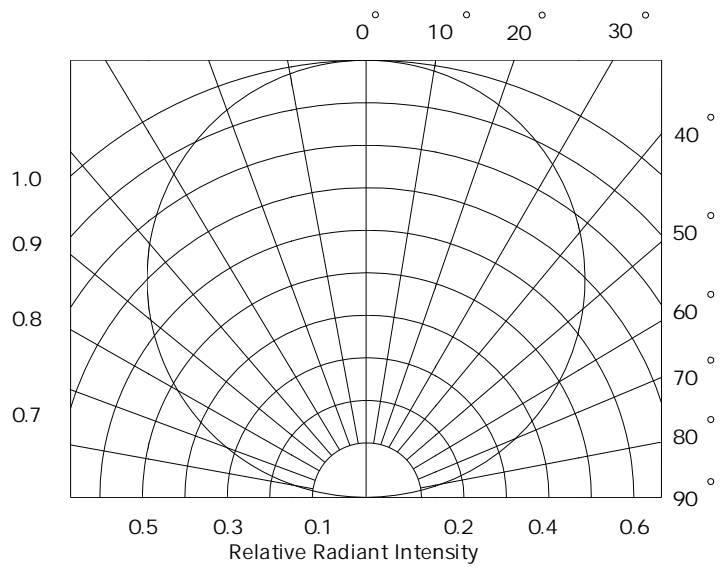
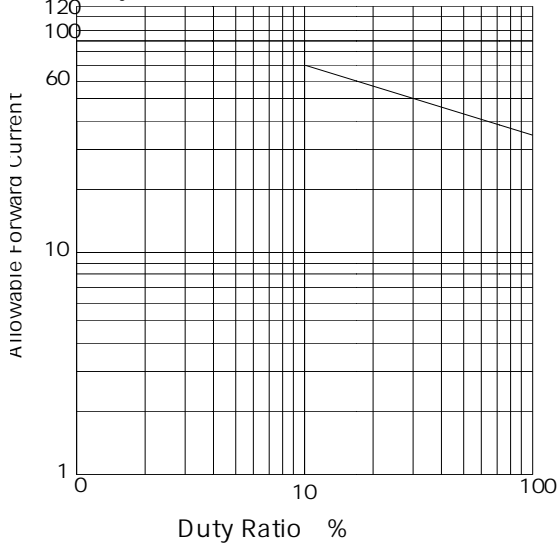
Ambient Temperature vs. Forward Voltage



Ambient Temperature vs. Relative Luminous Flux

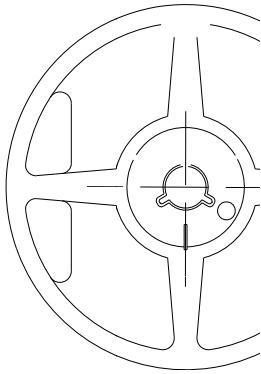


Duty Ratio vs. Allowable Forward Current

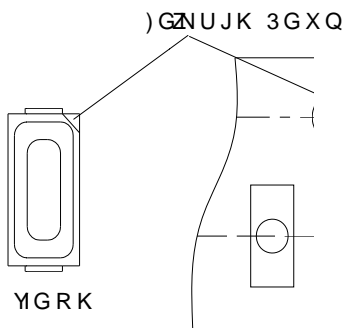


Packaging Specification

Package: 4000pcs/reel

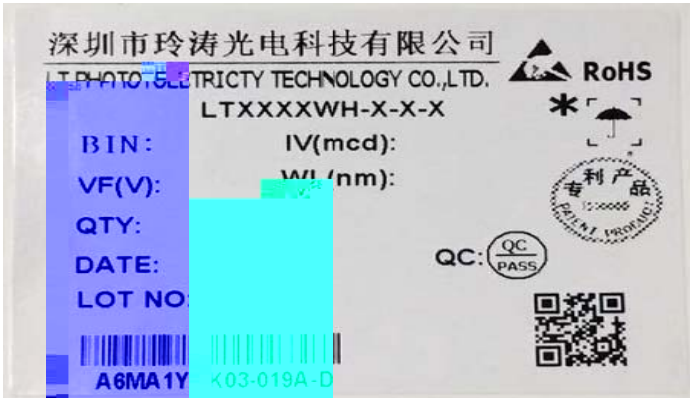


2.1.1 Carrier Tape Dimension

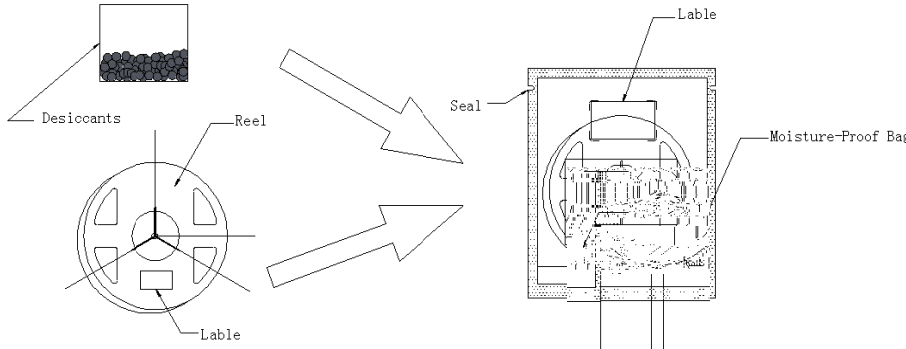


Notes: # Æ

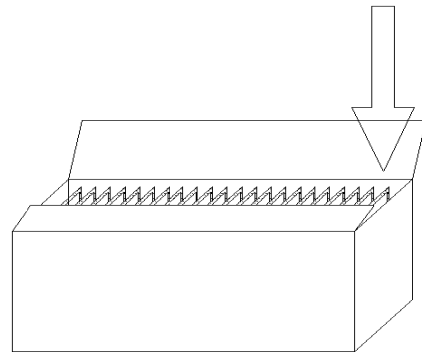
The tolerances unless mer



2.2 Moisture Resistant Packing



2.3 Cardboard Box



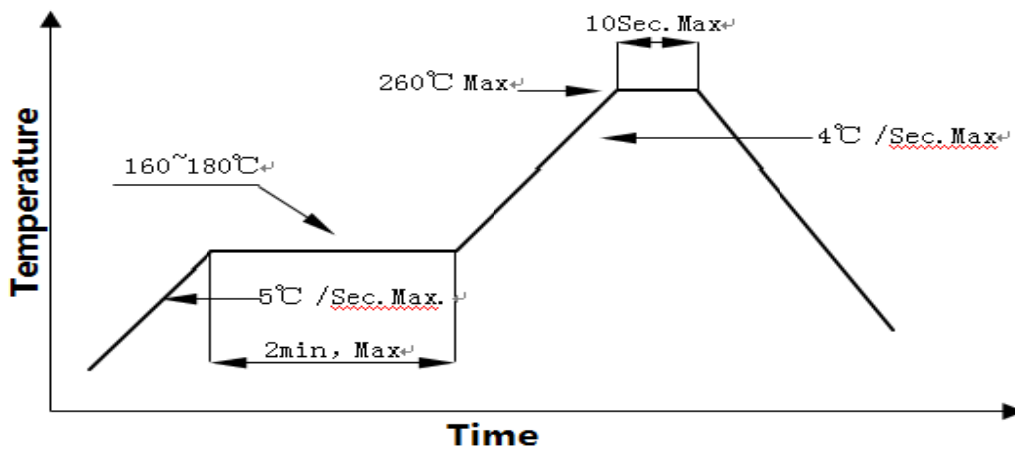
2.4 Reliability Test Items And Condi

2.5 Criteria For Judging Da

LED

3. SMT Reflow Soldering Instructions SMT

3.1 SMT Reflow Soldering Instructions



Repairing should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used (as below figure). It should be confirmed in advance whether the characteristics of LEDs will or not be damaged by repairing.

LED #w'@ D C ÉB \$ C . %o ûN± \$ C, , ûN± µ+^ j' J÷ ,6B J Á ~ Ê.µAÚ!š 0 ĩ E P C P • ...LED bDá°(] >

3.1.3 Cautions # E ÁN⁻

(1) The encapsulated material of the LEDs is silicone. Therefore the LEDs have a soft surface on the top of package. The pressure to the top surface will be impacted on the reliability of the LEDs. Precautions should be taken to avoid the strong pressure on the encapsulated part. So when use the picking up nozzle, the pressure on the silicone resin should be proper. LED 7>û7, p.{ 7, ,>žM⁻

E¹Ež, +^ Ñ ? Á 7, %o>žM⁻ P § LED %M-], lš Ê ?N° Lh à óFµ f ^ ? Á ž, , %o µ+^ n j, , 7, %o>žM⁻, ° Á Ñ Ê e ! %o, ° >

(2) Components should not be mounted on warped (non coplanar) portion of PCB. After soldering, do not warp the circuit board. LED &¥* C?.'@ Û ^ e (, ° PCB µ @ , '@ Û • D , • C? . e Í4õ D%µ >

(3) Do not apply mechanical force or excess vibration during the cooling process to normal temperature after soldering. Do not rapidly cool device after soldering. #w'@ • D í aEý0A c , C? . / † Ī Ō Ö L Ñ , • C? . ?M= P , #w'@ D , C? . Gý+^%ö • í a , ° ĩ E >

4. Handling Pre caution s Ý ÷ µ+^# E ÁN⁻

4.1 Handli ng Preca utions Ý ÷ µ+^# E ÁN⁻

(1) LED operating environment and sulfur element composition cannot be over 100PPM in the LED mating usage material. This is provided for informational purposes only and is not a warranty or endorsement. LED ')á ' D LED F8Gf, ° † Ī c. j y3V L > (Ý F 3 C %C » Eý100PPM. F e 6 ` 0Aä , C ' 1 < ÷ C^ û >

(2) In order to prevent external material from getting into the inside of LED, which may cause the malfunction of LED, the single content of Bromine element is required to be less than 900PPM, the single content of Chlorine element is required to be less than 900PPM, the total content of Bromine element and Chlorine element in the external materials of the application products is required to be less than 1500PPM. This is provided for informational purposes only and is not a warranty or endorsement. p ¼Lh ĩ L +, (ÝC^F) LED »G FV F LED, ° Z , v:)á ' v+^ • , 1• 1• , < 6, ° \$ê y3V aH ? . "x E Ä 900PPM , < 6" e y3V aH ? . "x E Ä 900PPM , \$ê y3V D" e y3V q aH û N±E Ä 1500PPM. F e 6 ` 0Aä , C ' 1 < ÷ C^ û >

(3) VOCs (Volatile organic compounds) emitted from materials used in the construction of fixtures can penetrate silicone encapsulants of LEDs and discolor when exposed to heat and photonic energy. The result can be a significant loss of light output from the fixture. Knowledge of the properties of the materials selected to be used in the construction of fixtures can help prevent



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