LEDTECH ELECTRONICS CORP.

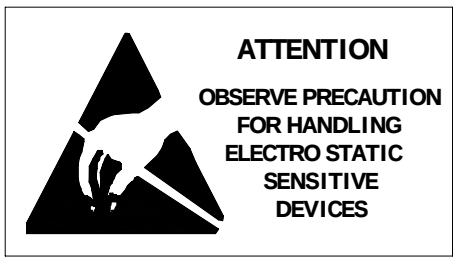
NANYA ROAD,MUGANG ZHAOQING
CITY GUANGDONG CHINA.
TEL:86-758-2875541,2870651,2877464,2876185,2877017
FAX:86-758-2878014
Http://www.ledtech.com.tw

SPECIFICATION

PART NO. : LT5K33-AA-ULE1-SA8-Z

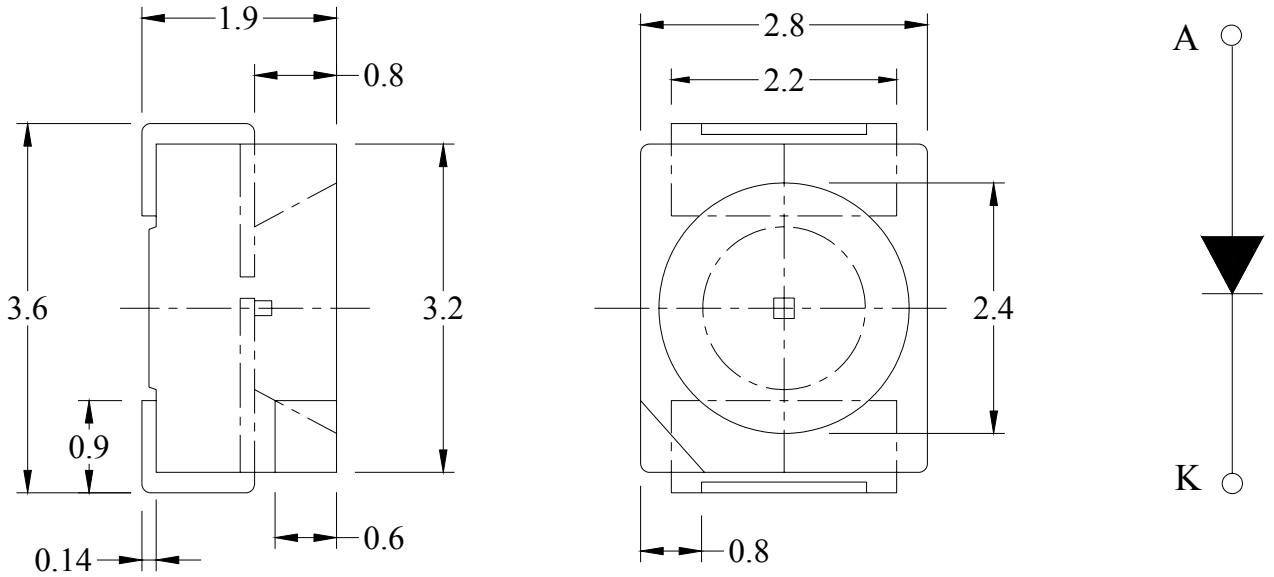
3.2 x 2.8mm SMD TYPE





Approved by	Checked by	Prepared by
Tung	*Lian*	*Show*

Package Dimensions



Notes:

1. All dimensions are in mm.
2. Tolerance is ±0.25mm unless otherwise noted.

Description

Part No.	LED Chip		Lens Color
	Material	Emitting Color	
LT5K33-AA-ULE1-SA8-Z	AlGaInP/Si	Yellow	Water Clear

Absolute Maximum Ratings at Ta=25 ℃

Parameter	Symbol	Rating	Unit
Power Dissipation	P_D	75	mW
Reverse Voltage	V_R	5	V
D.C. Forward Current	If	30	mA
Peak Current(1/10Duty Cycle,0.1ms Pulse Width.)	If(Peak)	100	mA
Operating Temperature Range	Topr.	-25 to +85	℃
Storage Temperature Range	Tstg.	-40 to +100	℃
Soldering Temperature	Tsld.	Reflow Soldering: 260℃ for 10 sec. Hand Soldering: 350℃ for 3 sec.	
Electric Static Discharge Threshold (HBM)	ESD	6000	V

Electrical and Optical Characteristics:

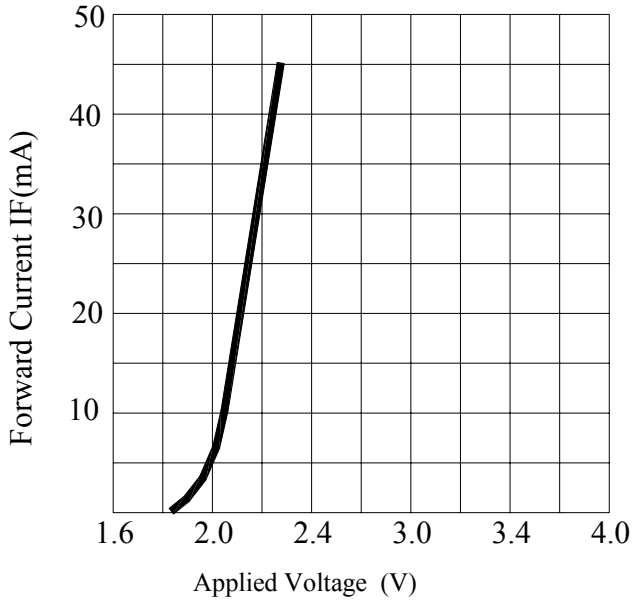
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	If=20mA	200	460		mcd
Forward Voltage	Vf	If=20mA		2.1	2.5	V
Peak Wavelength	λp	If=20mA		591		nm
Dominant Wavelength	λd	If=20mA		589		nm
Reverse Current	Ir	Vr=5V			100	μA
Viewing Angle	2θ 1/2	If=20mA		120		deg
Spectrum Line Halfwidth	Δλ	If=20mA		15		nm

Notes: 1.The datas tested by IS tester.

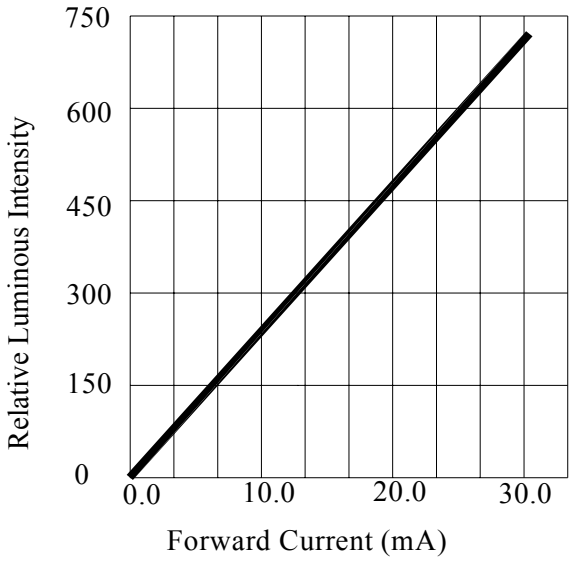
2. Customer's special requirements are also welcome.

Typical Electrical/Optical Characteristic Curves

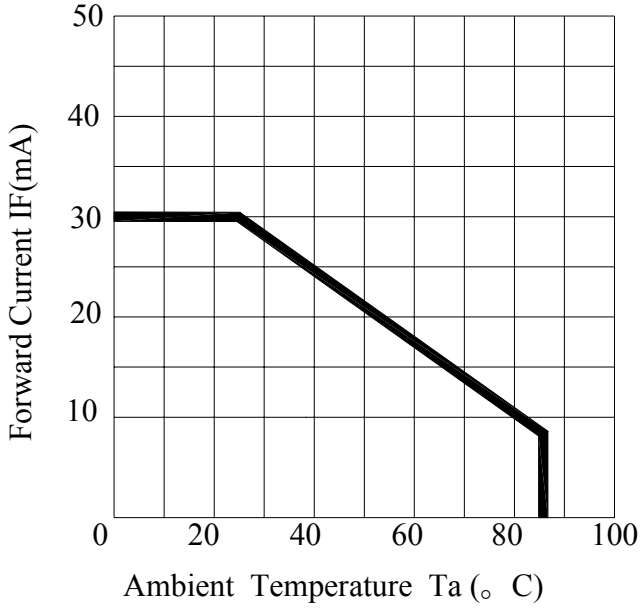
(25℃ Ambient Temperature Unless Otherwise Noted)



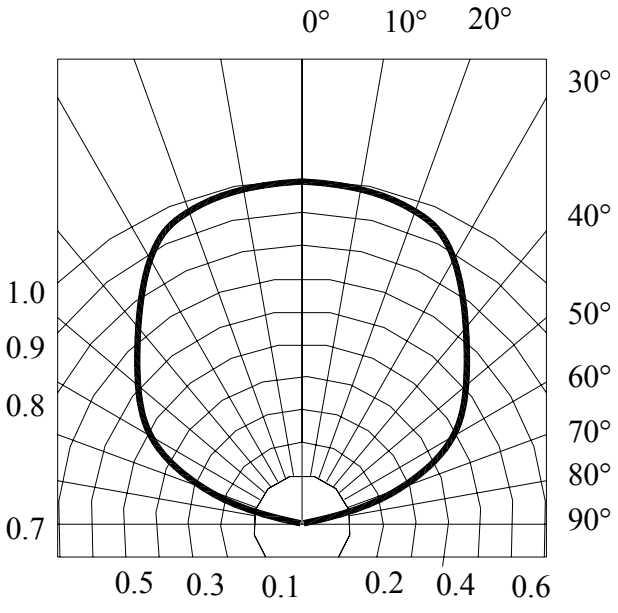
Forward Current VS. Applied Voltage



Forward Current VS. Luminous Intensity



Ambient Temperature VS. Forward Current



Radiation Diagram

PRECAUTION IN USE

Storage

Recommended storage environment

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

Use within 7 days after opening of sealed vapor/ESD barrier bags.

If the moisture absorbent material (silica gel) has faded away or the LEDs have exceeded the storage time, baking treatment should be performed using the following conditions.

Baking treatment : 60±5℃ for 24 hours.

Fold the opened bag firmly and keep in dry environment.

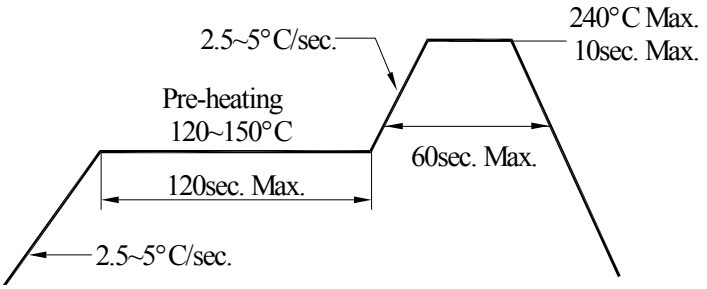
Soldering

Reflow Soldering			Hand Soldering	
	Lead Solder	Lead – free Solder		
Pre-heat	120~150℃	180~200℃	Temperature	350℃ Max.
Pre-heat time	120sec. Max.	120sec. Max.	Soldering time	3sec. Max. (one time only)
Peak temperature	240℃ Max.	260℃ Max.		
Soldering time	10sec. Max.	10sec. Max.		
Condition	refer to Temperature-profile 1	refer to Temperature-profile 2		

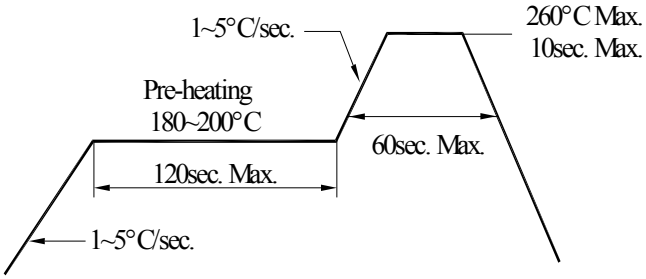
***After reflow soldering rapid cooling should be avoided.**

[Temperature-profile (Surface of circuit board)]
Use the conditions shown to the under figure.

＜1 : Lead Solder＞

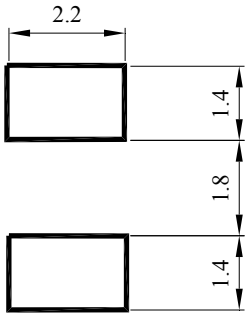


＜2 : Lead-free Solder＞



[Recommended soldering pad design]

Use the following conditions shown in the figure.



(UNIT:mm)

Handling of Silicone Resin LEDs

Handling Indications

During processing, mechanical stress on the surface should be minimized as much as possible. Sharp objects of all types should not be used to pierce the sealing compound

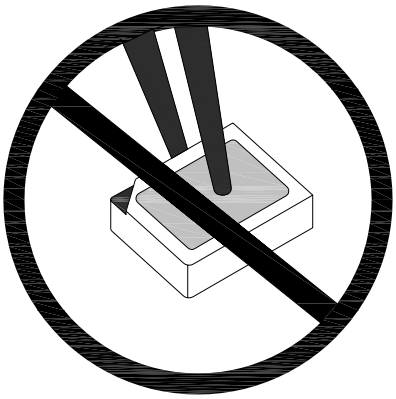


Figure 1

In general, LEDs should only be handled from the side. By the way, this also applies to LEDs without a silicone sealant, since the surface can also become scratched.

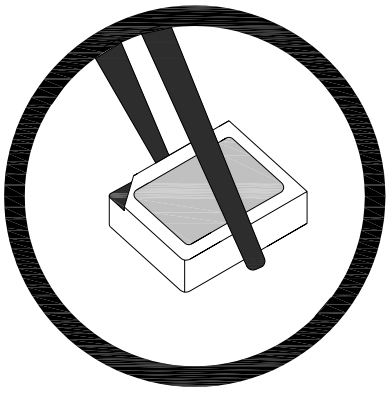
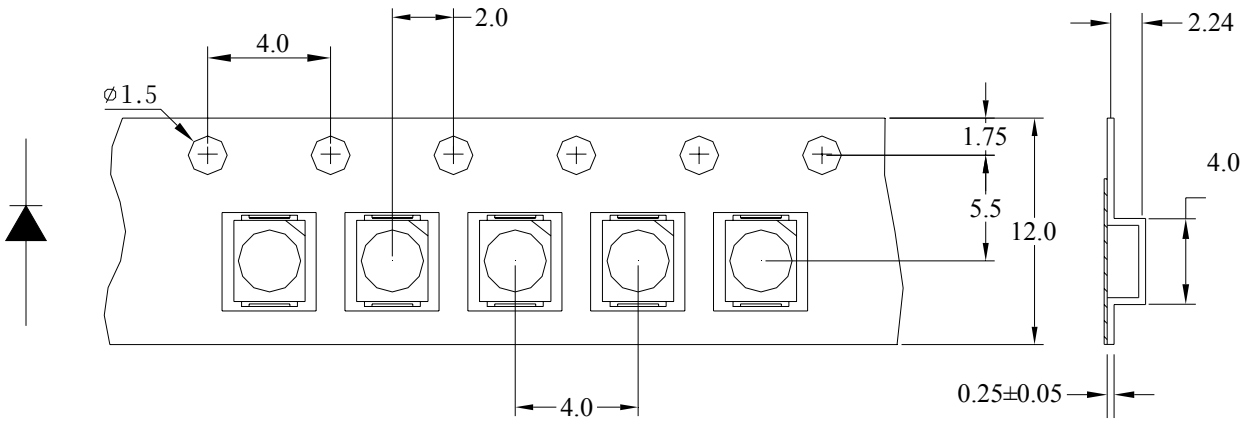


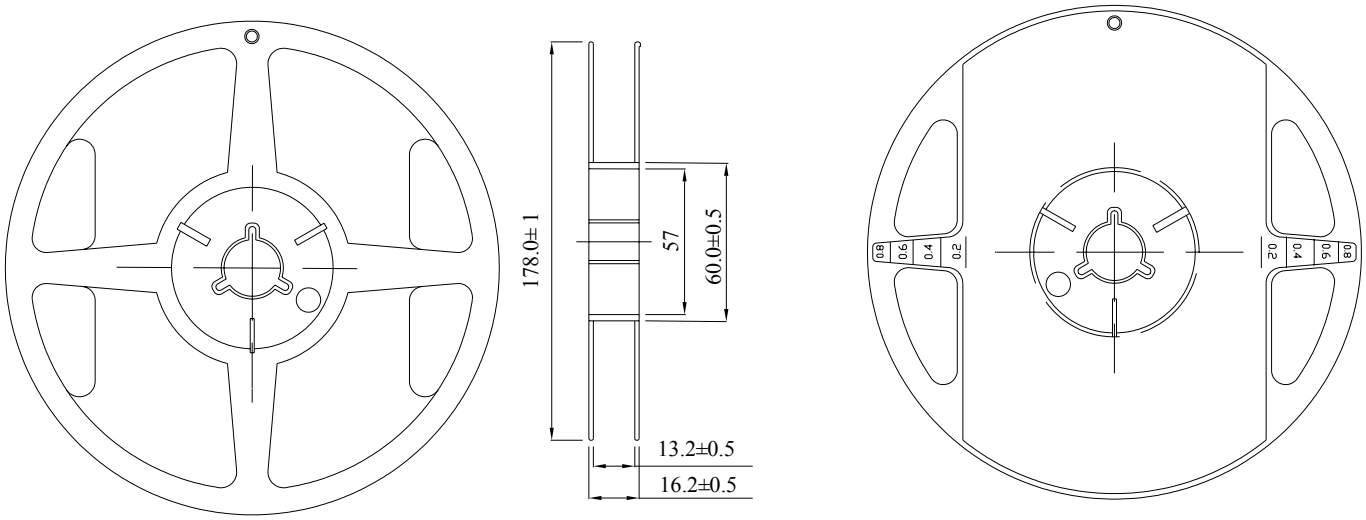
Figure 2

When populating boards in SMT production, there are basically no restrictions regarding the form of the pick and place nozzle, except that mechanical pressure on the surface of the resin must be prevented.
This is assured by choosing a pick and place nozzle which is larger than the LED's reflector area.

Dimensions for Tape



Dimensions for Reel



Notes:

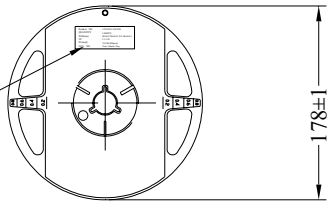
1.All dimensions are in mm, tolerance is±2.0mm unless otherwise noted.

2.Specifications are subject to change without notice.

Packing

REEL
QUANTITY: 2,000 PCS

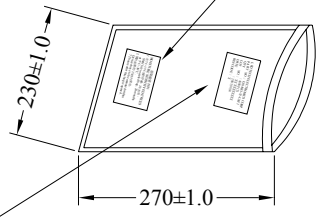
LEDTECH ELECTRONICS CORP.
PART NO :LTXXXX-XX
Q'TY : PCS
LOT NO :XXXXXXXXX
DATE :
BIN CODE:



濕氣敏感材料
MOISTURE SENSITIVE DEVICES
1. 在5℃~30℃密封貯藏，1年有效。
Shelf life in sealed bag : 12 months at 5°C~30°C .
2. 開封後需在168小時內使用。
Devices have to be mounted within 168 hours after this bag is opened .

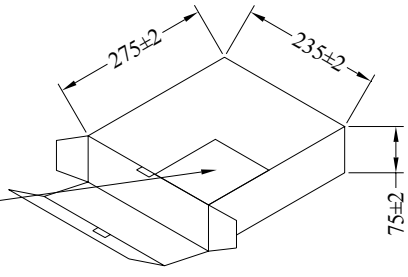
BAG
QUANTITY: 2,000 PCS

LEDTECH ELECTRONICS CORP.
PART NO :LTXXXX-XX
Q'TY : PCS
LOT NO :XXXXXXXXX
DATE :
BIN CODE:



INSIDE BOX
QUANTITY: 4 BAGS
TOTAL: 8,000 PCS

LEDTECH ELECTRONICS CORP.
PART NO :LTXXXX-XX
Q'TY : PCS
LOT NO :XXXXXXXXX
DATE :
BIN CODE:



Notes:

1.All dimensions are in mm, tolerance is±2.0mm unless otherwise noted.

2.Specifications are subject to change without notice.