



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](http://www.ledtech.com.tw)

SPECIFICATION

PART NO. : LT1J63-1W-RYGAW-S07

6.0 x 6.0 mm CERAMIC SMD TYPE



Approved by

Checked by

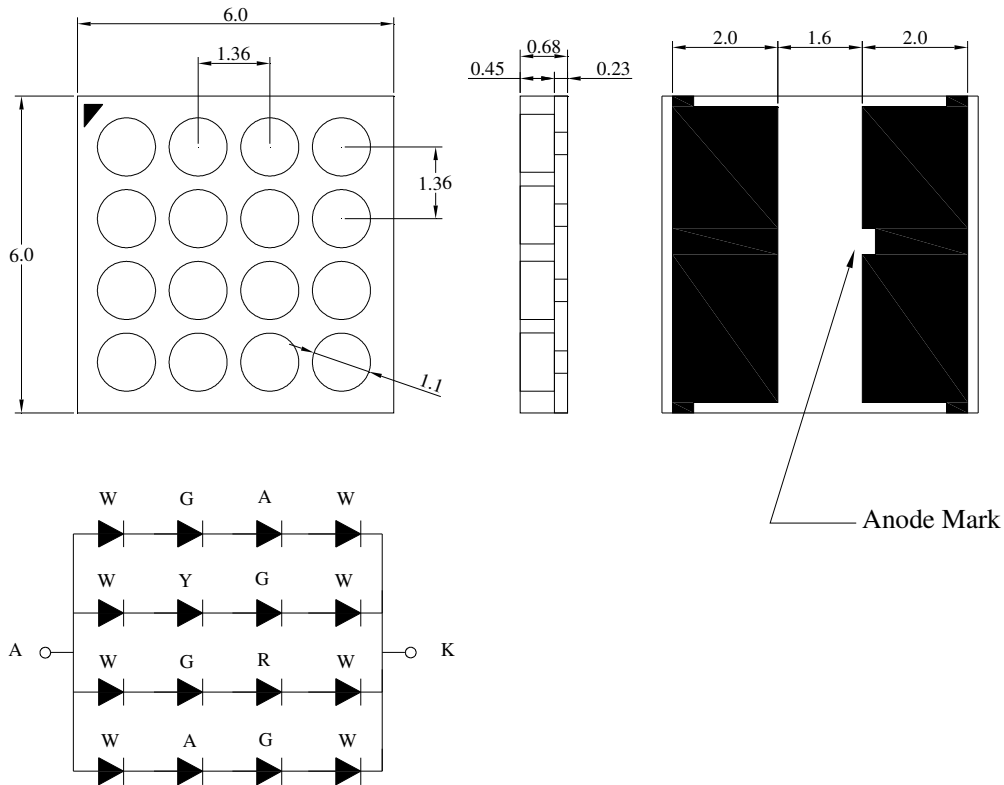
Prepared by

Tung

Lian

Ping

Package Dimensions



Anode Mark

Notes:

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

Description

Part No.	LED Chip		Lens Color
	Material	Emitting Color	
LT1J63-1W-RYGAW-S07	White&Green	InGaN/Sapphire	Water Clear
	Red&Yellow	AlGaInP/Si	
	Amber	AlGaInP/GaAs	



LT1J63-1W-RYGAW-S07

6.0 x 6.0mm
CERAMIC SMD TYPE**Absolute Maximum Ratings at Ta=25 °C**

Parameter	Symbol	Rating	Unit	
Power Dissipation ★	PD	White&Green	120	mW
		Red&Yellow	78	
		Amber	72	
Reverse Voltage ★	VR	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.	-40 to +100	°C	
Storage Temperature Range	Tstg.	-40 to +100	°C	
Soldering Temperature.	Tsld.	Reflow Soldering: 260°C for 10 sec.		
Electric Static Discharge Threshold (HBM)	ESD	300	V	

Electrical and Optical Characteristics:

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Luminous Flux	Φ_v	If=80mA	10.7	20		lm	
Forward Voltage	Vf	If=80mA		11.5	15	V	
Correlated Color Temperature	CCT	If=80mA	Rank C9	5500	--	6000	°K
			Rank C10	6000	--	6500	
			Rank C11	6500	--	7000	
Color Renderig Index	CRI	If=80mA	--	94	--	Ra	
Reverse Current ★	Ir	Vr=5V			50	μ A	
Viewing Angle	2θ 1/2	If=80mA		120		deg	

Notes: 1.The datas tested by IS tester.

2. Customer's special requirements are also welcome.

3. ★ The value are based on 1 die performance.

**Typical Electrical/Optical Characteristic Curves
(25°C Ambient Temperature Unless Otherwise Noted)**

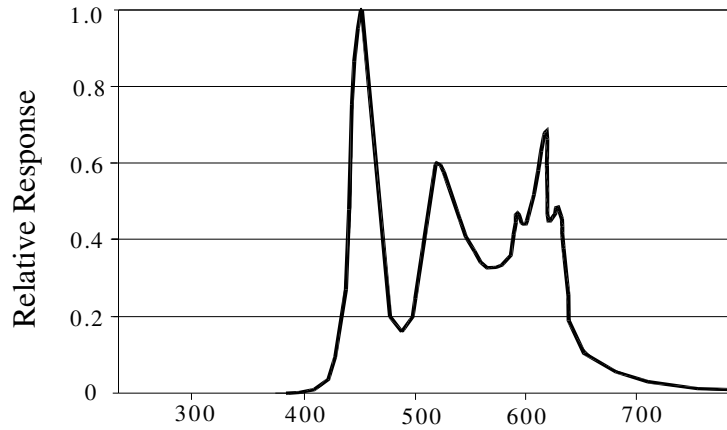
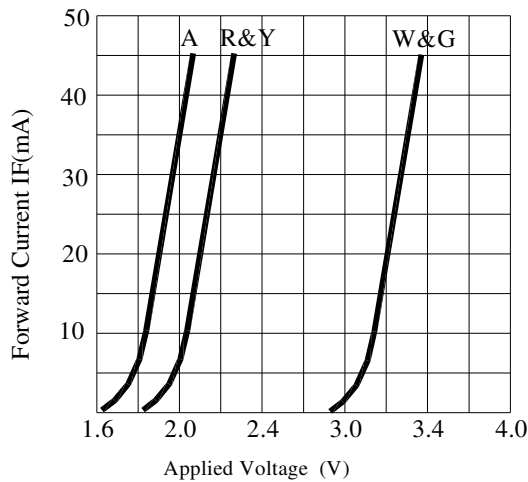
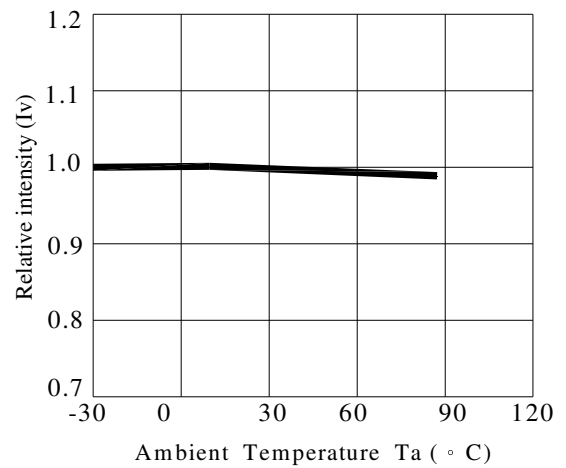


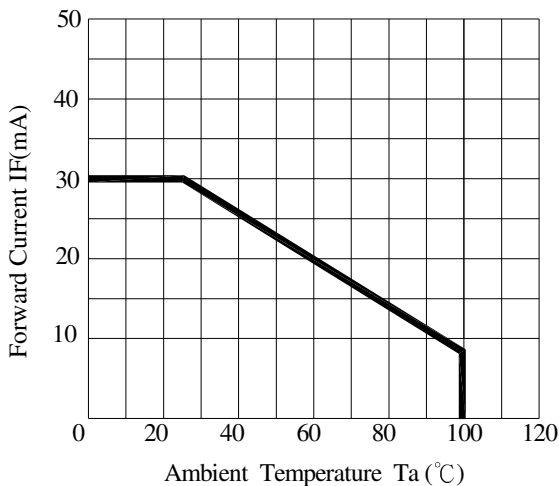
Fig.1 WHITE LED Spectrum VS. WAVELENGTH



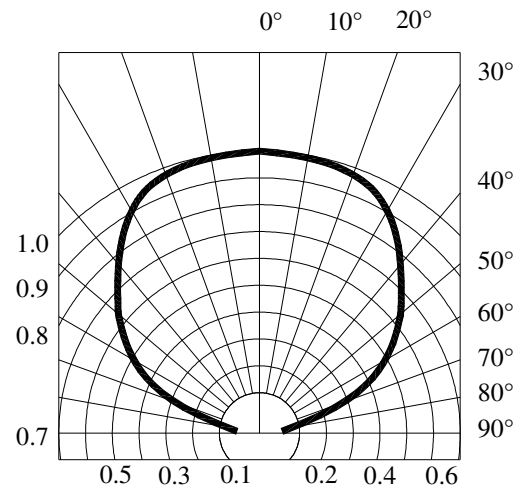
Forward Current VS. Applied Voltage



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°C for 24 hours.

Fold the opened bag firmly and keep in dry environment.

Soldering

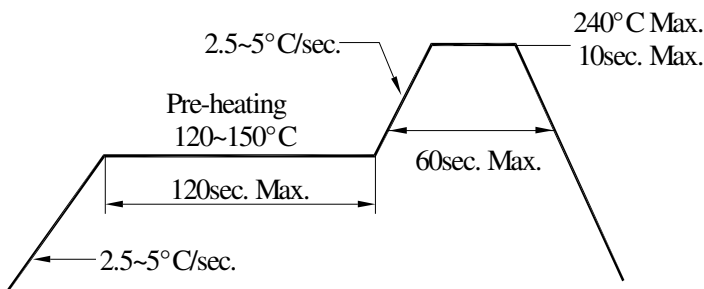
Reflow Soldering		
	Lead Solder	Lead - free Solder
Pre-heat	120~150°C	180~200°C
Pre-heat time	120sec. Max.	120sec. Max.
Peak temperature	240°C Max.	260°C Max.
Soldering time	10sec. Max.	10sec. Max.
Condition	refer to Temperature-profile 1	refer to Temperature-profile 2

*After reflow soldering rapid cooling should be avoided.

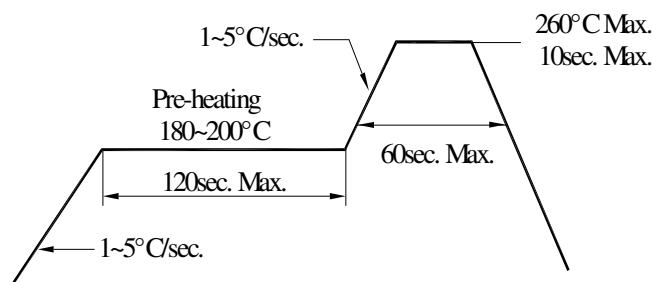
[Temperature-profile (Surface of circuit board)]

Use the conditions shown to the under figure.

< 1 : Lead Solder >

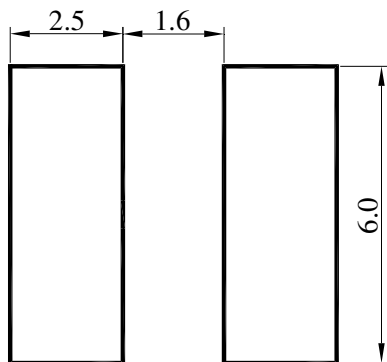


< 2 : Lead-free Solder >



[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.

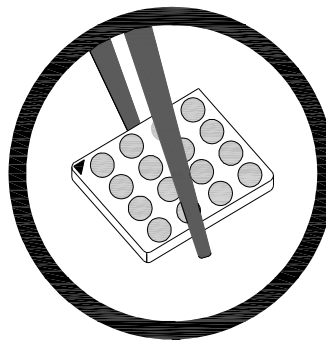
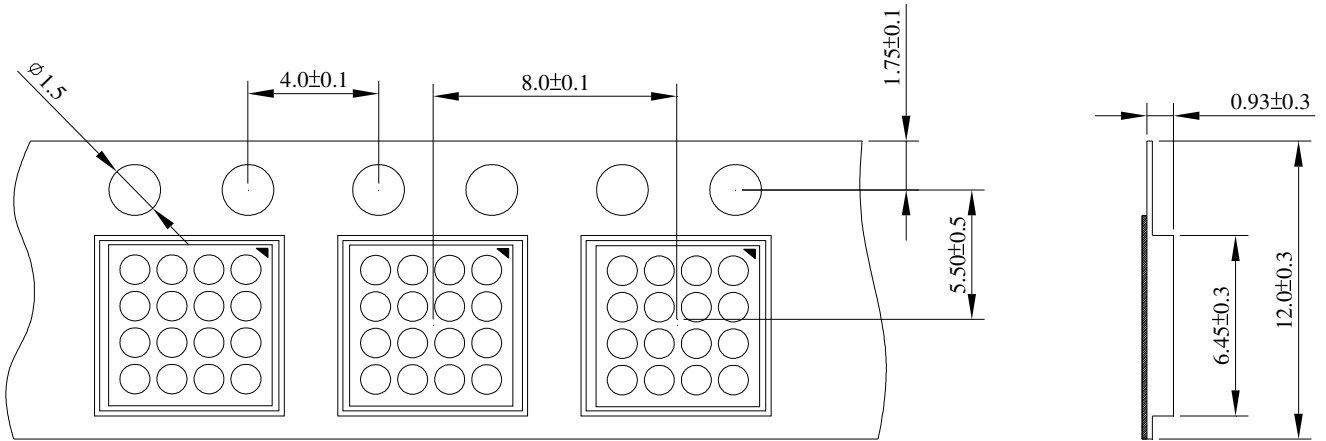


Figure 2

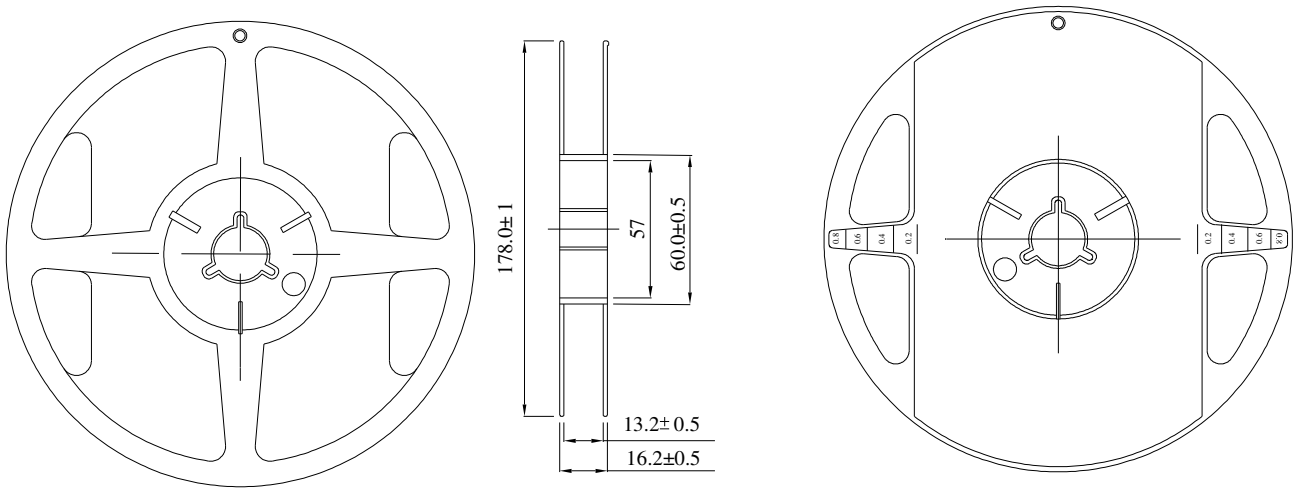
When populating boards in SMT production, there are basically no restrictions regarding the form of the pick and place nozzle, except that mechanical pressure on the surface of the resin must be prevented.

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:

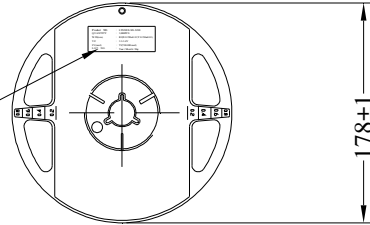
1. All dimensions are in mm, tolerance is ±2.0mm unless otherwise noted.
2. Specifications are subject to change without notice.

Packing

REEL

QUANTITY: 1,000 PCS

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

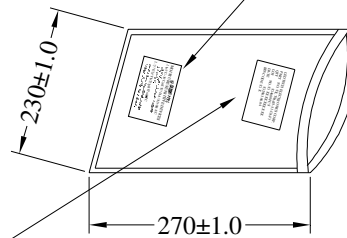


溼氣敏感材料
MOISTURE SENSITIVE DEVICES
1. 在 5°C - 30°C 密封貯藏，1年有效。
Shelf life in sealed bag : 12 months
at 5°C - 30°C .
2. 開封後需在168小時內使用。
Devices have to be mounted within
168 hours after this bag is opened .

BAG

QUANTITY: 1,000 PCS

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

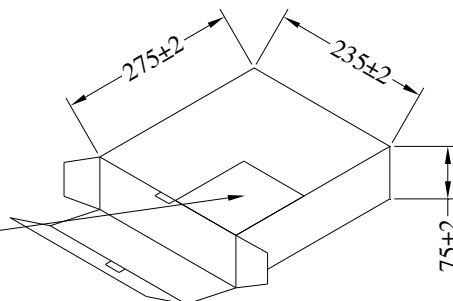


INSIDE BOX

QUANTITY: 4 BAGS

TOTAL: 4,000 PCS

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



Notes:

- 1.All dimensions are in mm, tolerance is ± 2.0 mm unless otherwise noted.
- 2.Specifications are subject to change without notice.