



LEDTECH ELECTRONICS CORP.

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# SPECIFICATION

*PART NO. : LT1J6R-1W-RYGAW-S08*

*6.0 x 6.0 mm CERAMIC SMD TYPE*



Approved by

Checked by

Prepared by

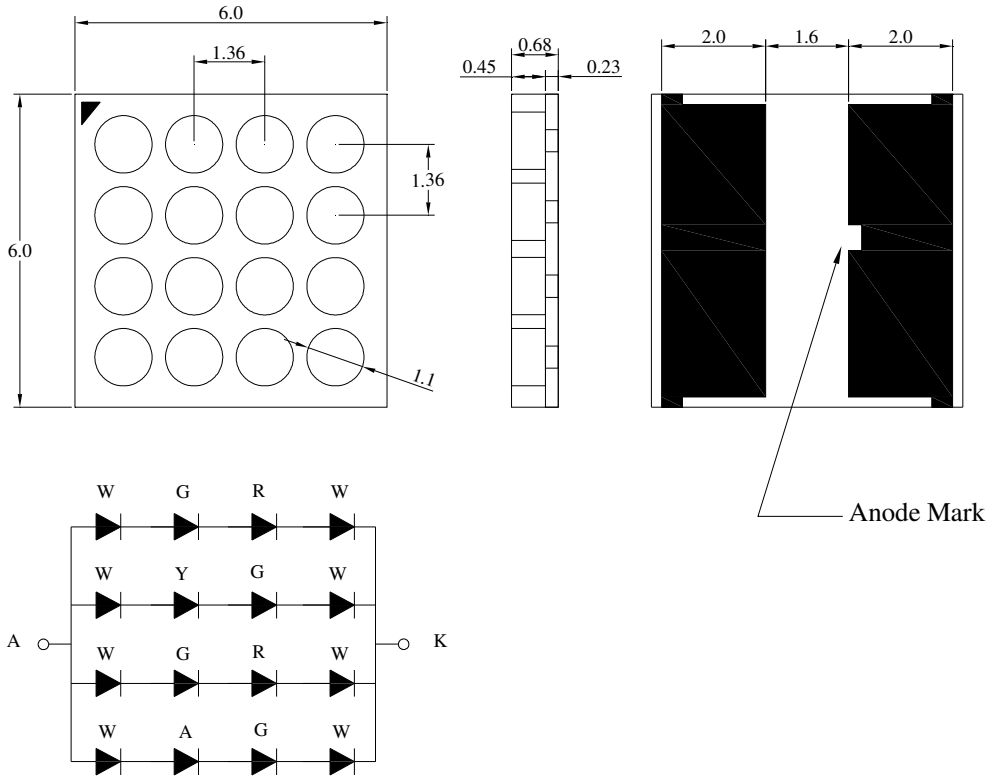
*Tung*

*Lian*

*Ping*



### Package Dimensions



Anode Mark

#### Notes:

1. All dimensions are in mm.
2. Tolerance is  $\pm 0.25$ mm unless otherwise noted.

### Description

Part No.	LED Chip			Lens Color
	Material	Emitting Color		
LT1J6R-1W-RYGAW-S08	White&Green	InGaN/Sapphire	Nature White	Water Clear
	Red&Yellow	AlGaInP/Si		
	Amber	AlGaInP/GaAs		



LT1J6R-1W-RYGAW-S08

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	$\Phi_v$	If=80mA	10.7	17.3		lm	
Forward Voltage	Vf	If=80mA		11.5	15	V	
Correlated Color Temperature	A	CCT	If=80mA	2800	--	3000	°K
	B			3000	--	3200	
Color Renderig Index	CRI	If=80mA	--	94	--	Ra	
Reverse Current ★	Ir	Vr=5V			50	$\mu$ A	
Viewing Angle	$2\theta$ 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)**

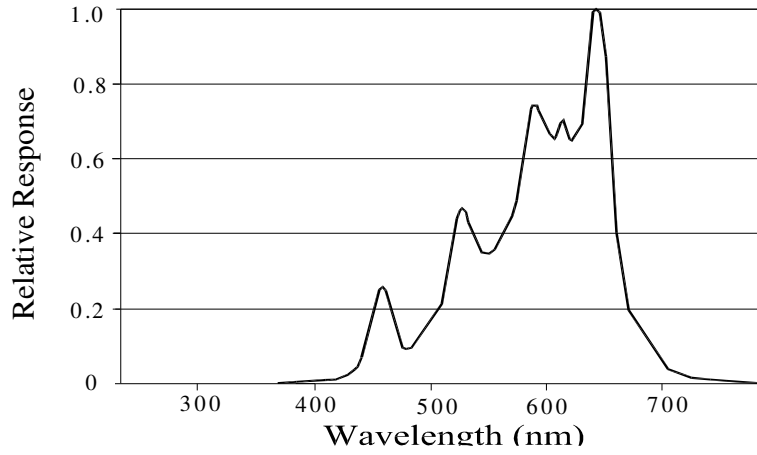
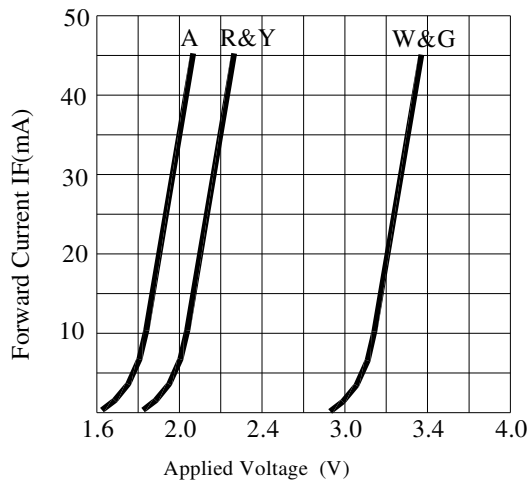
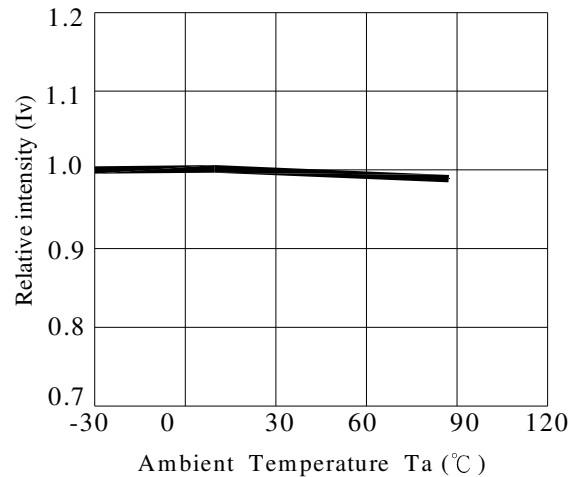


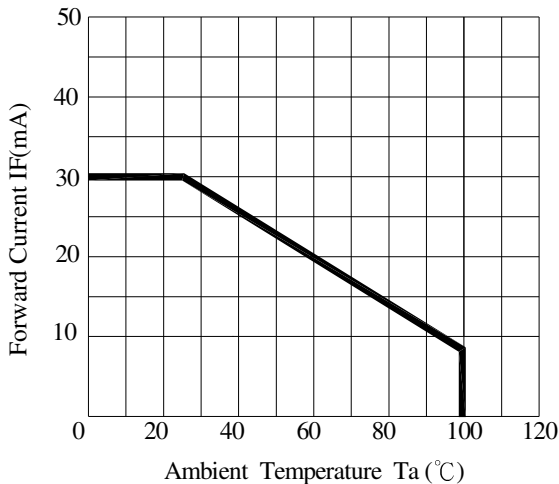
Fig.1 WHITE LED Spectrum VS. WAVELENGTH



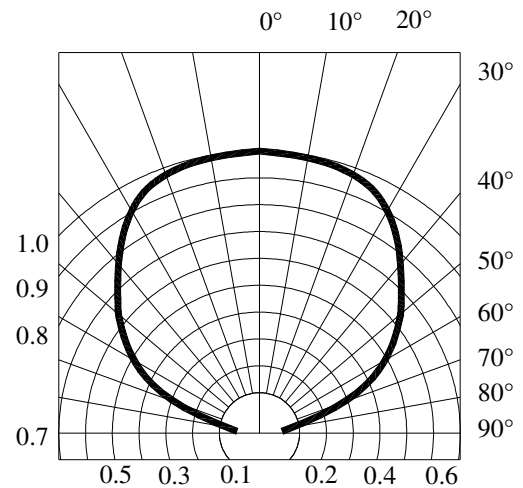
Forward Current VS. Applied Voltage



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**

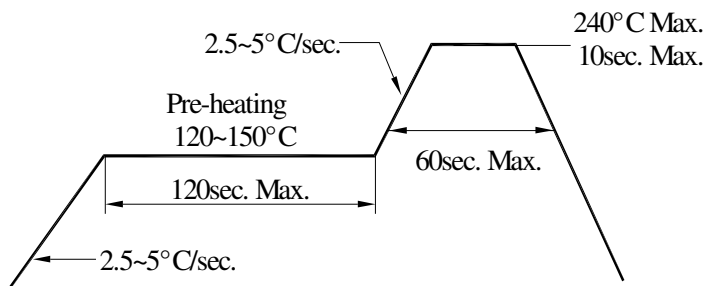
Reflow Soldering		
	Lead Solder	Lead - free Solder
Pre-heat	120~150°C	180~200°C
Pre-heat time	120sec. Max.	120sec. Max.
Peak temperature	240°C Max.	260°C Max.
Soldering time	10sec. Max.	10sec. Max.
Condition	refer to Temperature-profile 1	refer to Temperature-profile 2

\*After reflow soldering rapid cooling should be avoided.

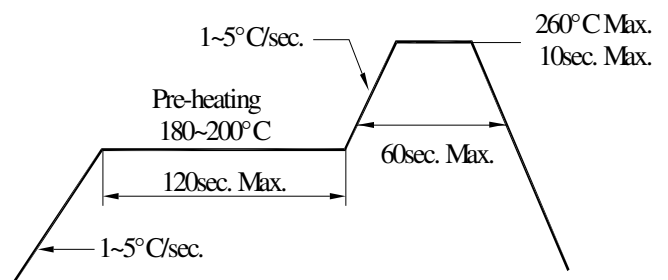
[Temperature-profile (Surface of circuit board)]

Use the conditions shown to the under figure.

< 1 : Lead Solder >

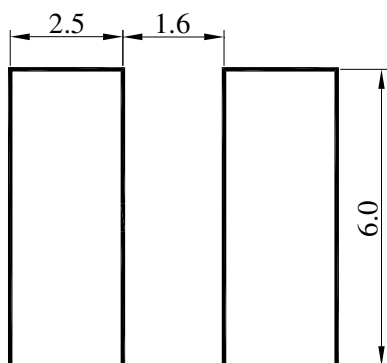


< 2 : Lead-free Solder >



[ Recommended soldering pad design ]

Use the following conditions shown in the figure.



(Unit:mm)

## Handling of Silicone Resin LEDs

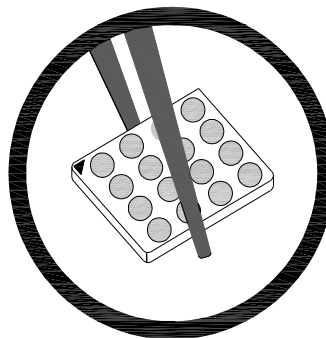
### Handling Indications

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.

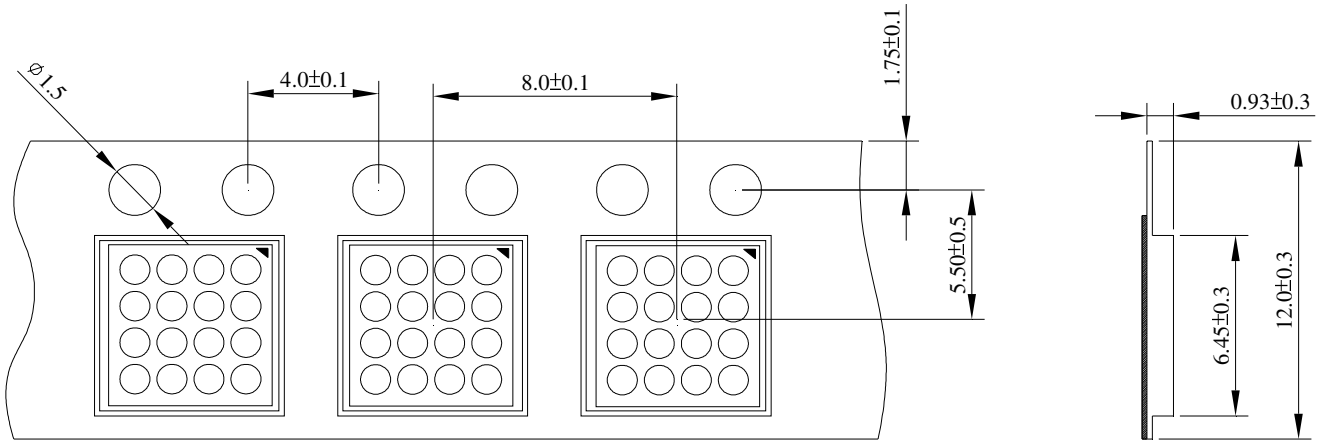


**Figure 2**

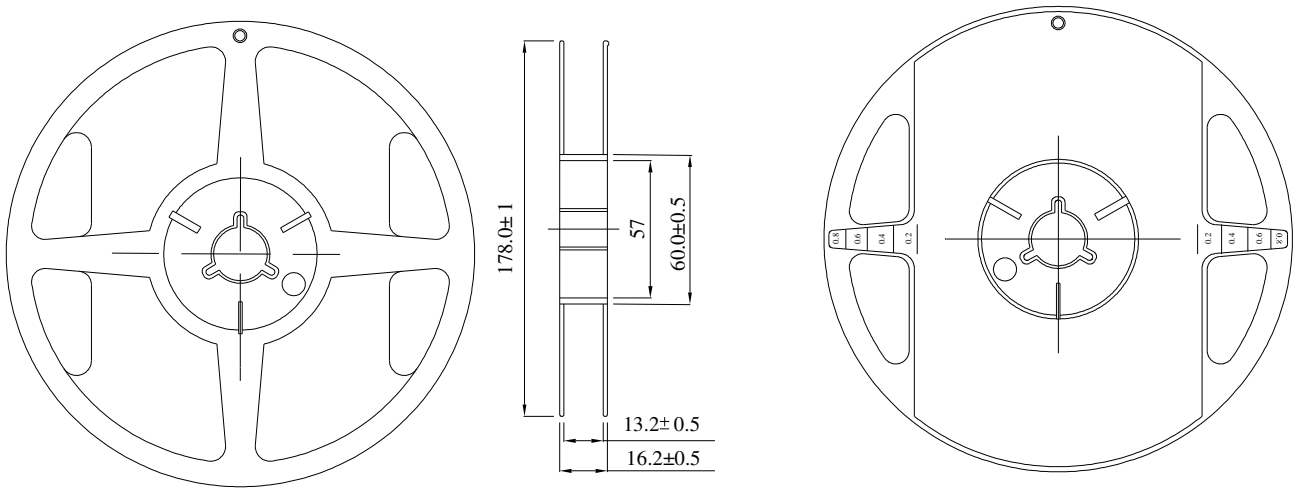
When populating boards in SMT production, there are basically no restrictions regarding the form of the pick and place nozzle, except that mechanical pressure on the surface of the resin must be prevented.

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:**

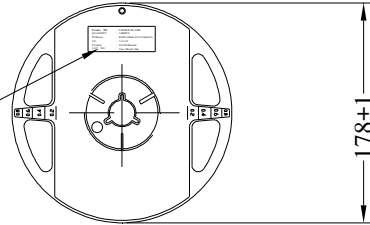
1. All dimensions are in mm, tolerance is  $\pm 2.0$ mm unless otherwise noted.
2. Specifications are subject to change without notice.

## Packing

### REEL

QUANTITY: 1,000 PCS

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

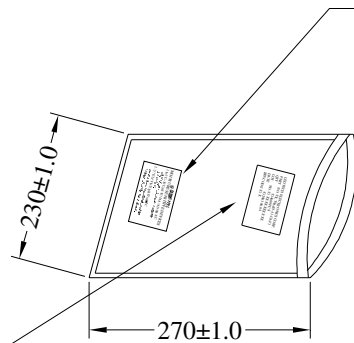


溼氣敏感材料  
MOISTURE SENSITIVE DEVICES  
1. 在 $5^{\circ}\text{C}$ - $30^{\circ}\text{C}$ 密封貯藏，1年有效。  
Shelf life in sealed bag : 12 months  
at  $5^{\circ}\text{C}$ - $30^{\circ}\text{C}$  .  
2. 開封後需在168小時內使用。  
Devices have to be mounted within  
168 hours after this bag is opened .

### BAG

QUANTITY: 1,000 PCS

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

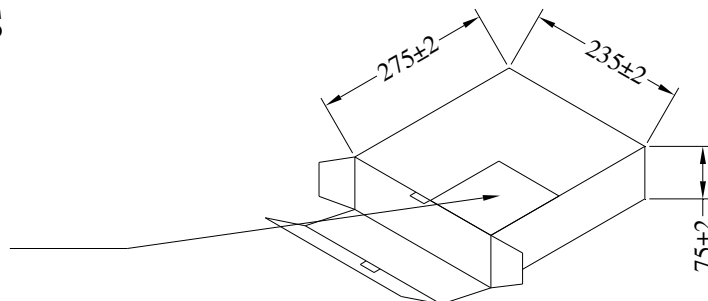


### INSIDE BOX

QUANTITY: 4 BAGS

TOTAL: 4,000 PCS

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



### Notes:

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