



LEDTECH ELECTRONICS CORP.

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# SPECIFICATION

*PART NO. : LT5K23-AA-T01*

*3.2 x 2.8mm SMD TYPE*



Approved by

Checked by

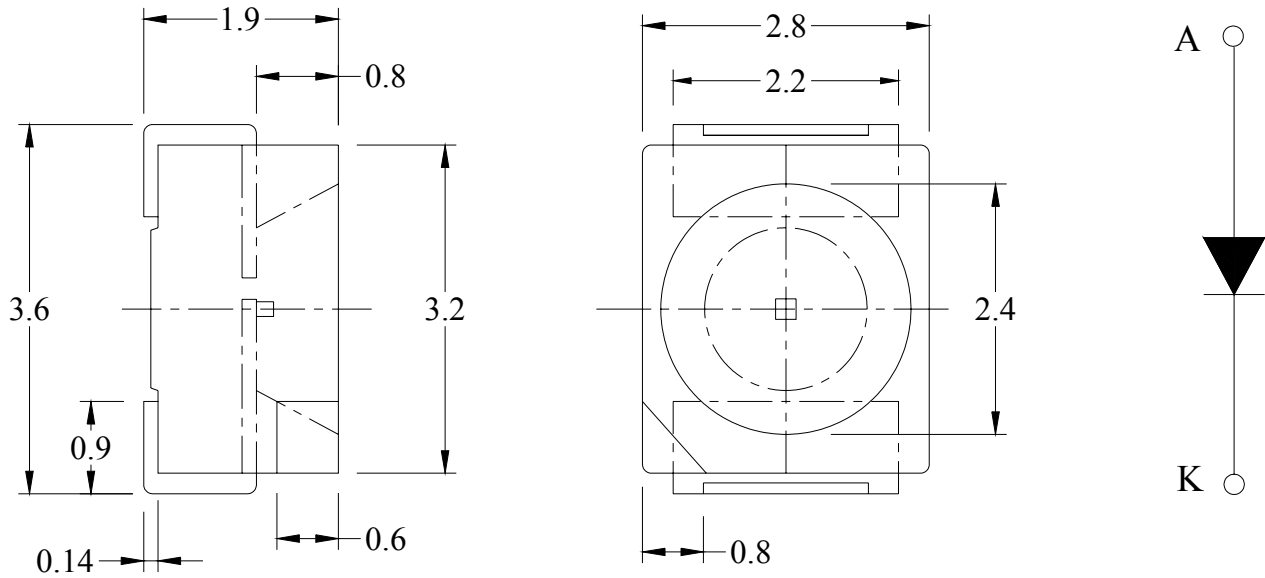
Prepared by

*Sam*

*Lian*

*Liang*

### Package Dimensions



**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	
LT5K23-AA-T01	GaP/GaP	Green	Water Clear

**Absolute Maximum Ratings at Ta=25 °C**

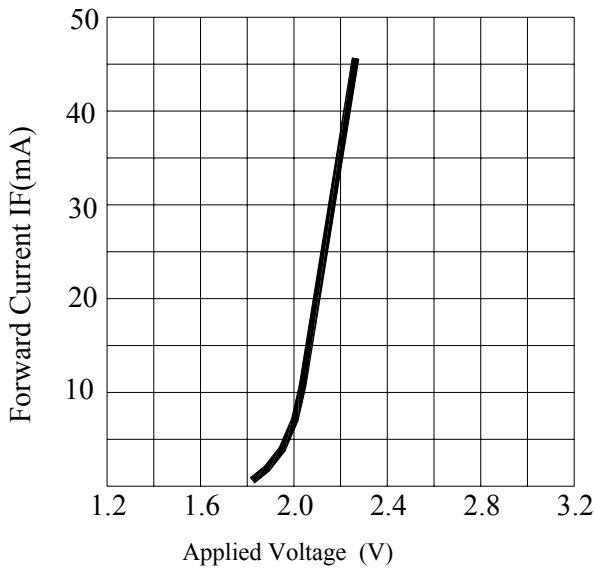
Parameter	Symbol	Rating	Unit
Power Dissipation	P <sub>D</sub>	78	mW
Reverse Voltage	V <sub>R</sub>	5	V
D.C. Forward Current	I <sub>f</sub>	30	mA
Peak Current(1/10Duty Cycle,0.1ms Pulse Width.)	I <sub>f</sub> (Peak)	100	mA
Operating Temperature Range	T <sub>opr.</sub>	-25 to +85	°C
Storage Temperature Range	T <sub>stg.</sub>	-40 to +100	°C
Lead Soldering Temp. (1.6mm from body) for 5 seconds		260	°C

**Electrical and Optical Characteristics:**

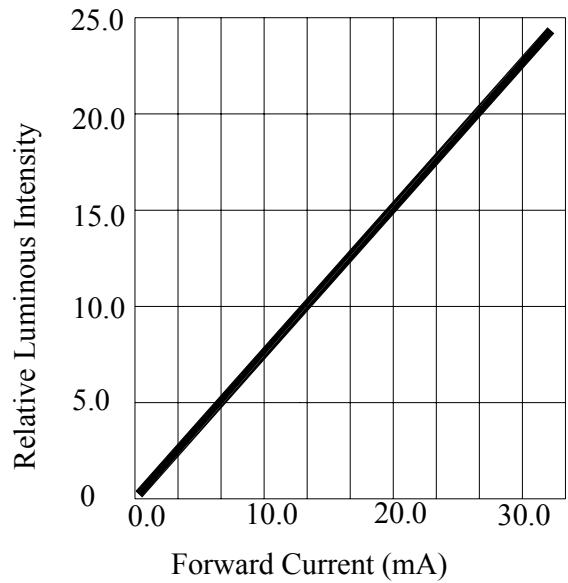
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	I <sub>v</sub>	I <sub>f</sub> =20mA	9	15		mcd
Forward Voltage	V <sub>f</sub>	I <sub>f</sub> =20mA		2.1	2.6	V
Peak Wavelength	λ <sub>P</sub>	I <sub>f</sub> =20mA		567		nm
Dominant Wavelength	λ <sub>D</sub>	I <sub>f</sub> =20mA		572		nm
Reverse Current	I <sub>r</sub>	V <sub>r</sub> =5V			100	μA
Viewing Angle	2 θ 1/2	I <sub>f</sub> =20mA		120		deg
Spectrum Line Halfwidth	Δλ	I <sub>f</sub> =20mA		30		nm

### Typical Electrical/Optical Characteristic Curves

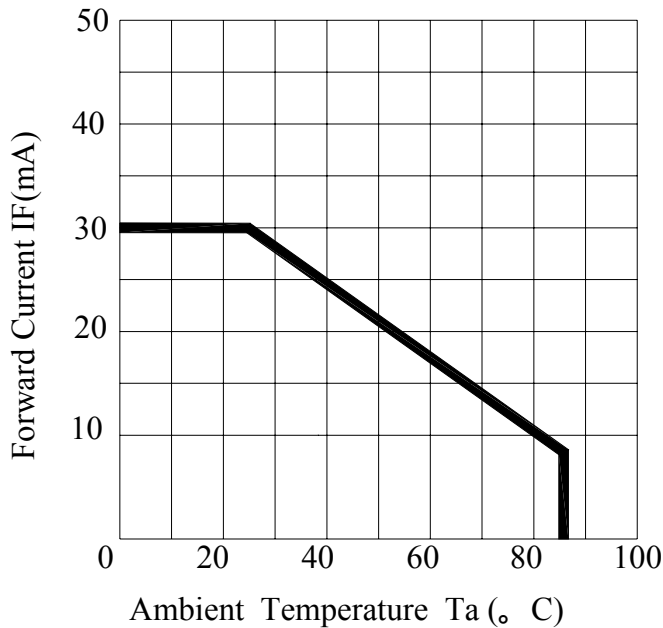
(25°C Ambient Temperature Unless Otherwise Noted)



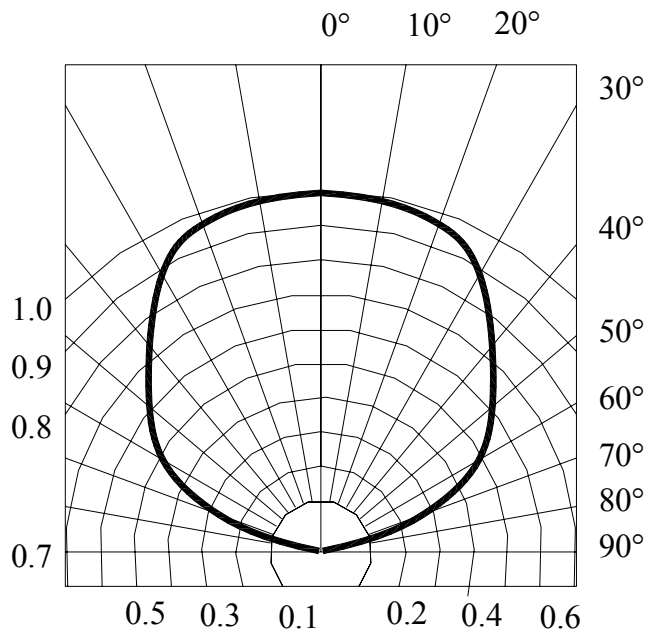
Forward Current VS. Applied Voltage



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.

Fold the opened bag firmly and keep in dry environment.

**Soldering**

	Reflow Soldering		Hand Soldering	
	Lead Solder	Lead - free Solder	Temperature	350°C Max
Pre-heat	120~150°C	180~200°C	Soldering time	3sec Max (one time only)
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		

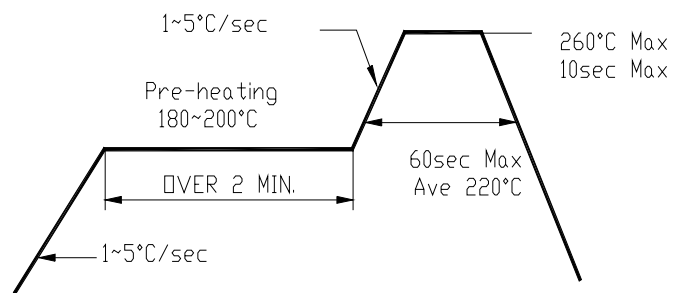
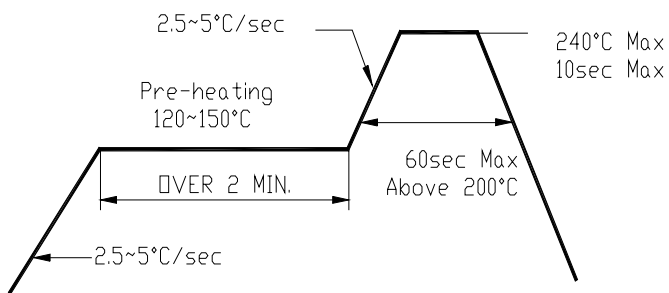
\*After reflow soldering rapid cooling should be avoided.

[Temperature-profile (Surface of circuit board)]

Use the conditions shown to the under figure.

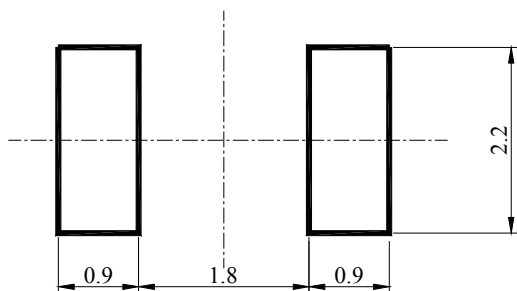
< 1 : Lead Solder >

< 2 : Lead-free Solder >



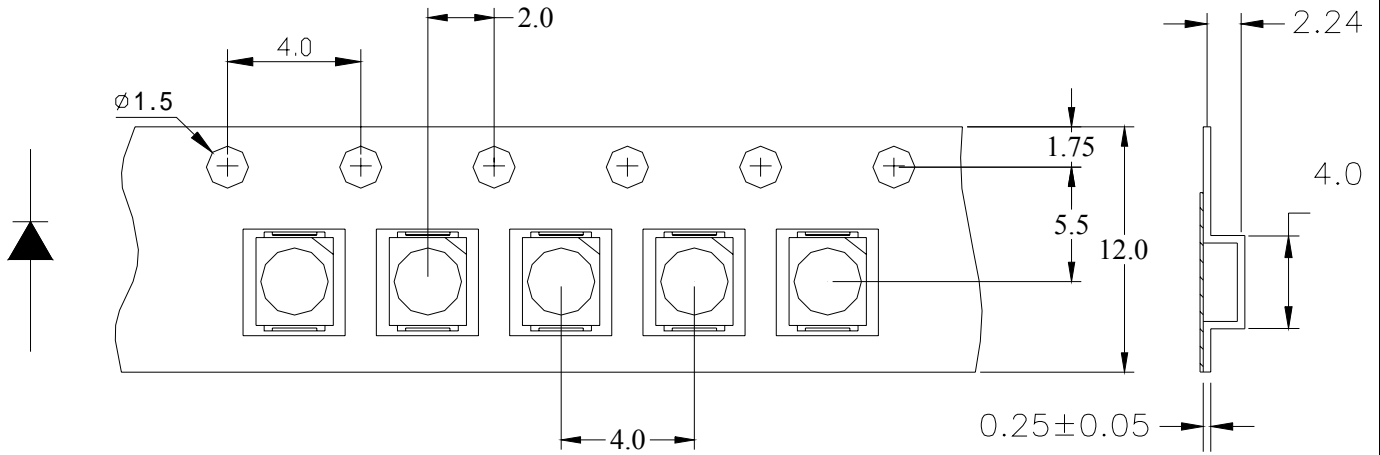
[ Recommended soldering pad design ]

Use the following conditions shown in the figure.

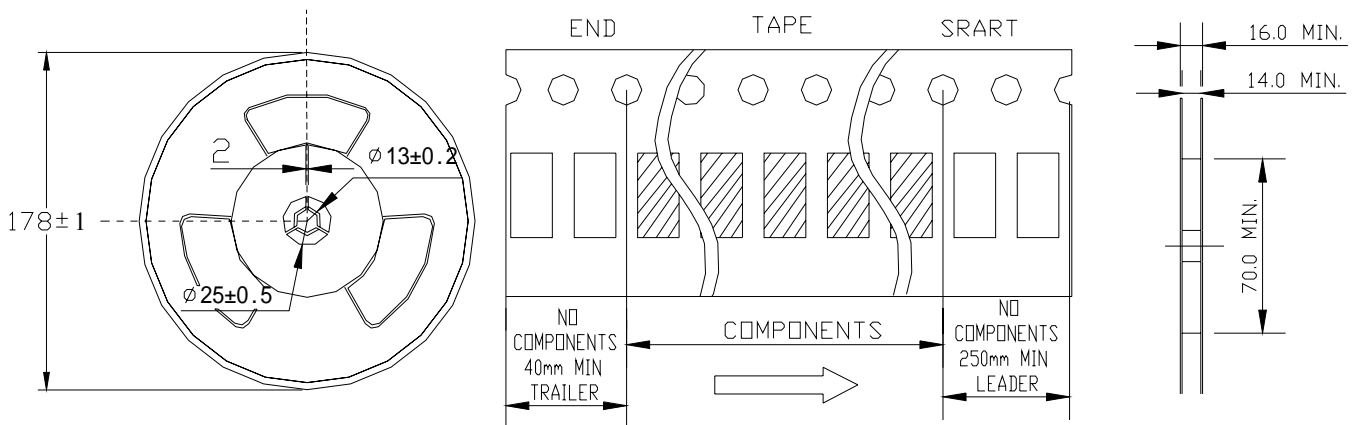


(Unit:mm)

**Dimensions for Tape**



**Dimensions for Reel**

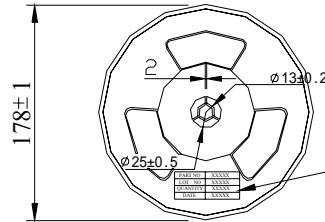


**Notes:**

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

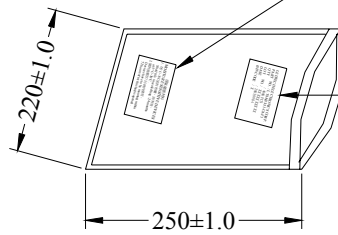
**Packing**

**Reel : 2,000PCS**



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

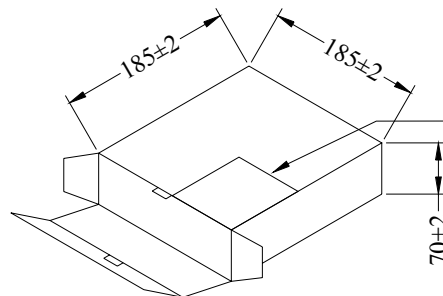
**Bag 2,000PCS**



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72小時內使用。  
 Devices have to be mounted within  
 72 hours after this bag is opened .

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

**2Bags : 4,000PCS**



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

Notes:

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- 2.SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.