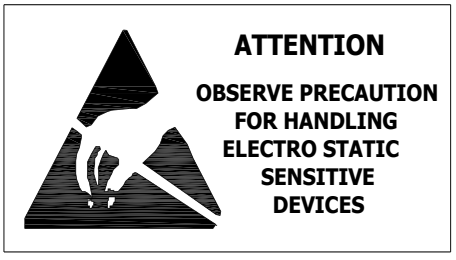
LEDTECH ELECTRONICS CORP.

(Zone 22) North Guiyuan Rd, West Jixi Rd, Duanzhou District, Zhaoqing City, Guangdong Province, P. R. China
TEL:86-758-2875541,2870651,2877464,2876185,2877017
FAX:86-758-2878014
Http://www.ledtech.com.tw

SPECIFICATION

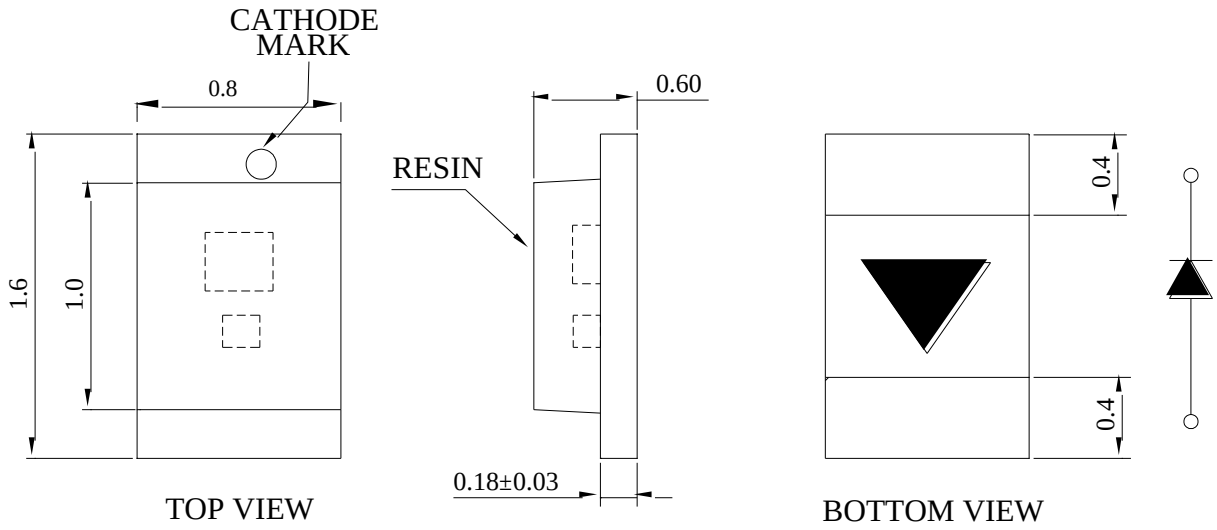
PART NO. : LT8A23-54-UDC9-TE-Z

0603 SMD CHIP LED



Approved by	Checked by	Prepared by
Yue	*Lian*	*Yongcai chen*

Package Dimensions



Notes:

1. All dimensions are in mm.
2. Tolerance is ±0.1mm unless otherwise noted.

Description

Part No.	LED Chip		Lens Color
	Material	Emitting Color	
LT8A23-54-UDC9-TE-Z	InGaN/Sapphire	True Green	Water Clear

Absolute Maximum Ratings at Ta=25 ℃

Parameter	Symbol	Rating	Unit
Power Dissipation	PD	120	mW
Reverse Voltage	VR	5	V
D.C. Forward Current	If	30	mA
Peak Current(1/10Duty Cycle,0.1ms Pulse Width.)	If(Peak)	80	mA
Operating Temperature Range	Topr.	-30 to +80	℃
Storage Temperature Range	Tstg.	-40 to +85	℃
Soldering Temperature.	Tsol.	Reflow Soldering:260℃ for 10 sec.	
Electric Static Discharge	ESD	6000	V

Electrical and Optical Characteristics:

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	If=20mA	262	600		mcd
Forward Voltage	Vf	If=20mA		3.2	4.0	V
Peak Wavelength	λp	If=20mA		----		nm
Dominant Wavelength	λd	If=20mA		520		nm
Reverse Current	Ir	Vr=5V			50	μA
Viewing Angle	2θ 1/2	If=20mA		130		deg
Spectrum Line Halfwidth	Δλ	If=20mA		35		nm

Notes:1. Tolerance of Luminous Intensity is ±15%

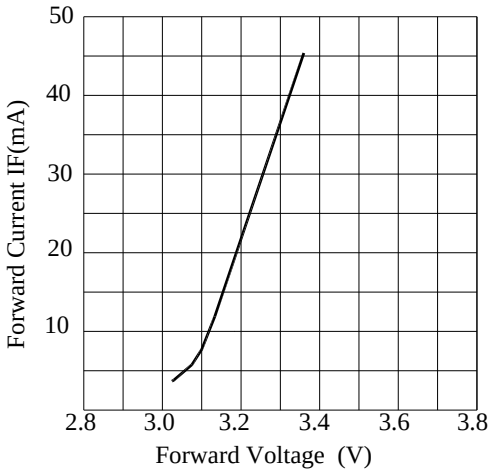
2. Tolerance of Forward Voltage is ±0.1V

3. Tolerance of Dominant Wavelength is ±1nm

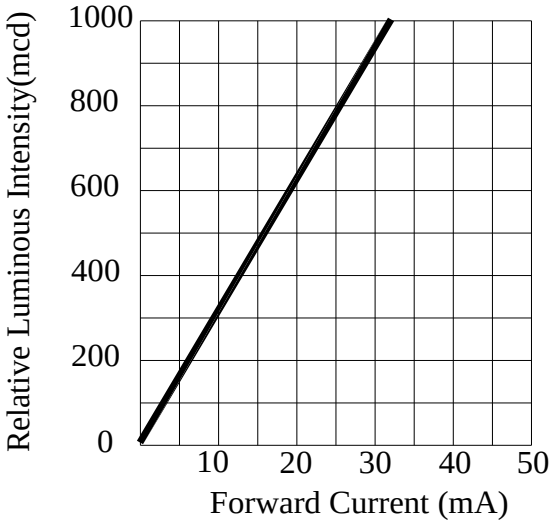
4. Customer's special requirements are also welcome

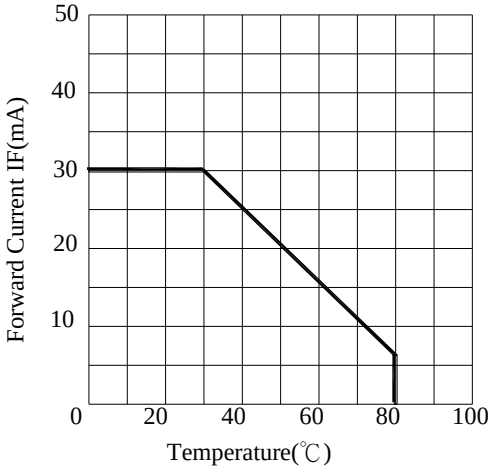
Typical Electrical/Optical Characteristic Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

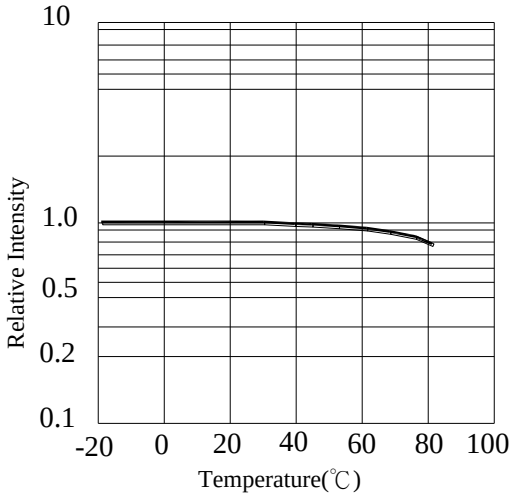


FORWARD CURRENT VS. APPLIED VOLTAGE

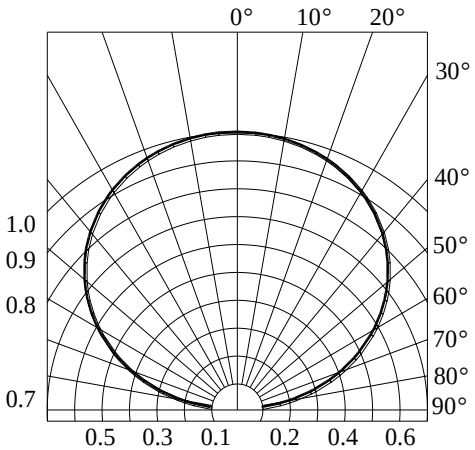




FORWARD CURRENT VS. AMBIENT TEMPERATURE



RELATIVE INTENSITY VS. AMBIENT TEMPERATURE



Radiation Diagram

Precautions in Use:

Storage

Recommend storage environment

Temperature： 5℃～30℃ (41°F～86°F)

Humidity： 60% RH Max.

Moisture measures: Please refer to Moisture-sensitive label on reels package bags.

If unused LEDs remain, they should be stored in moisture proof packages, such as sealed container with packages of moisture absorbent material (silica gel). It is also recommended to return the LEDs to the original moisture proof bag and to reseal the moisture proof bag again.

Fold the opened bag firmly and keep in dry environment.

Soldering

Reflow Soldering

Recommend use of upper and lower heater type reflow furnace.

260℃ Max for up to 10 seconds, one time only.

Pre-heat is 150℃ Max for up to 2 minutes Max.

In case of screen-printing, keep metal mask thickness between 0.2mm and 0.3mm.

Cleaning

Surface condition of this device may change when organic solvents such as trichloroethylene or acetone were applied.

Avoid using organic solvent.

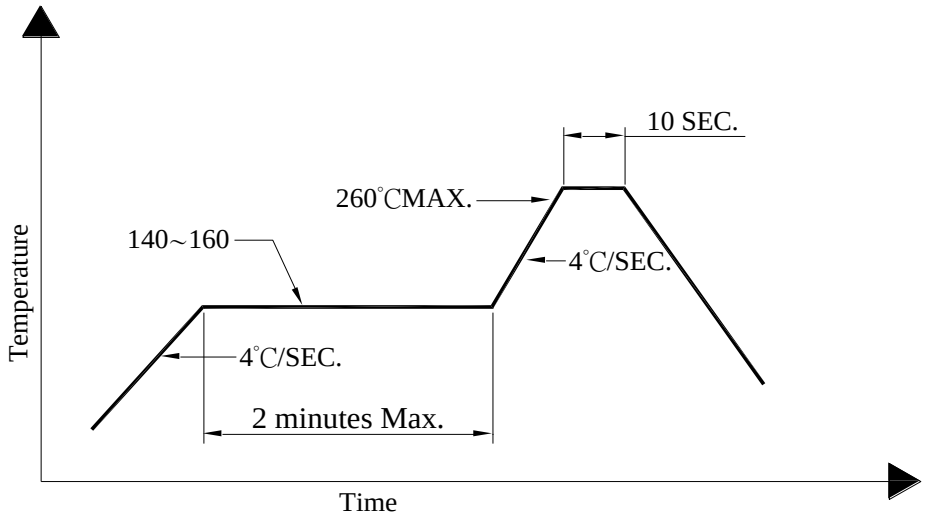
Recommend ultrasonic method 300W Max.

Packaging

EIA-481A standard package.

In 8mm tape on 5000 pcs diameter reels sealed in vapor/ESD barrier bags.

Reflow Temp/Time:



Sulfur-sensitive

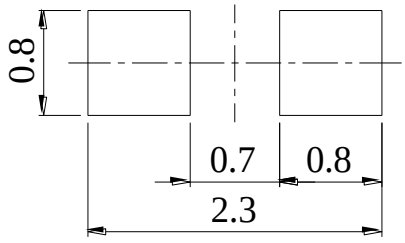
- There is silver-plated metal part on the inner/outer side of the outer package.

  If exposed to the condition with corrosive gas, the silver plating surface may go bad, which will affect soldering strength and optical properties. Therefore, after opening it must be kept in a sealed container, etc.
- Materials contain sulfur component (gasket, adhesive, etc.) may have bad effects on the surface of the coating, so please do not use such materials in the product.
- In cardboard boxes and rubber, even in the atmosphere may contain minute amount of corrosive gases; In addition, the resin material may also contain halogen which has a bad effect on the surface of the coating.
- Even if the soldering installation and product assembly finished, by the effect of corrosive gas generated by relative materials of LED and external injected, the coating surface may go bad, so it is necessary to design the product taking into account the above factors.
- If requires, it is best to use a silicone washer, but be aware that low molecular silicone may cause the product poor contact.
- Keep the product in location where has less temperature change, because moisture condensation would be generated under a condition of strong temperature change.

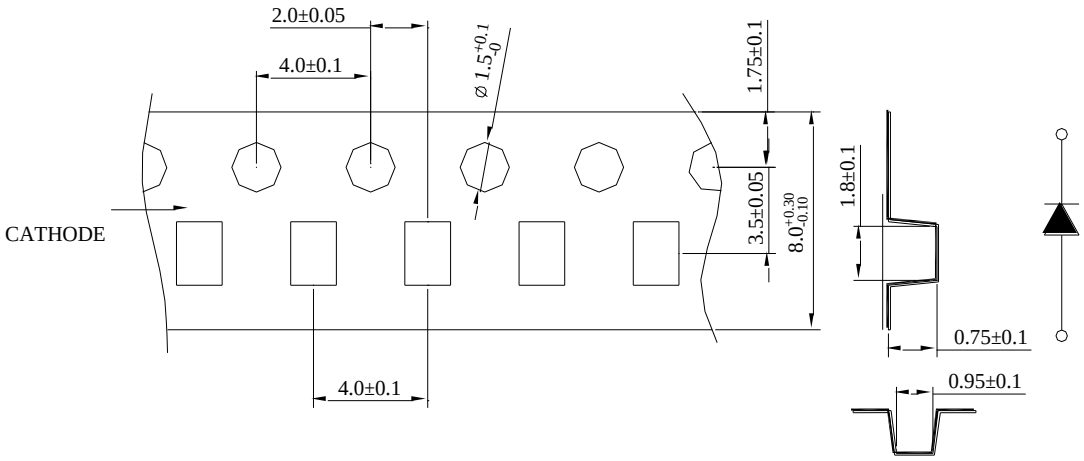
DISCLAIMER

1. Our department reserves the right(s) on the adjustment of product material mix for the specification.
2. The product meets our department published specification for a period of twelve (12) months from date of shipment.
3. The graphs shown in this datasheet are representing typical data only and do not show guaranteed values.
4. When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. Our department assumes no responsibility for any damage resulting from the use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
5. These specification sheets include materials protected under copyright of our department. Reproduction in any form is prohibited without obtaining our department's prior consent.
6. This product is not intended to be used for military, aircraft, automotive, medical, life sustaining or life saving applications or any other application which can result in human injury or death. Please contact authorized our department sales agent for special application request.

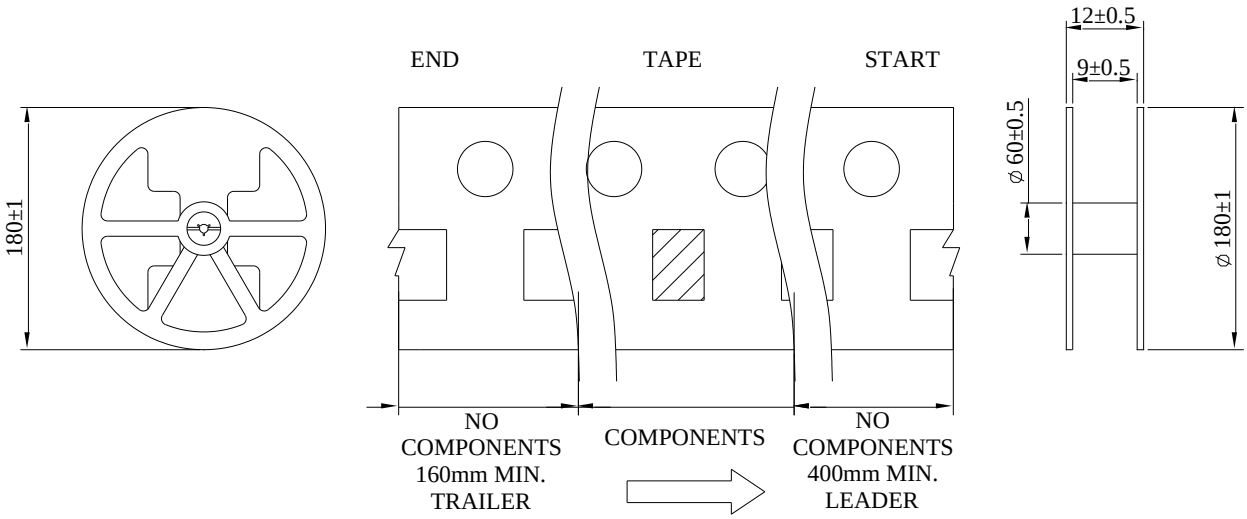
Reflow Soldering Pad Dimensions



Dimensions for Tape



Dimensions for Reel



Notes:

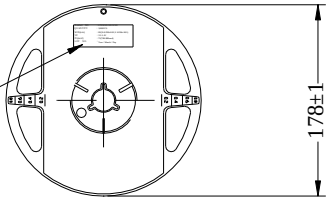
1.All dimensions are in mm, tolerance is±2.0mm unless otherwise noted.

2.Specifications are subject to change without notice.

Dimensions for Tape

REEL
QUANTITY: 5,000 PCS

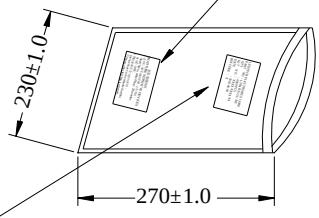
LEDTECH ELECTRONICS CORP.
PART NO :LTXXXX-XX
Q'TY : PCS
LOT NO :XXXXXXXXX
DATE :
BIN CODE:



Moisture-sensitive label

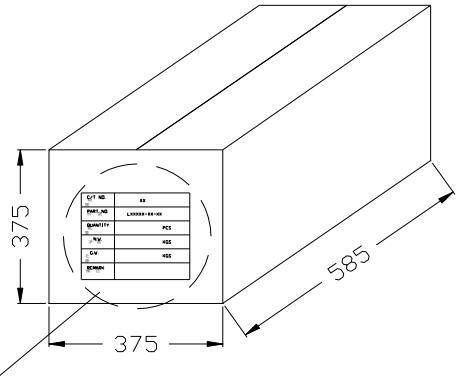
BAG
QUANTITY: 5,000 PCS

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



OUTER CARTON:
QUANTITY: 85 BAGS
TOTAL: 425,000PCS

C/T NO. 箱 號	XX
PART NO. 料 號	XXXXXXXXXXXXX
QUANTITY 數 量	PCS
N.W. 淨 重	KGS
G.W. 毛 重	KGS
REMARK 備 註	



Notes:

1.7 inch reel-5000 pieces per reel.

2.Minimum packing quantity is 500 pieces for remainders.

3.The maximum number of consecutive missing lamps is two.