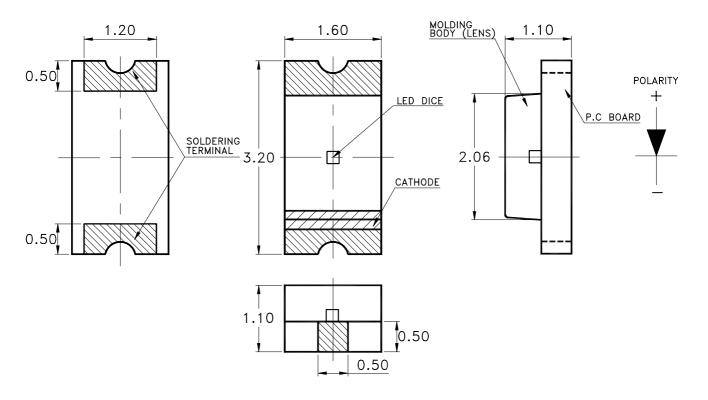


### Property of Lite-On Only

#### **Features**

- \* Package in 8mm tape on 7" diameter reels.
- \* Compatible with automatic placement equipment.
- \* Compatible with infrared and vapor phase reflow solder process.
- \* EIA STD Package.
- \* I.C. Compatible.

#### Package Dimensions



Part No.	Lens	Source Color
LTST-C150UBKT	Water Clear	GaN on SiC Blue

#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm$  0.1mm (.004") unless otherwise noted.

Part No.: LTST-C150UBKT	Page: 1 of 6	
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### Property of Lite-On Only

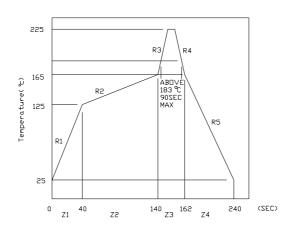
### Absolute Maximum Ratings At Ta=25°C

Parameter	LTST-C150UBKT	Unit			
Power Dissipation	135	mW			
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	70	mA			
Continuous Forward Current	30	mA			
Derating Linear From 50° C	0.5	mA/°C			
Reverse Voltage	5	V			
Electrostatic Discharge Threshold(HBM) <sup>Note A</sup>	1000	V			
Operating Temperature Range	-20°C to +80°C				
Storage Temperature Range	-30°C to + 100°C				
Wave Soldering Condition	260°C For 5 Seconds				
Infrared Soldering Condition	260°C For 5 Seconds				
Vapor Phase Soldering Condition	215°C For 3 Minutes				

#### Note A:

HBM: Human Body Model. Seller gives no other assurances regarding the ability of Products to withstand ESD.

#### Suggest IR Reflow Condition:



Part No.: LTST-C150UBKT Page: 2 of 6



#### Property of Lite-On Only

#### Electrical Optical Characteristics At Ta=25°C

Parameter	Symbol	Part no. LTST-	Min.	Тур.	Max.	Unit	Test Condition
Luminous Intensity	IV	C150UBKT	1.8	4.5		mcd	IF = 20mA Note 1, 5
Viewing Angle	2 θ 1/2	C150UBKT		130		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λΡ	C150UBKT		428		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λd	C150UBKT		466		nm	Note 3
Spectral Line Half-Width	Δλ	C150UBKT		65		nm	
Forward Voltage	VF	C150UBKT		3.8	4.5	V	IF = 20mA
Reverse Current	IR	C150UBKT			100	μΑ	VR = 5V

NOTE: 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve. Tester: EG&G DR-2550.

- $2.\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3. The dominant wavelength,  $\lambda$  d is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.
- 4. Iv classification code is marked on each packing bag. The Iv base on Lite-On's bin classification
- 5. The Iv guarantee should be added  $\pm$  15%.
- 6. Caution in ESD:

Static Electricity and surge damages the LED. It is recommend to use a wrist band or anti-electrostatic glove when handling the LED. All devices, equipment and machinery must be properly grounded.

Part No.: LTST-C150UBKT	Page:	3	of	6	
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#### Property of Lite-On Only

#### Typical Electrical / Optical Characteristics Curves

(25 °C Ambient Temperature Unless Otherwise Noted)

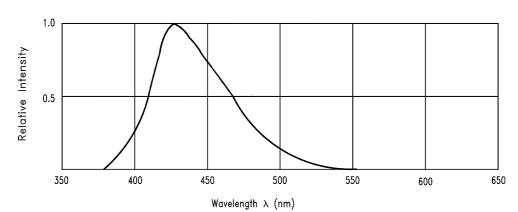
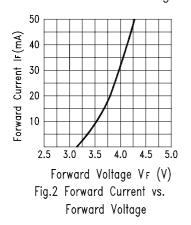
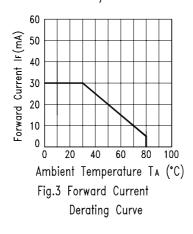
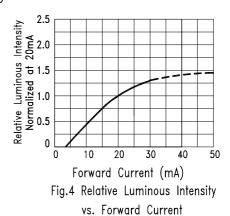
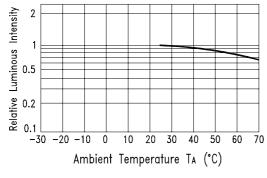


Fig.1 Relative Intensity vs. Wavelength









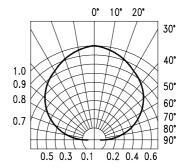


Fig.5 Luminous Intensity vs.

Ambient Temperature

Fig.6 Spatial Distribution

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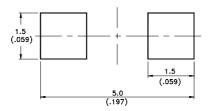
#### Property of Lite-On Only

#### Cleaning

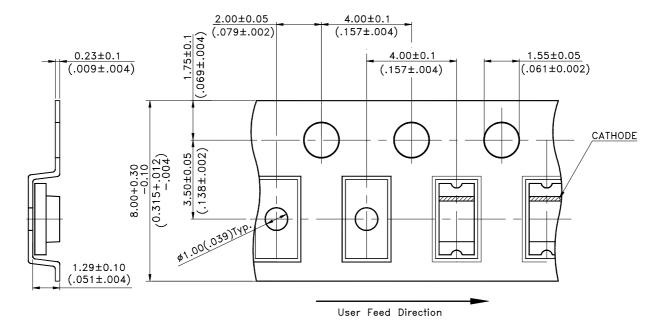
Do not use unspecified chemical liquid to clean LED they could harm the package.

If clean is necessary, immerse the LED in ethyl alcohol or in isopropyl alcohol at normal temperature for less one minute.

#### **Suggest Soldering Pad Dimensions**



#### **Package Dimensions Of Tape And Reel**



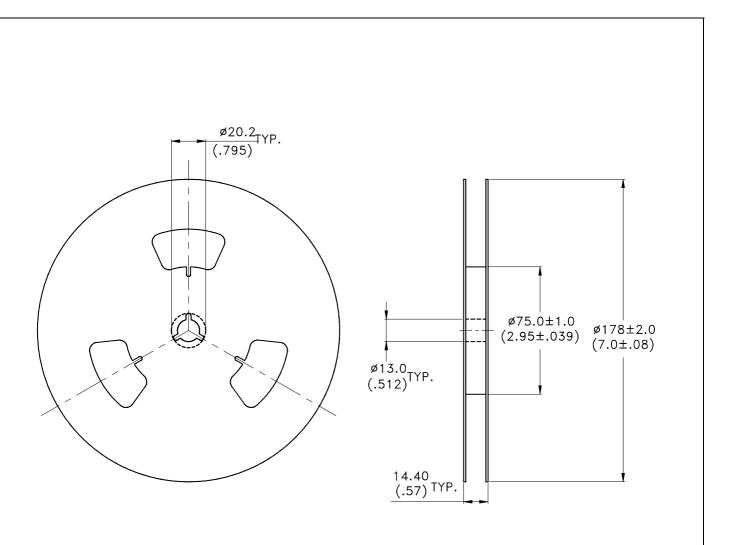
#### Notes:

1. All dimensions are in millimeters (inches).

Part No.: LTST-C150UBKT Page: 5 of 6



### Property of Lite-On Only



#### Notes:

- 1. Empty component pockets sealed with top cover tape.
- 2. 7 inch reel-3000 pieces per reel.
- 3. The maximum number of consecutive missing lamps is two.
- 4. In accordance with ANSI/EIA RS-481 specifications.

Part No.: LTST-C150UBKT Page: 6 of 6