# LITEON

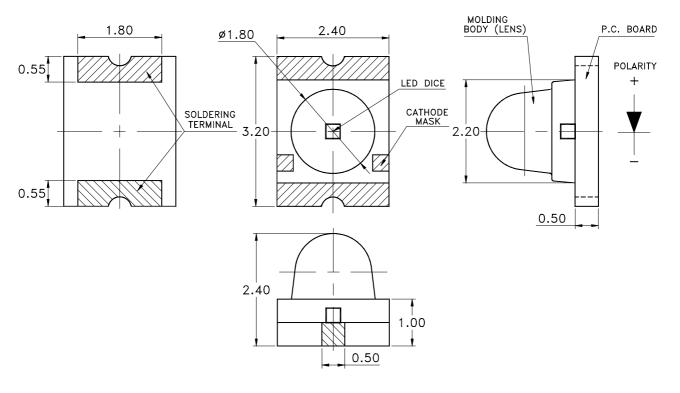
### LITE-ON ELECTRONICS, INC.

### Property of Lite-On Only

#### **Features**

- \* Dome lens Chip LED.
- \* 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-C930CBKT	Water Clear	InGaN on SiC Blue

#### Notes:

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

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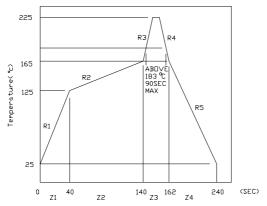
### Absolute Maximum Ratings At Ta=25°C

Parameter	LTST-C930CBKT	Unit		
Power Dissipation	120	mW		
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	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 to withstand ESD.

### Suggest IR Reflow Condition :



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### 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	C930CBKT	120.0	180.0		mcd	IF = 20mA Note 1
Viewing Angle	2 θ 1/2	C930CBKT		25		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λ Peak	C930CBKT		468		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λd	C930CBKT		470		nm	Note 3
Spectral Line Half-Width	Δλ	C930CBKT		26		nm	
Forward Voltage	VF	C930CBKT		3.7	4.0	V	IF = 20mA
Reverse Current	IR	С930СВКТ			100	μΑ	VR = 5V

Notes: 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.

- 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. 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.

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### Property of Lite-On Only

### Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

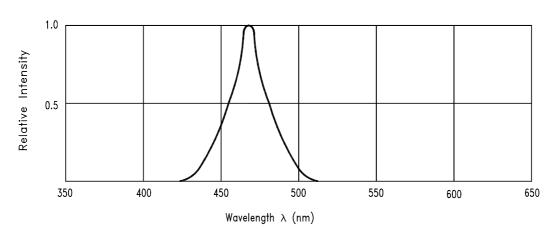
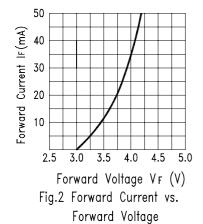
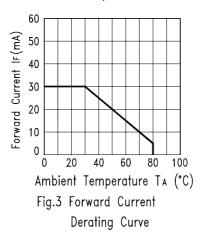
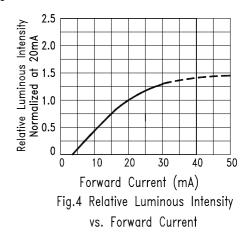
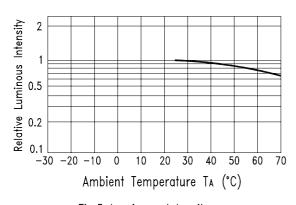


Fig.1 Relative Intensity vs. Wavelength









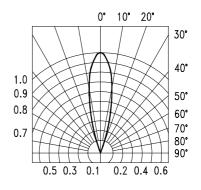


Fig.5 Luminous Intensity vs.

Ambient Temperature

Fig.6 Spatial Distribution

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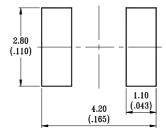
### Property of Lite-On Only

### Cleaning

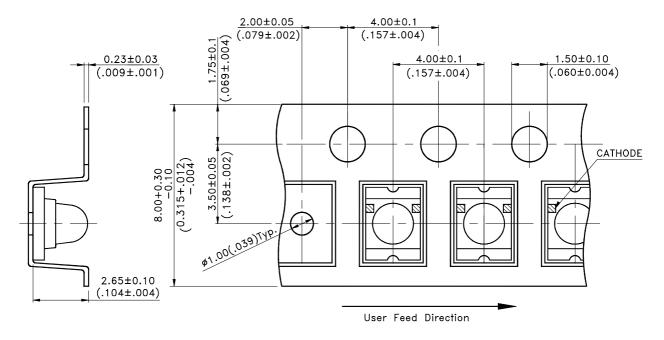
Do not use unspecified chemical liquid to clean LED they could harm the package.

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**



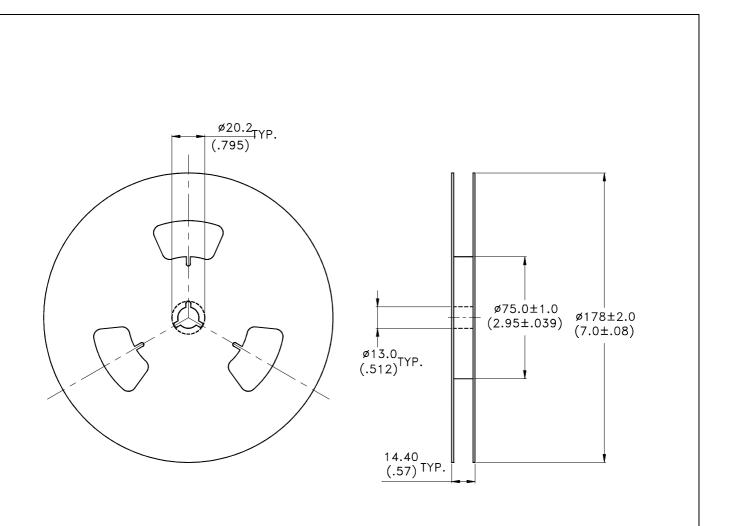
### Notes:

1. All dimensions are in millimeters (inches).

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Property of Lite-On Only



### Notes:

- 1. Empty component pockets sealed with top cover tape.
- 2. 7 inch reel-1500 pieces per reel.
- 3. The maximum number of consecutive missing lamps is two.
- 4. In accordance with ANSI/EIA 481-1-A-1994 specifications.

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