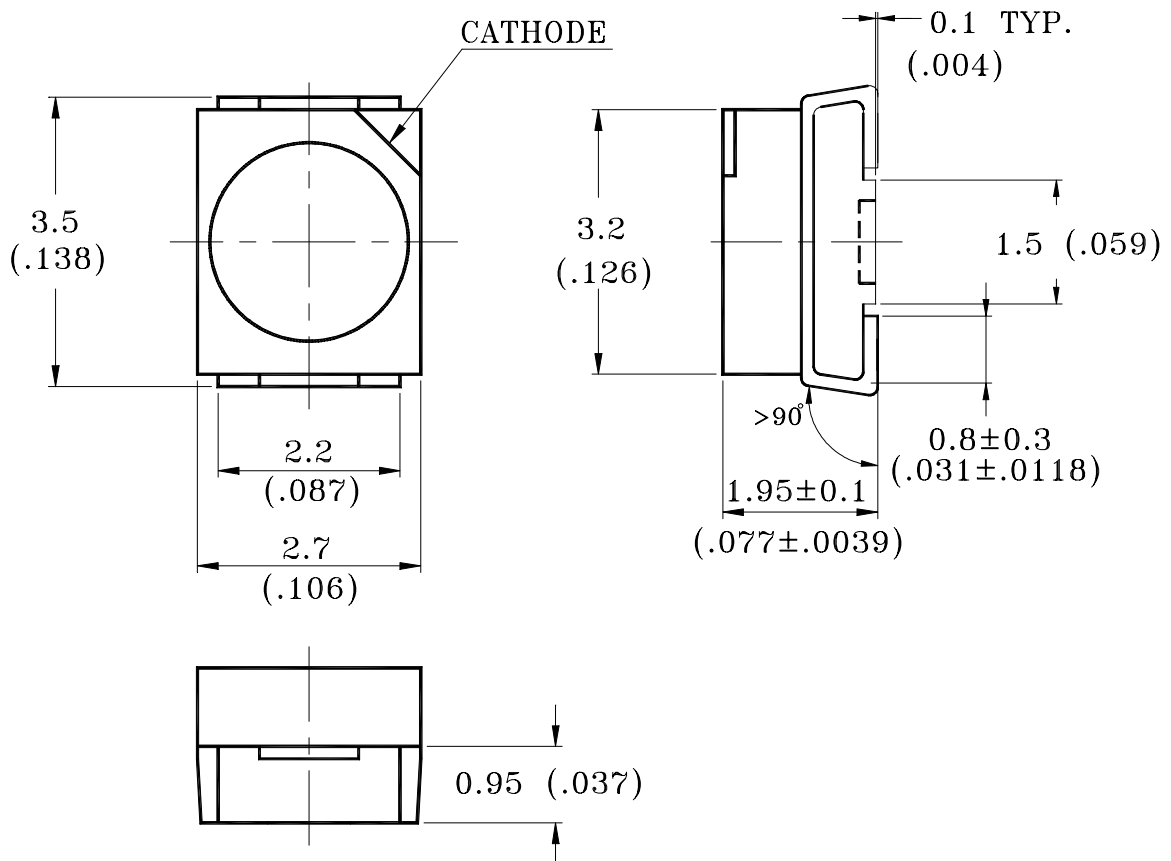


Property of Lite-On Only

### 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 Color	Source Color
LTST-T670TBKT	Water Clear	GaN Blue

#### Notes:

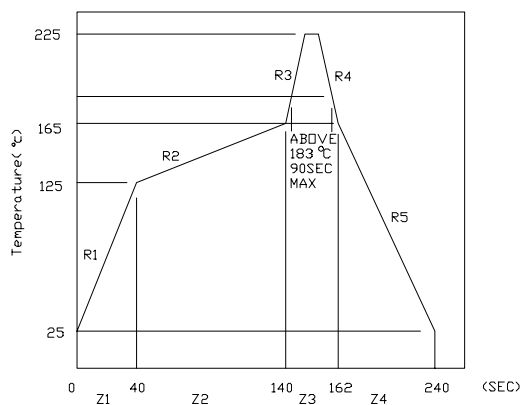
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2$  mm (.008") unless otherwise noted.

## Property of Lite-On Only

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

Parameter	LTST-T670TBKT	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 25°C	0.4	mA/°C
Reverse Voltage	5	V
Operating Temperature Range	-55°C to + 100°C	
Storage Temperature Range	-55°C to + 100°C	
Infrared Soldering Condition	260°C For 5 Seconds	
Vapor Phase Soldering Condition	215°C For 3 Minutes	
Wave Soldering Temperature	260°C For 5 Seconds	

Suggest IR Reflow Condition :



## Property of Lite-On Only

### Electrical / Optical Characteristics at Ta=25°C

Parameter	Symbol	Part No. LTST-	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	IV	T670TBKT	-	90.0		mcd	IF = 20mA Note 1
Viewing Angle	$2\theta_{1/2}$	T670TBKT		120		deg	Note 2 (Fig.6)
Peak Emission Wavelength	$\lambda_P$	T670TBKT		468		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	$\lambda_d$	T670TBKT		470		nm	Note 3
Spectral Line Half-Width	$\Delta\lambda$	T670TBKT		25		nm	
Forward Voltage	VF	T670TBKT		3.5	4.0	V	IF = 20mA
Reverse Current	IR	T670TBKT			100	$\mu A$	VR = 5V
Capacitance	C	T670TBKT		40		PF	VF=0, f=1MHZ

NOTE: 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.

## Property of Lite-On Only

### Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

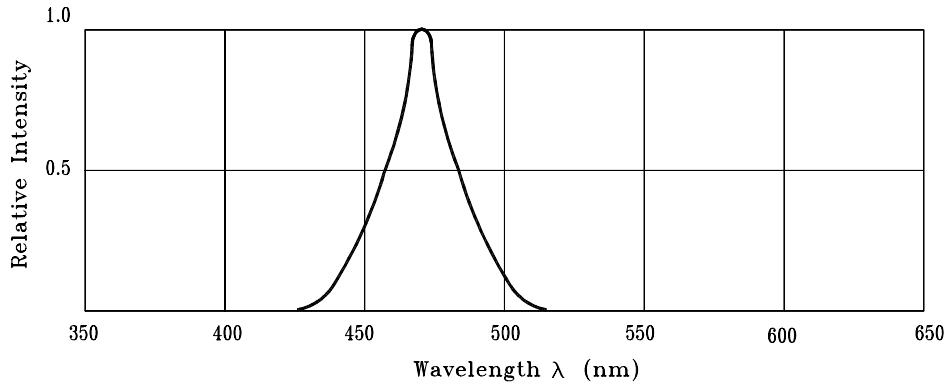


Fig.1 RELATIVE INTENSITY VS. WAVELENGTH

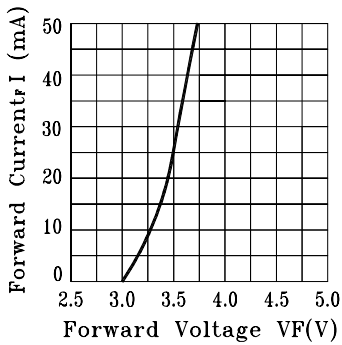


Fig.2 FORWARD CURRENT VS. FORWARD VOLTAGE

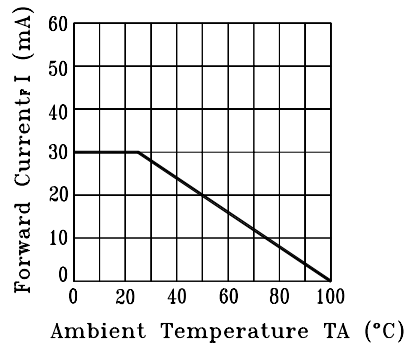


Fig.3 FORWARD CURRENT DERATING CURVE

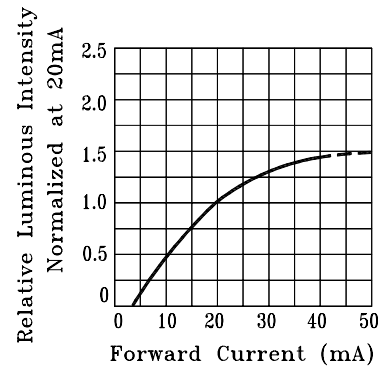


Fig.4 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

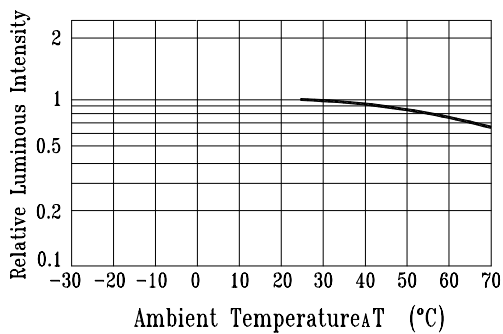


Fig.5 Luminous Intensity vs. Ambient Temperature

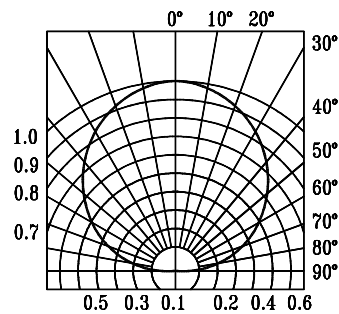


Fig.6 SPATIAL DISTRIBUTION

Property of Lite-On Only

## User Guide

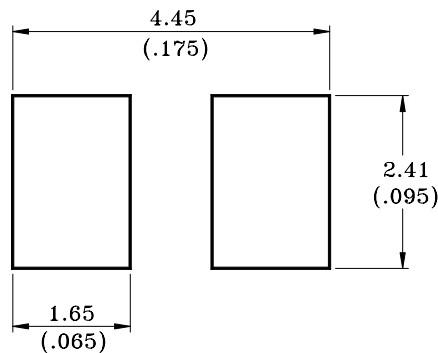
### Cleaning

Do not use unspecified chemical liquid to clean LED they could harm the package.  
If cleaning is necessary, immerse the LED in ethyl alcohol or isopropyl alcohol at normal temperature for less one minute.

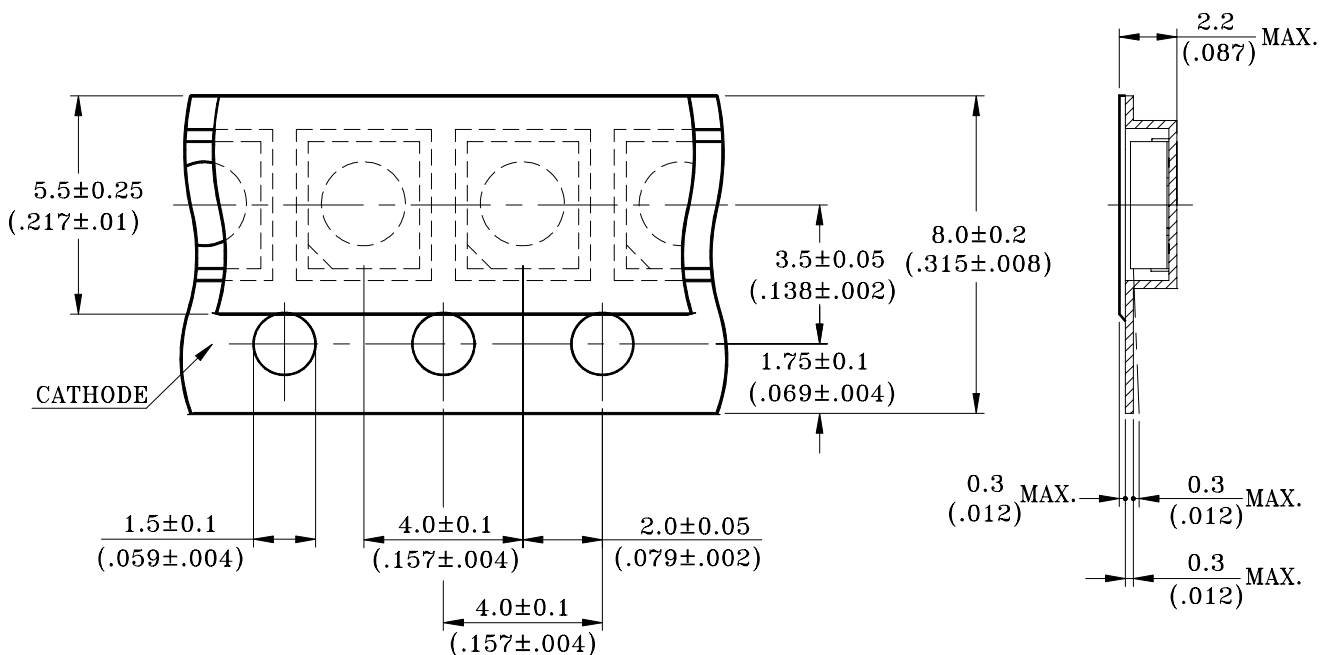
### Recommend Printed Circuit Board Attachment Pad

Infrared / vapor phase

Reflow Soldering



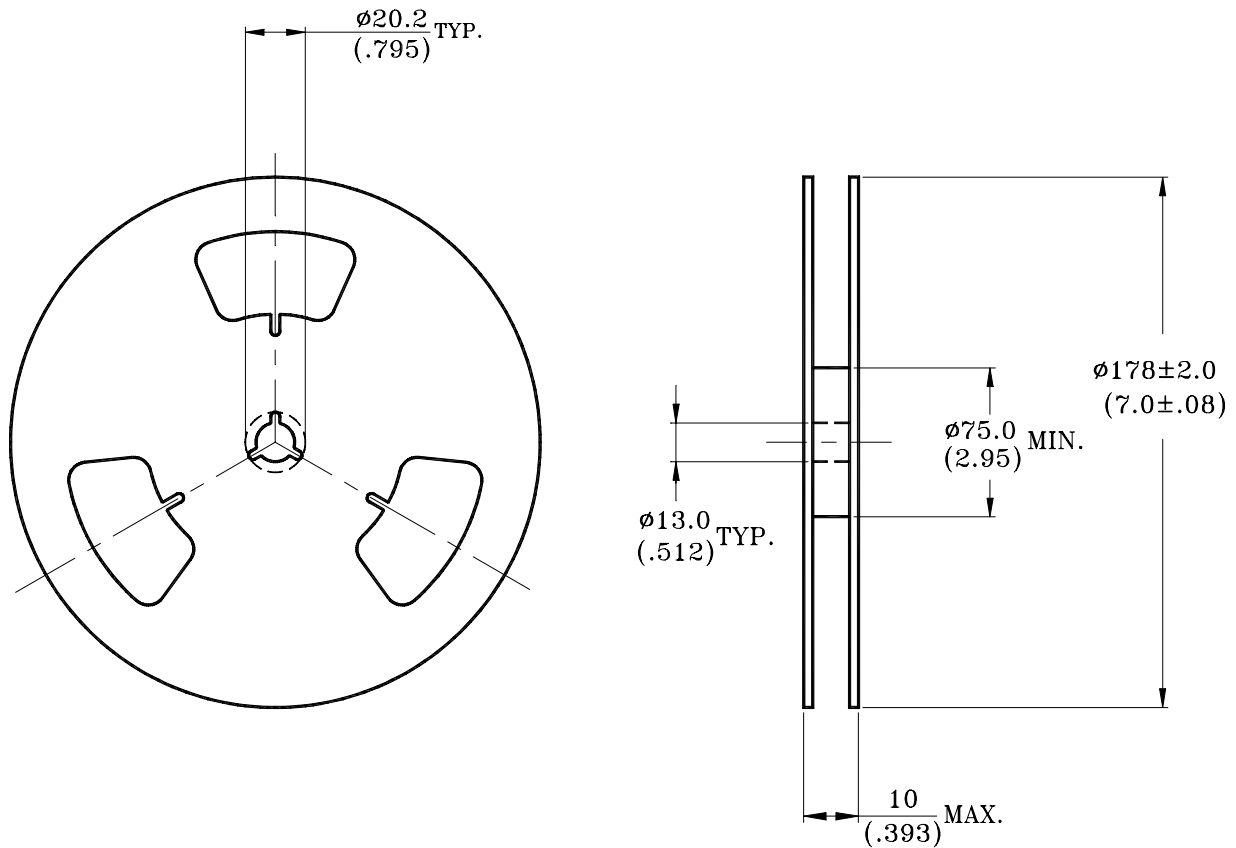
### Package Dimensions of Tape



Note:

1. All dimensions are in millimeters (inches).

Property of Lite-On Only

**Package Dimensions of Reel**

## Notes:

1. Empty component pockets sealed with top cover tape.
2. 7 inch reel-2000 pieces per reel.
3. The maximum number of consecutive missing lamps is two.
4. In accordance with ANSI/EIA RS-481 specifications.