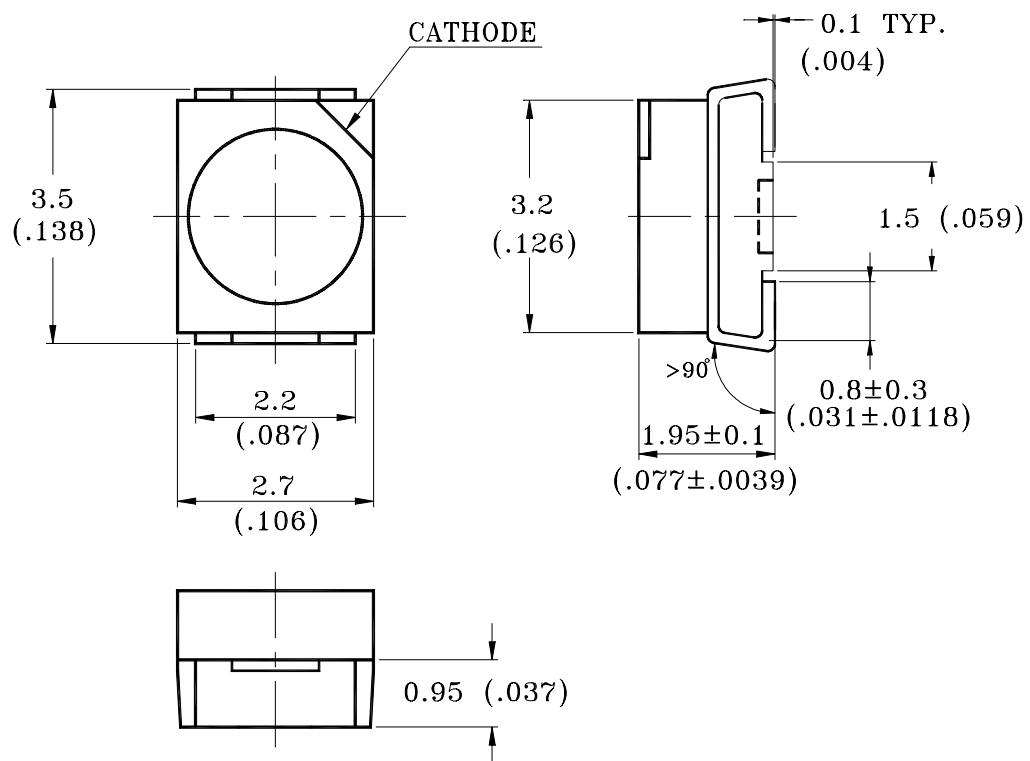


**Features**

- \* 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-T670YKT	Water Clear	Yellow

**Notes:**

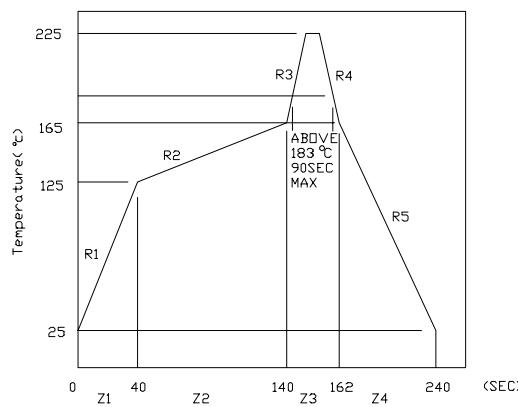
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2$  mm (.008") unless otherwise noted.

## Property of LITE-ON Only

Absolute Maximum Ratings at  $T_a=25^\circ\text{C}$ 

Parameter	LTST-T670YKT	Unit
Power Dissipation	60	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Continuous Forward Current	20	mA
Derating Linear From $50^\circ\text{C}$	0.4	mA/ $^\circ\text{C}$
Reverse Voltage	5	V
Operating Temperature Range	$-55^\circ\text{C}$ to $+100^\circ\text{C}$	
Storage Temperature Range	$-55^\circ\text{C}$ to $+100^\circ\text{C}$	
Infrared Soldering Condition	$265^\circ\text{C}$ For 5 Seconds	
Vapor Phase Soldering Condition	$215^\circ\text{C}$ For 3 Minutes	
Wave Soldering Temperature	$260^\circ\text{C}$ 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	T670YKT	5.6	12.4		mcd	IF = 10mA Note 1,4
Viewing Angle	$2\theta_{1/2}$	T670YKT		120		deg	Note 2 (Fig.6)
Peak Emission Wavelength	$\lambda_P$	T670YKT		585		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	$\lambda_d$	T670YKT		588		nm	Note 3
Spectral Line Half-Width	$\Delta\lambda$	T670YKT		35		nm	
Forward Voltage	VF	T670YKT		2.1	2.8	V	IF = 20mA
Reverse Current	IR	T670YKT			100	$\mu A$	VR = 5V
Capacitance	C	T670YKT		15		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. The max. & min. are not including testing tolerance 15%.

### Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

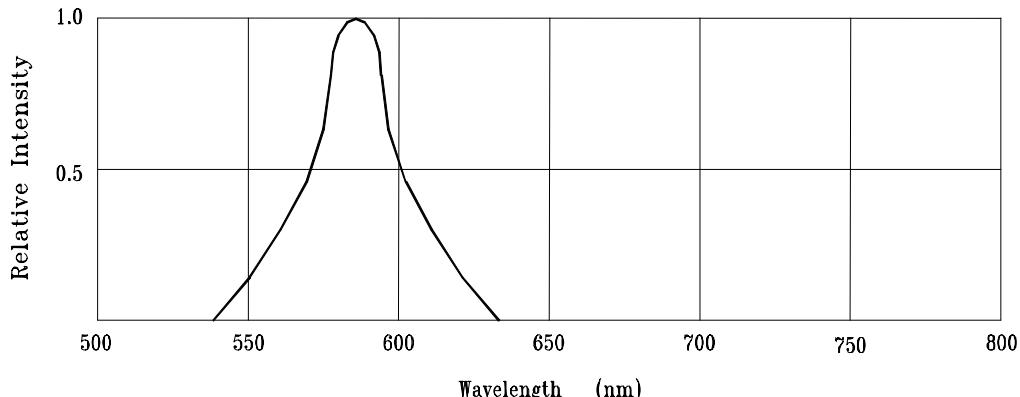


Fig.1 RELATIVE INTENSITY VS. WAVELENGTH

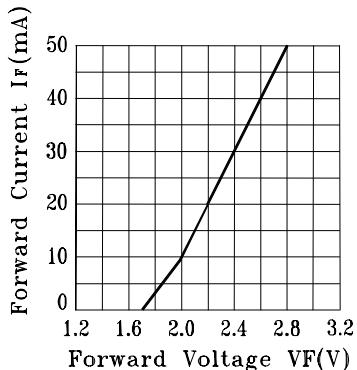


Fig.2 FORWARD CURRENT VS.  
FORWARD VOLTAGE

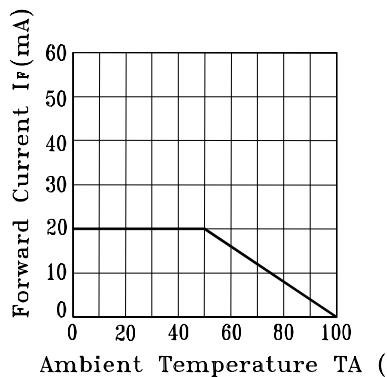


Fig.3 FORWARD CURRENT  
DERATING CURVE

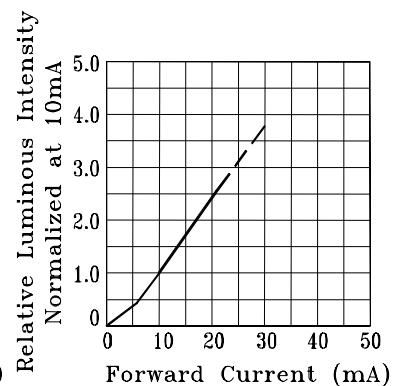


Fig.4 RELATIVE LUMINOUS  
INTENSITY VS. FORWARD CURRENT

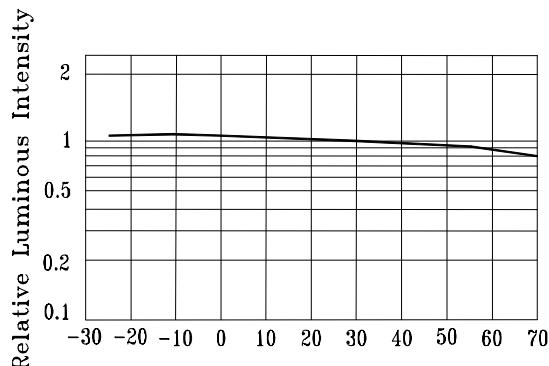


Fig.5 LUMINOUS INTENSITY VS.  
AMBIENT TEMPERATURE.

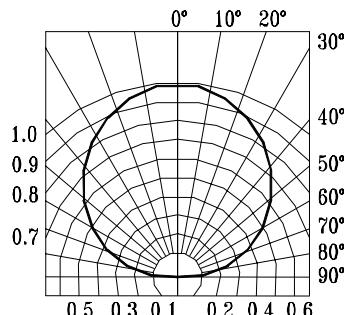


Fig.6 SPATIAL DISTRIBUTION

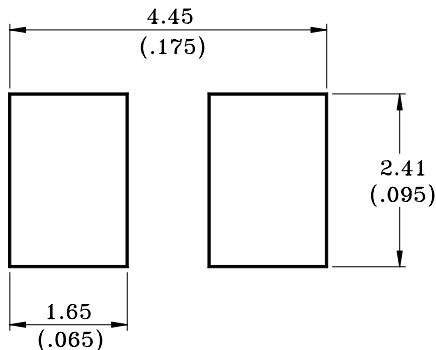
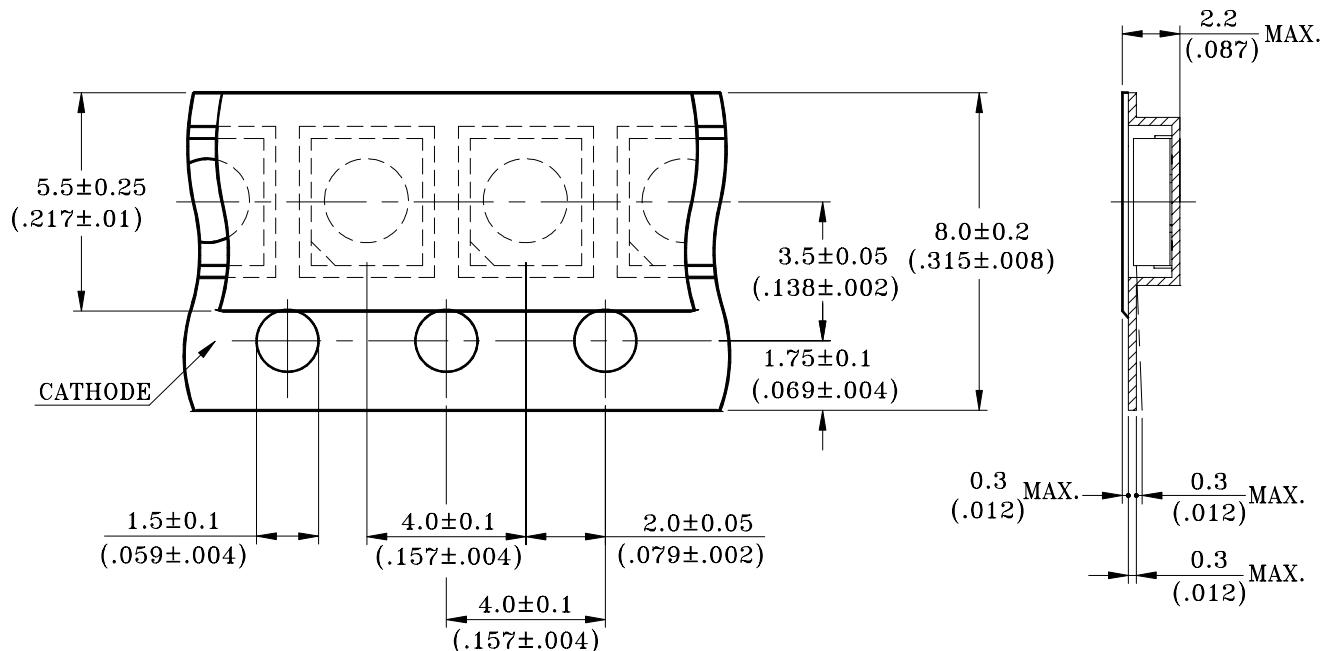
**User Guide****Cleaning**

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**

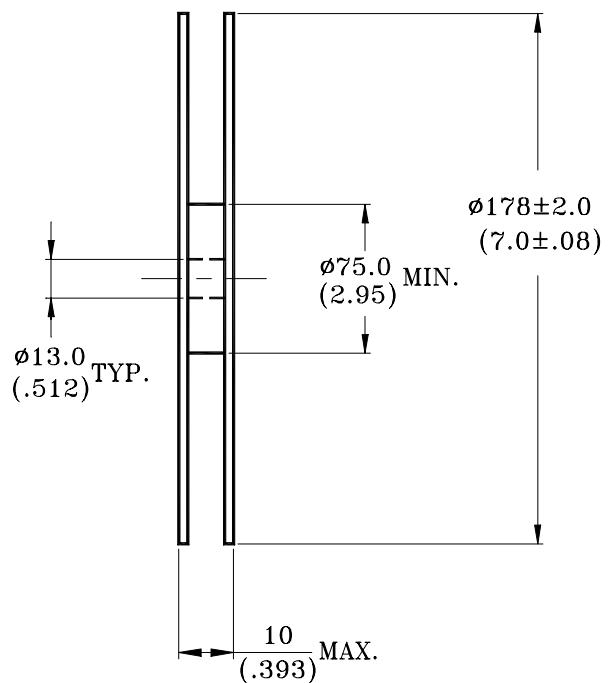
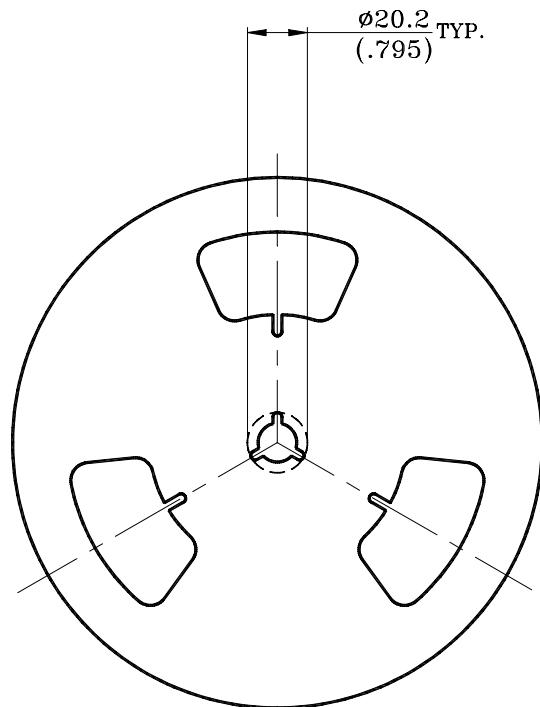
Infrared / vapor phase

Reflow Soldering

**Package Dimensions of Tape**

Note:

1. All dimensions are in millimeters (inches).

**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.