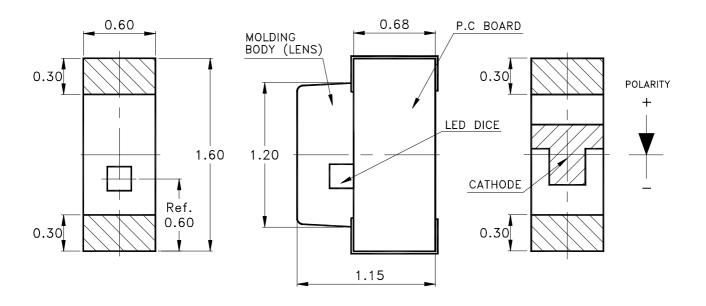


## Property of Lite-On Only

#### **Features**

- \* Side looking special for LCD backlight.
- \* Ultra bright AlInGaP 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-S270KFKT	Water Clear	AlInGaP Orange

#### Notes:

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

Part No.: LTST-S270KFKT Page: 1 of 6

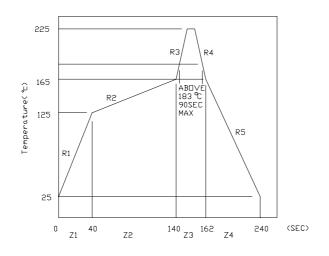


## Property of Lite-On Only

## Absolute Maximum Ratings At Ta=25°C

Parameter	LTST-S270KFKT	Unit			
Power Dissipation	75	mW			
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	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 +85°C					
Storage Temperature Range -55°C to +85°C					
Wave Soldering Condition	g Condition 260°C For 5 Seconds				
Infrared Soldering Condition	260°C For 5 Seconds				
Vapor Phase Soldering Condition	215°C For 3 Minutes				

#### Suggest IR Reflow Condition:



Part No.: LTST-S270KFKT 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	S270KFKT	30.0	60.0		mcd	IF = 20mA Note 1	
Viewing Angle	2 θ 1/2	S270KFKT		130		deg	Note 2 (Fig.6)	
Peak Emission Wavelength	λ Peak	S270KFKT		611		nm	Measurement @Peak (Fig.1)	
Dominant Wavelength	λd	S270KFKT		605		nm	Note 3	
Spectral Line Half-Width	Δλ	S270KFKT		17		nm		
Forward Voltage	VF	S270KFKT		2.0	2.4	V	IF = 20mA	
Reverse Current	IR	S270KFKT			100	$\mu$ A	VR = 5V	
Capacitance	С	S270KFKT		40		PF	VF = 0 f = 1MHZ	

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.

Part No.: LTST-S270KFKT Page: 3 of 6

## Property of Lite-On Only

## Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

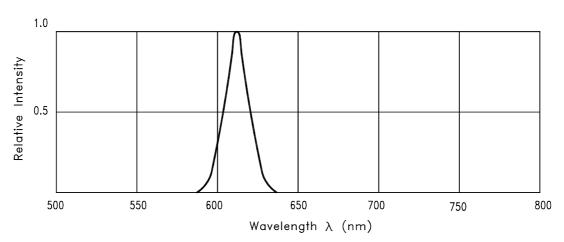


Fig.1 RELATIVE INTENSITY VS. WAVELENGTH

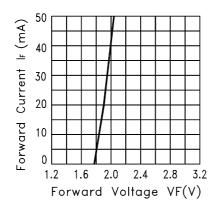
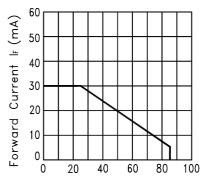
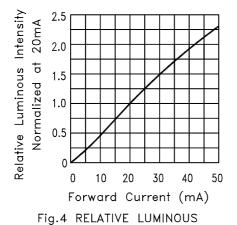


Fig.2 FORWARD CURRENT VS. FORWARD VOLTAGE



Ambient Temperature TA (°C) Fig.3 FORWARD CURRENT

DERATING CURVE



INTENSITY VS. FORWARD CURRENT

0° 10° 20° 30° 40° 50° 60° 70° 80° 90°

Fig.6 SPATIAL DISTRIBUTION

Part No.: LTST-S270KFKT Page: 4 of 6



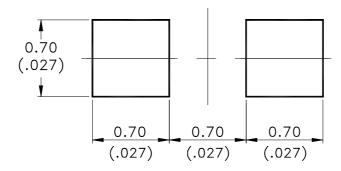
### Property of Lite-On Only

#### Cleaning

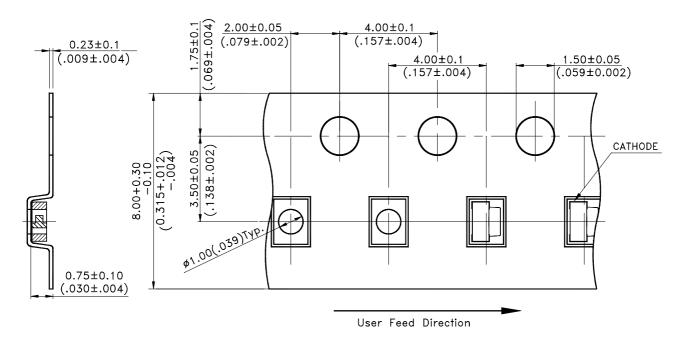
Do not use unspecified chemical liquid to clean LED they could harm the package.

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



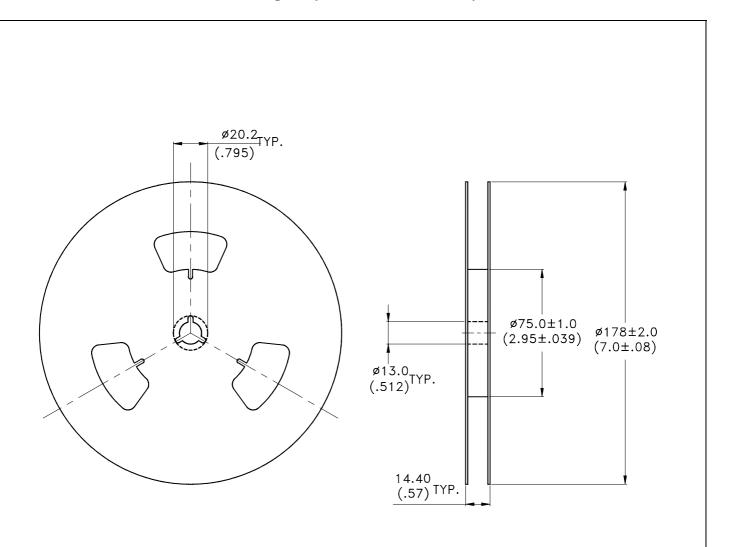
#### Notes:

1. All dimensions are in millimeters (inches).

Part No.: LTST-S270KFKT	Page:	5	of	6	
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## Property of Lite-On Only



#### Notes:

- 1. Empty component pockets sealed with top cover tape.
- 2. 7 inch reel- 4000 pieces per reel.
- 3. The maximum number of consecutive missing lamps is two.
- 4. In accordance with ANSI/EIA 481-1-A-1994 specifications.

Part No.: LTST-S270KFKT Page: 6 of 6