

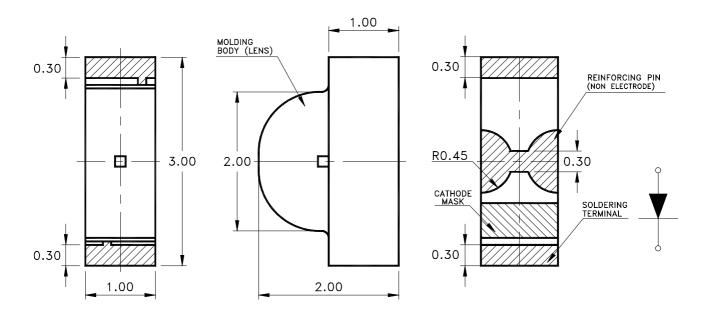
LITE-ON ELECTRONICS, INC.

Property of Lite-On Only

Features

- * Side looking special for LCD backlight.
- * Package in 8mm tape on 7" diameter reels.
- * Compatible with automatic placement equipment.
- * Compatible with infrared and vapor phase reflow and wave solder process.
- * EIA STD package.
- * I.C. compatible.

Package Dimensions



Part No.	Lens	Source Color
LTST-S320GKT	Water Clear	GaP on GaP Green

Notes:

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

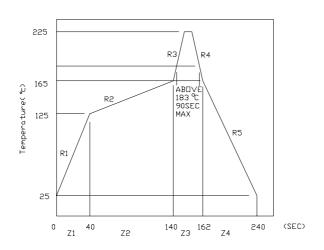
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Absolute Maximum Ratings At Ta=25℃

Parameter	LTST-S320GKT	Unit		
Power Dissipation	100	mW		
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	120	mA		
Continuous Forward Current	30	mA		
Derating Linear From 50℃	0.6	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	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:



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Electrical Optical Characteristics At Ta=25°C

Parameter	Symbol	Part No. LTST-	Min.	Тур.	Max.	Unit	Test Condition	
Luminous Intensity	IV	S320GKT	2.5	10.0	20.0	mcd	IF = 20mA Note 1	
Viewing Angle	2 \theta 1/2	S320GKT		130		deg	Note 2 (Fig.6)	
Peak Emission Wavelength	λΡ	S320GKT		565		nm	Measurement @Peak (Fig.1)	
Dominant Wavelength	λd	S320GKT		569		nm	Note 3	
Spectral Line Half-Width	Δλ	S320GKT		30		nm		
Forward Voltage	VF	S320GKT		2.1	2.6	V	IF = 20mA	
Reverse Current	IR	S320GKT			100	μ A	VR = 5V	
Capacitance	С	S320GKT		35		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. θ 1/2 is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3. The dominant wavelength, λ d is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

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Typical Electrical / Optical Characteristics Curves (25 °C Ambient Temperature Unless Otherwise Noted)

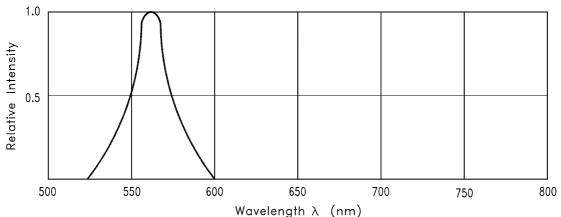


Fig.1 RELATIVE INTENSITY VS. WAVELENGTH

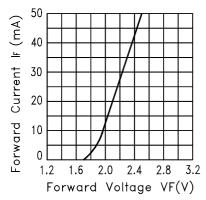


Fig.2 FORWARD CURRENT VS. FORWARD VOLTAGE

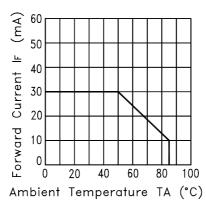


Fig.3 FORWARD CURRENT DERATING CURVE

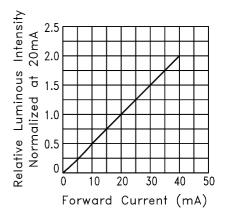


Fig.4 RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT

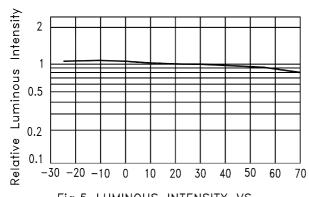


Fig.5 LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

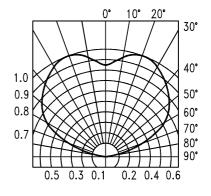


Fig.6 SPATIAL DISTRIBUTION

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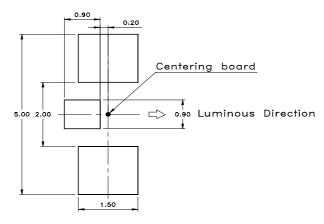
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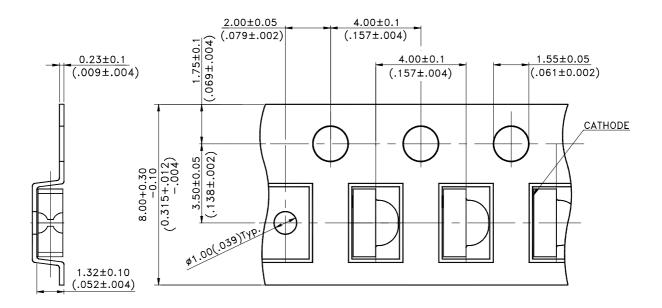
Cleaning

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:

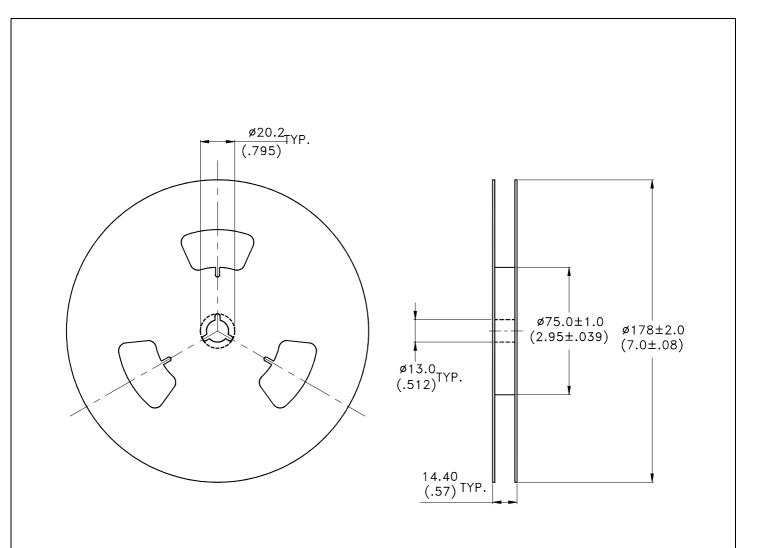
1. All dimensions are in millimeters (inches).

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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 481-1-A-1994 specifications.

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