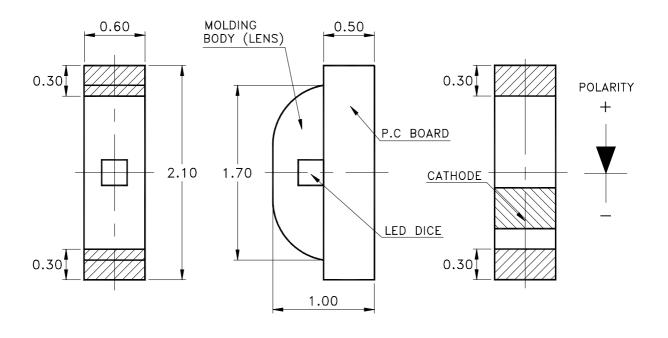


Property of Lite-On Only

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 solder process.
- * EIA STD Package.
- * I.C. Compatible.

Package Dimensions



Part No.	Lens	Source Color
LTST-S220UBKT	Water Clear	GaN on SiC Blue

Notes:

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

Part No.: LTST-S220UBKT Page: 1 of 6



Property of Lite-On Only

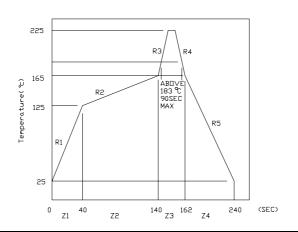
Absolute Maximum Ratings At Ta=25°C

Parameter	LTST-S220UBKT	Unit			
Power Dissipation	135	mW			
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	70	mA			
Continuous Forward Current	30	mA			
Derating Linear From 30° C	0.5	mA/°C			
Reverse Voltage	5	V			
Electrostatic Discharge Threshold(HBM) ^{Note A}	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 Products to withstand ESD.

Suggest IR Reflow Condition:



Part No.: LTST-S220UBKT 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	S220UBKT	1.8	4.5		mcd	IF = 20mA Note 1, 5
Viewing Angle	2 θ 1/2	S220UBKT		130		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λΡ	S220UBKT		428		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λd	S220UBKT		466		nm	Note 3
Spectral Line Half-Width	Δλ	S220UBKT		65		nm	
Forward Voltage	VF	S220UBKT		3.8	4.5	V	IF = 20mA
Reverse Current	IR	S220UBKT			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. 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.
- 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.

Part No.: LTST-S220UBKT	Page:	3	of	6	
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Property of Lite-On Only

Typical Electrical / Optical Characteristics Curves

(25 °C Ambient Temperature Unless Otherwise Noted)

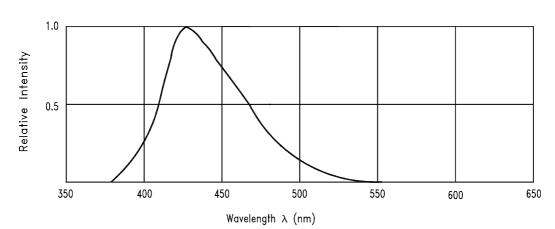
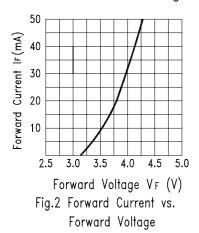
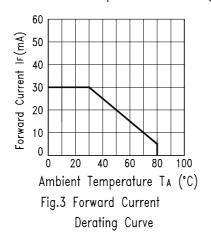
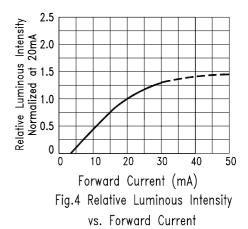
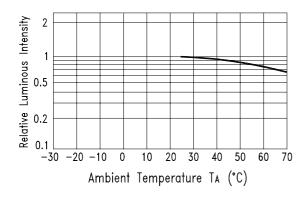


Fig.1 Relative Intensity vs. Wavelength









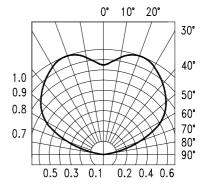


Fig.5 Luminous Intensity vs.

Ambient Temperature

Fig.6 Spatial Distribution

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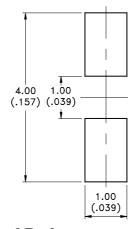
Property of Lite-On Only

Cleaning

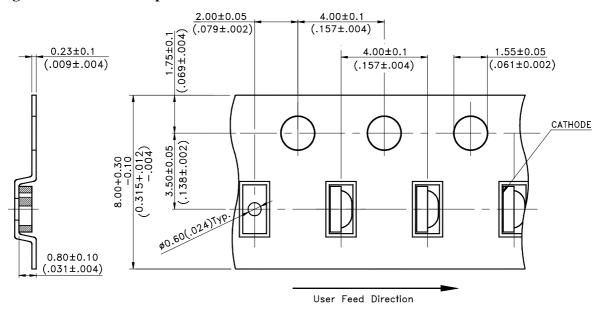
Do not use unspecified chemical liquid to clean LED they could harm the package.

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



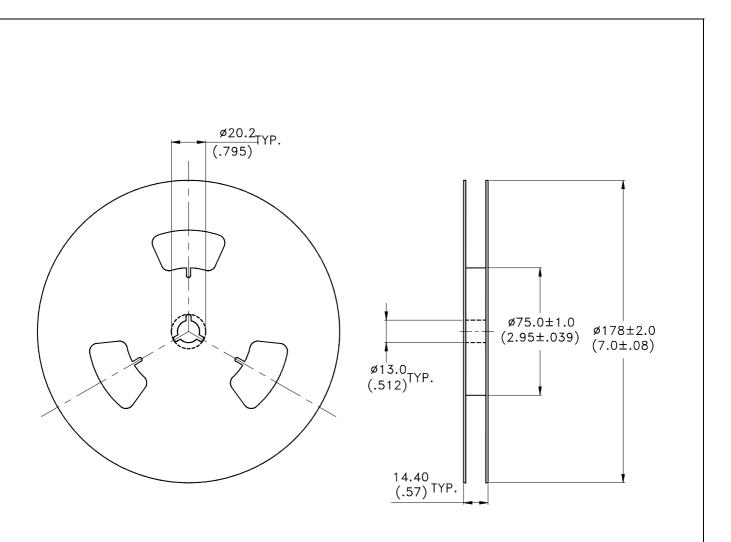
Notes:

1. All dimensions are in millimeters (inches).

Part No.: LTST-S220UBKT	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 RS-481 specifications.

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