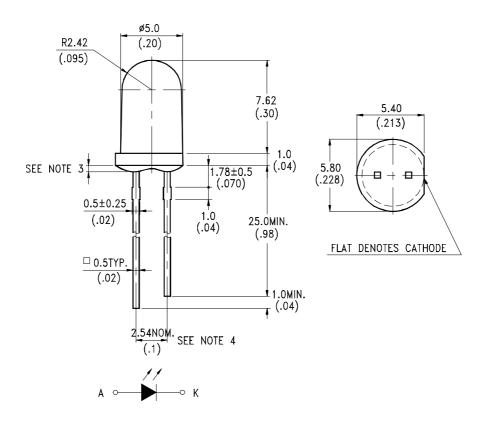
Property of Lite-On Only

### **FEATURES**

- \* SPECIAL FOR HIGH CURRENT AND LOW FORWARD VOLTAGE
- \* HIGH POWER
- \* AVAILABLE FOR PULSE OPERATING
- \* WIDE VIEWING ANGLE
- \* WATER CLEAR PACKAGE
- \* SOLDER PLATED LEADS

### **PACKAGE DIMENSIONS**



### NOTES:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25$  mm(.010") unless otherwise noted.
- 3. Protruded resin under flange is 1.5mm(.059") max.
- 4. Lead spacing is measured where the leads emerge from the package.
- 5. Specifications are subject to change without notice.
- 6. The vender of dice is OTC.

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## ABSOLUTE MAXIMUM RATINGS AT TA=25°C

PARAMETER	MAXIMUM RATING	UNIT	
Power Dissipation	150	mW	
Peak Forward Current (300pps, $10 \mu$ s pulse)	2	А	
Continuous Forward Current	100	mA	
Reverse Voltage	5	V	
Operating Temperature Range	$-40^{\circ}$ C to $+85^{\circ}$ C		
Storage Temperature Range	-55°C to + 100°C		
Lead Soldering Temperature [4.0mm(.157") From Body]	320°C for 3 Seconds		

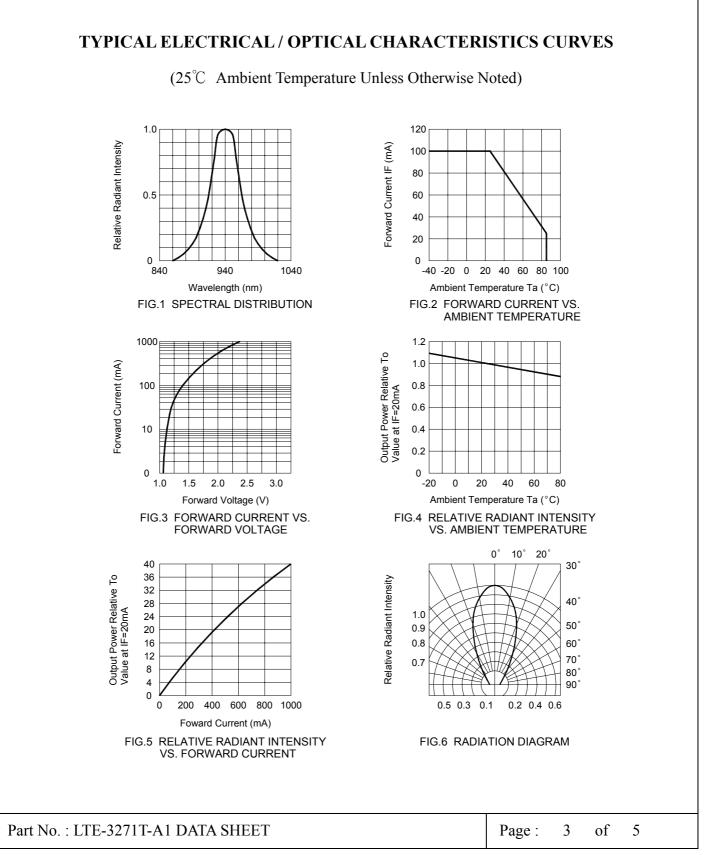
## ELECTRICAL / OPTICAL CHARACTERISTICS AT TA=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Aperture Radiant Incidence	Ee	0.80	1.4		mW/cm <sup>2</sup>	$I_F = 20 m A$
Radiant Intensity	I <sub>E</sub>	30			mW/sr	$I_F = 100 \text{mA}$
Radiant Intensity	I <sub>E</sub>	6	10.5		mW/sr	$I_F = 20 m A$
Peak Emission Wavelength	λp		940		nm	$I_F = 20 m A$
Spectral Line Half-Width	Δλ		50		nm	$I_F = 20 m A$
Forward Voltage	V <sub>F</sub>		1.25	1.6	V	$I_F = 50 mA$
Forward Voltage	V <sub>F</sub>		1.65	2.1	V	$I_F = 250 mA$
Forward Voltage	V <sub>F</sub>		2.0	2.4	V	$I_F = 450 \text{mA}$
Reverse Current	I <sub>R</sub>			100	$\mu$ A	$V_R = 5V$
Viewing Angle (See FIG.6)	$2\theta_{1/2}$	20	50		deg.	

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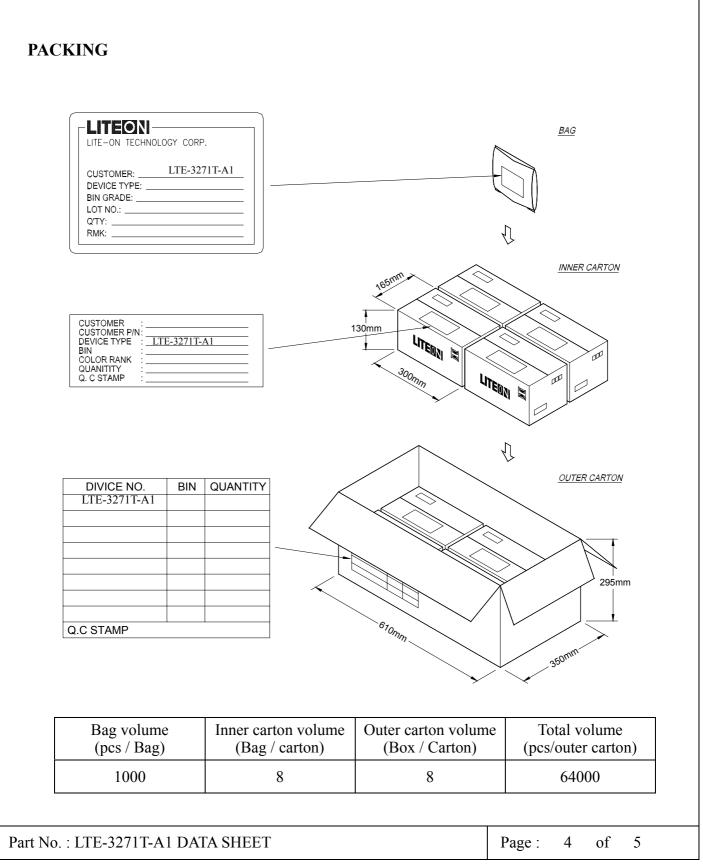


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BNS-OD-C131/A4

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## CAUTIONS

## 1. Application

The LEDs described here are intended to be used for ordinary electronic equipment (such as office equipment, communication equipment and household applications). Consult Liteon's Sales in advance for information on applications in which exceptional reliability is required, particularly when the failure or malfunction of the LEDs may directly jeopardize life or health (such as in aviation, transportation, traffic control equipment, medical and life support systems and safety devices).

## 2. Storage

The storage ambient for the LEDs should not exceed 30°C temperature or 70% relative humidity.

It is recommended that LEDs out of their original packaging are used within three months. For extended storage out of their original packaging, it is recommended that the LEDs be stored in a sealed container with appropriate desiccant or in desiccators with nitrogen ambient.

## 3. Cleaning

Use alcohol-based cleaning solvents such as isopropyl alcohol to clean the LEDs if necessary.

## 4. Lead Forming & Assembly

During lead forming, the leads should be bent at a point at least 3mm from the base of LED lens.

Do not use the base of the lead frame as a fulcrum during forming.

Lead forming must be done before soldering, at normal temperature.

During assembly on PCB, use minimum clinch force possible to avoid excessive mechanical stress.

## 5. Soldering

When soldering, leave a minimum of 2mm clearance from the base of the lens to the soldering point. Dipping the lens into the solder must be avoided.

Do not apply any external stress to the lead frame during soldering while the LED is at high temperature.

Recommended soldering conditions :

Soldering iron		Wave soldering		
Temperature Soldering time	320°C Max. 3 sec. Max. (one time only)	Pre-heat Pre-heat time Solder wave Soldering time	100°C Max. 60 sec. Max. 260°C Max. 5 sec. Max.	

Note: Excessive soldering temperature and/or time might result in deformation of the LED lens or catastrophic failure of the LED

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