



**Spec No.: DS-20-98-0280** Effective Date: 07/06/2000

Revision: -

**LITE-ON DCC** 

**RELEASE** 

BNS-OD-FC001/A4

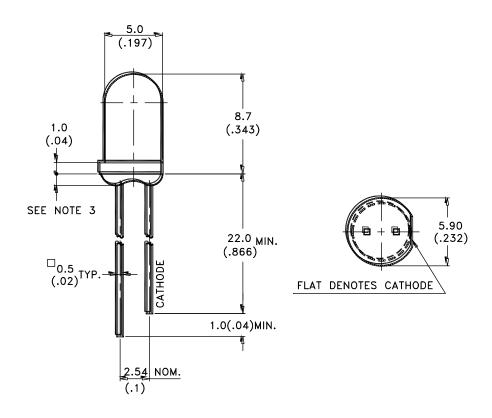
# LITEON LITE-ON ELECTRONICS, INC.

Property of Lite-On Only

### **Features**

- \* High luminous intensity output.
- \* Low power consumption.
- \* High efficiency.
- \* Versatile mounting on P.C. board or panel.
- \* I.C. Compatible/low current requirements.
- \* Popular T-13/4 diameter.

### **Package Dimensions**



Part No.	Lens	Source Color		
LTL2H3KEK	Water Clear	AlInGaP Red		

#### 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 1.0mm(.04") max.
- 4. Lead spacing is measured where the leads emerge from the package.
- 5. Specifications are subject to change without notice.

Part No.: LTL2H3KEK	Page:	1	of	4		
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# Absolute Maximum Ratings at TA=25℃

Parameter	Maximum Rating	Unit	
Power Dissipation	75	mW	
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	90	mA	
Continuous Forward Current	30	mA	
Derating Linear From 50°C	0.4	mA/°C	
Reverse Voltage	5	V	
Operating Temperature Range	-40°C to + 100°C		
Storage Temperature Range	-55°C to + 100°C		
Lead Soldering Temperature [1.6mm(.063") From Body]	260°C for 5 Seconds		

Part No.: LTL2H3KEK Page: 2 of 4



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## Electrical / Optical Characteristics at TA=25°C

Parameter	Symbol	Min.	Тур.	Max.	Unit	Test Condition
Luminous Intensity	Iv	560	1700		mcd	I <sub>F</sub> = 20mA Note 1
Viewing Angle	2 heta 1/2		15		deg	Note 2 (Fig.5)
Peak Emission Wavelength	λР		632		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λd		624		nm	Note 4
Spectral Line Half-Width	Δλ		20		nm	
Forward Voltage	$V_{\mathrm{F}}$		2.05	2.4	V	$I_F = 20 \text{mA}$
Reverse Current	$I_{ m R}$			100	$\mu$ A	$V_R = 5V$
Capacitance	С		40		pF	$V_F = 0$ , $f = 1MHz$

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. Iv classification code is marked on each packing bag.
- 4. 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.: LTL2H3KEK Page: of 4 Property of Lite-On Only

## **Typical Electrical / Optical Characteristics Curves**

(25°C Ambient Temperature Unless Otherwise Noted)

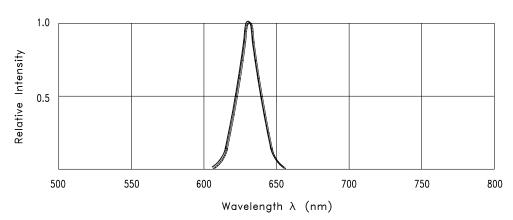
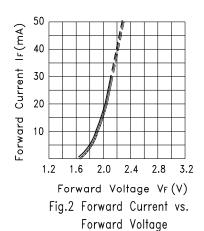
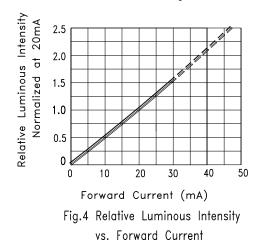
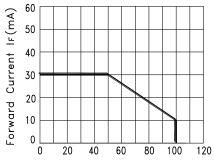


Fig.1 Relative Intensity vs. Wavelength







Ambient Temperature TA(°C) Fig.3 Forward Current Derating Curve

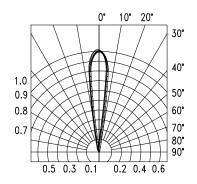


Fig.5 Spatial Distribution

Part No.: LTL2H3KEK Page: of 4