



Spec No.: DS-20-98-0064Effective Date: 07/06/2000

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

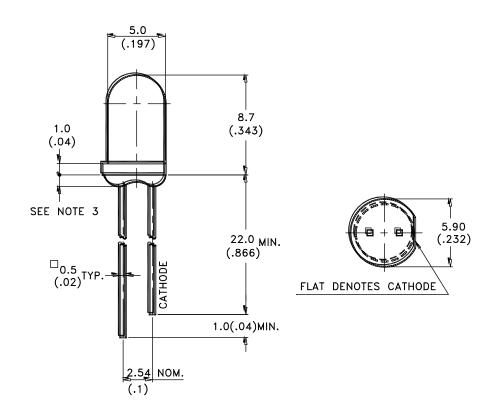
LITEON LITE-ON ELECTRONICS, INC.

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			
LTL2H3KRK	Water Clear	AlInGaP Super Red			

Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ± 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.: LTL2H3KRK	Page:	1	of	4		
---------------------	-------	---	----	---	--	--

LITEON LITE-ON ELECTRONICS, INC.

Property of Lite-On Only

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.: LTL2H3KRK Page: 2 of 4



LITEON LITE-ON ELECTRONICS, INC.

Property of Lite-On Only

Electrical / Optical Characteristics at TA=25°C

Parameter	Symbol	Min.	Тур.	Max.	Unit	Test Condition	
Luminous Intensity	Iv	560	1300		mcd	I _F = 20mA Note 1	
Viewing Angle	2 \theta 1/2		15		deg	Note 2 (Fig.5)	
Peak Emission Wavelength	λР		639		nm	Measurement @Peak (Fig.1)	
Dominant Wavelength	λd		631		nm	Note 4	
Spectral Line Half-Width	Δλ		20		nm		
Forward Voltage	V_{F}		2.0	2.4	V	$I_F = 20 \text{mA}$	
Reverse Current	$I_{ m R}$			100	μ 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, λ d is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

Part No.: LTL2H3KRK Page: of 4 Property of Lite-On Only

Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

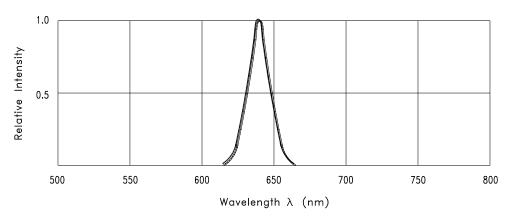
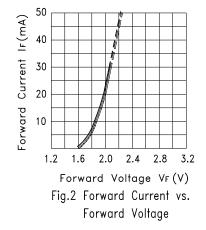


Fig.1 Relative Intensity vs. Wavelength



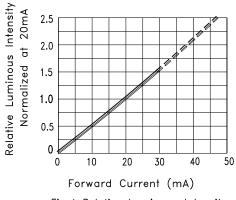
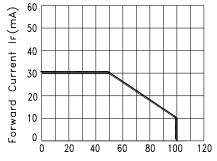


Fig.4 Relative Luminous Intensity vs. Forward Current



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

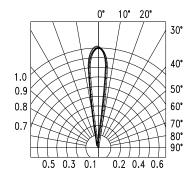


Fig.5 Spatial Distribution

Part No.: LTL2H3KRK Page: of 4