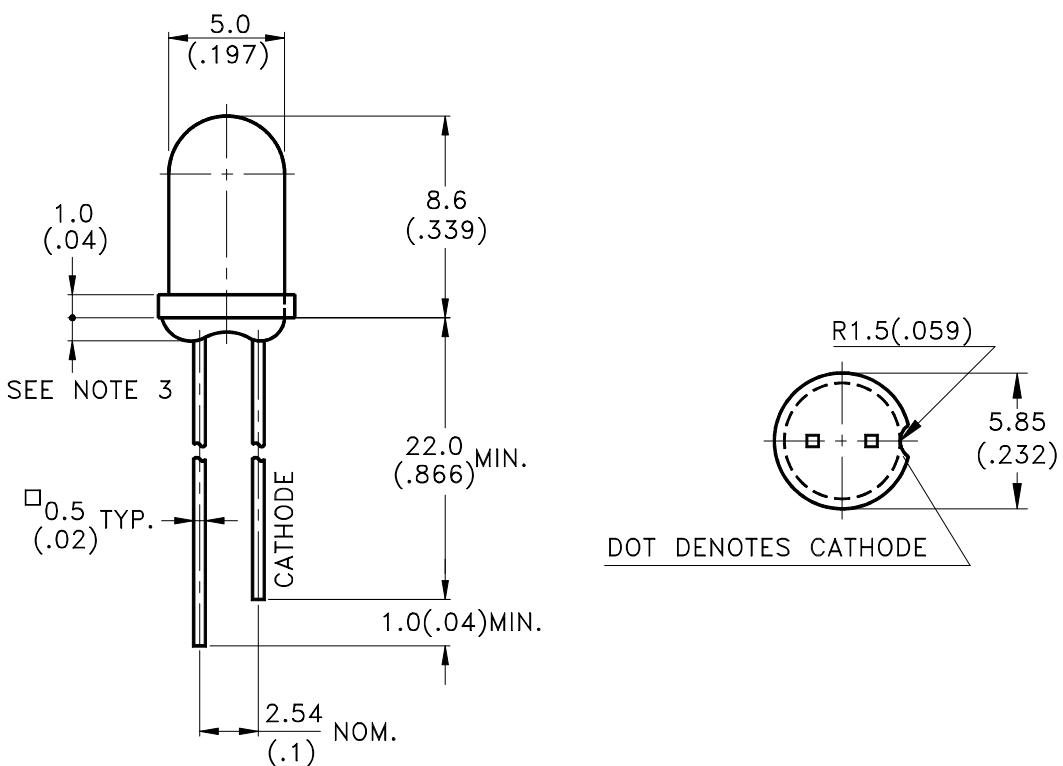


Property of Lite-On Only

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-1 3/4 diameter.

Package Dimensions

Part No.	Lens	Source Color
LTL307VRKNN	Water Clear	AlInGaP Super Red

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25\text{mm} (.010")$ 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.



LITE-ON ELECTRONICS, INC.

Property of Lite-On Only

Absolute Maximum Ratings at TA=25°C

Parameter	Maximum Rating	Unit
Power Dissipation	120	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	130	mA
Continuous Forward Current	50	mA
Derating Linear From 50°C	0.6	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	



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Electrical / Optical Characteristics at TA=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I _V	520	1150		mcd	I _F = 20mA Note 1
Viewing Angle	2θ _{1/2}		40		deg	Note 2 (Fig.5)
Peak Emission Wavelength	λ _P		639		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λ _d		631		nm	Note 4
Spectral Line Half-Width	Δ λ		20		nm	
Forward Voltage	V _F		1.9	2.3	V	I _F = 20mA
Reverse Current	I _R			100	μA	V _R = 5V
Capacitance	C		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. θ_{1/2} is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
3. I_V 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.

Property of Lite-On Only**Typical Electrical / Optical Characteristics Curves**

(25°C Ambient Temperature Unless Otherwise Noted)

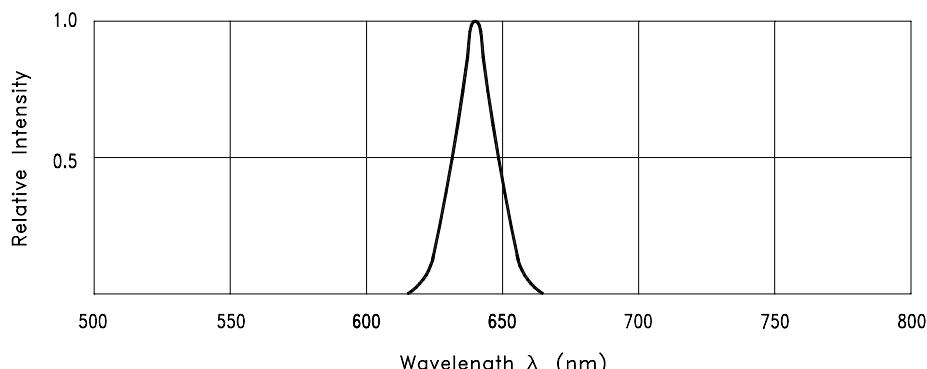


Fig.1 Relative Intensity vs. Wavelength

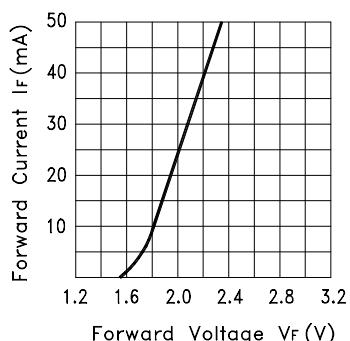
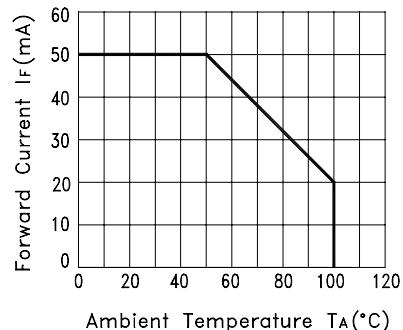
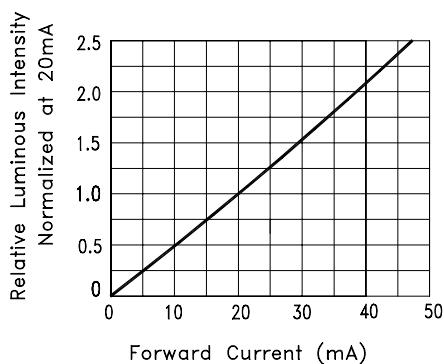
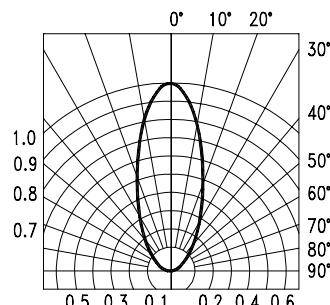
Fig.2 Forward Current vs.
Forward VoltageFig.3 Forward Current
Derating CurveFig.4 Relative Luminous Intensity
vs. Forward Current

Fig.5 Spatial Distribution

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