



L I T E - O N E L E C T R O N I C S , I N C .

Property of Lite-On Only

Absolute Maximum Ratings At $T_a=25^{\circ}\text{C}$

Parameter	Green	Yellow	Unit
Power Dissipation	100	60	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	120	80	mA
Continuous Forward Current	30	20	mA
Derating Linear From 50°C	0.4	0.25	mA/ $^{\circ}\text{C}$
Reverse Voltage	5	5	V
Operating Temperature Range	-55°C to $+100^{\circ}\text{C}$		
Storage Temperature Range	-55°C to $+100^{\circ}\text{C}$		
Lead Soldering Temperature [1.6mm(.063") From Body]	260°C for 5 Seconds		

Electrical Optical Characteristics At Ta=25°C

Parameter	Symbol	LTL-30EDKPHA	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I _v	Green Yellow	29 19	90 60		mcd	I _F = 20 mA Note 1,4
Viewing Angle	2 $\theta_{1/2}$	Green Yellow		20 20		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λ_p	Green Yellow		565 585		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λ_d	Green Yellow		569 588		nm	Note 3
Spectral Line Half-Width	$\Delta \lambda$	Green Yellow		30 35		nm	
Forward Voltage	V _F	Green Yellow		2.1 2.1	2.6 2.6	V	I _F = 20 mA
Reverse Current	I _R	Green Yellow			100 100	μ A	V _R = 5V
Capacitance	C	Green Yellow		35 15		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. 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. I_v needs $\pm 15\%$ additional for guaranteed limits.

Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

