





**Absolute Maximum Ratings at TA=25°C**

Parameter	Red Orange	Green	Unit
Power Dissipation	100	100	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	120	120	mA
Continuous Forward Current	30	30	mA
Derating Linear From 50°C	0.4	0.4	mA/°C
Reverse Voltage	5	5	V
Operating Temperature Range	-55°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		

### Electrical Optical Characteristics at T<sub>A</sub>=25°C

Parameter	Symbol	Color	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I <sub>v</sub>	Red Orange Green	12.6 8.7	40 29		mcd	I <sub>F</sub> = 20mA I <sub>F</sub> = 20mA Note 1,4
Viewing Angle	2θ <sub>1/2</sub>	Red Orange Green		30 30		deg	Note 2 (Fig.6)
Peak Emission	λ <sub>p</sub>	Red Orange Green		630 565		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λ <sub>d</sub>	Red Orange Green		621 569		nm	Note 3
Spectral Line Half-Width	Δλ	Red Orange Green		40 30		nm	
Forward Voltage	V <sub>F</sub>	Red Orange Green		2.0 2.1	2.6 2.6	V	I <sub>F</sub> = 20mA
Reverse Current	I <sub>R</sub>	Red Orange Green			100	μA	V <sub>R</sub> = 5V
Capacitance	C	Red Orange Green		20 35		pF	V <sub>F</sub> = 0, f = 1MHz

Note: 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commission International De L'Eclairage) eye-response curve.

2. θ<sub>1/2</sub> is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

3. The dominant wavelength, λ<sub>d</sub> is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

4. The I<sub>v</sub> guarantee should be added ±15%.

Property of Lite-On Only

## Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

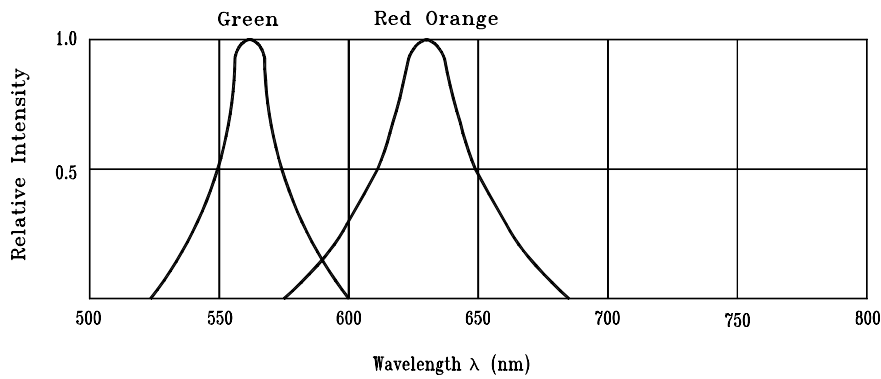


Fig.1 Relative Intensity vs. Wavelength

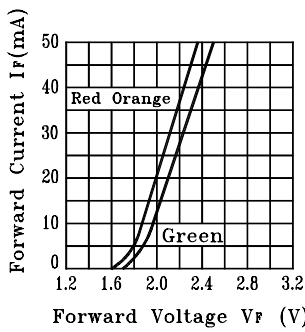


Fig.2 Forward Current vs. Forward Voltage

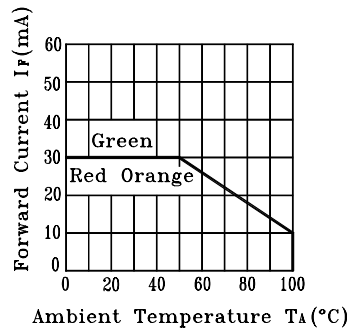


Fig.3 Forward Current Derating Curve

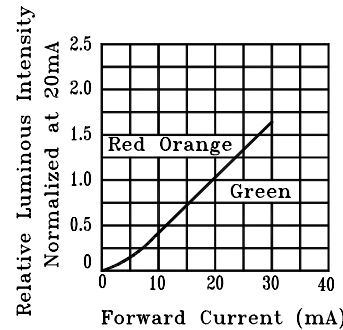


Fig.4 Relative Luminous Intensity vs. Forward Current

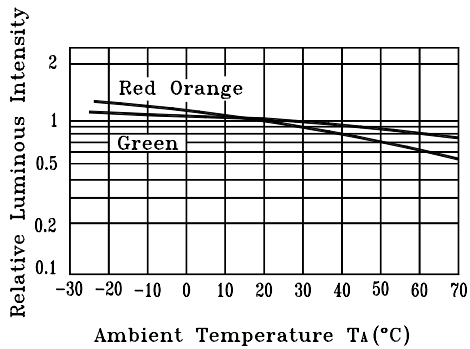


Fig.5 Luminous Intensity vs. Ambient Temperature

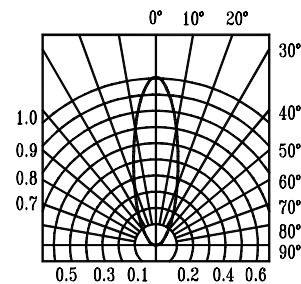


Fig.6 Spatial Distribution