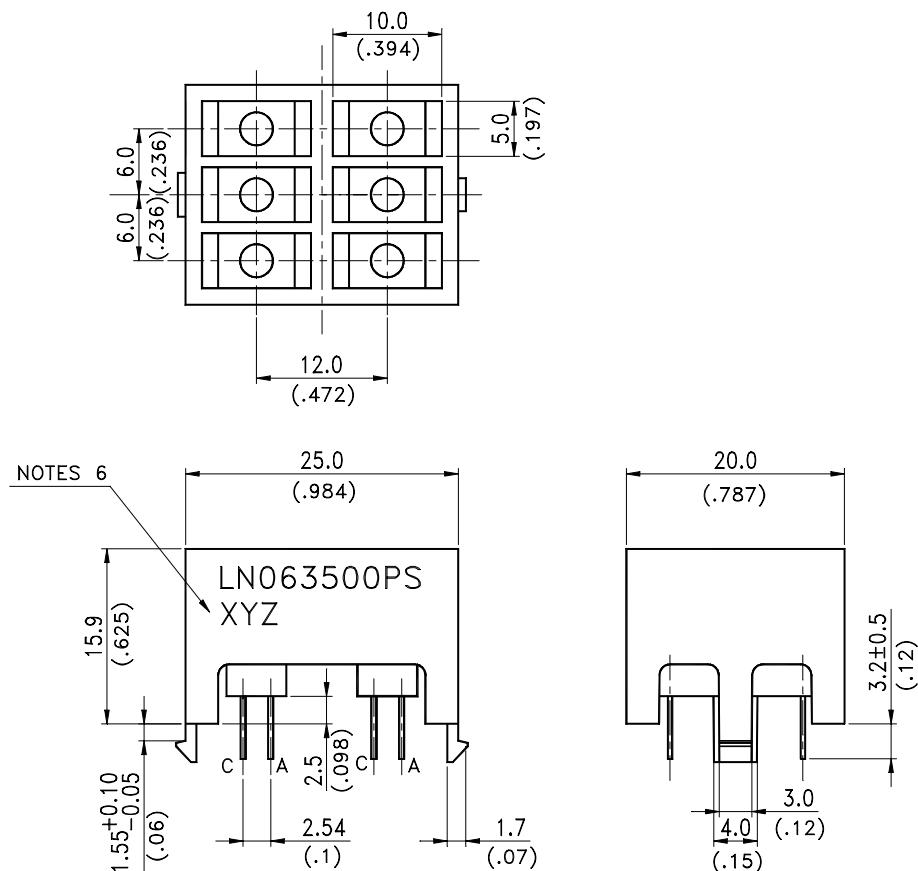


**Features**

- \* Designed for ease in circuit board assembly.
- \* Solid state light source.
- \* Reliable and rugged.

**Package Dimensions**

Part No.	Lens	Source Color
LTL-81HGECP1	Green Transparent	Green

**NOTES:**

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25\text{mm} (.010")$  unless otherwise noted.
3. The holder color is white.
4. The holder raw material is ABS.
5. The LED lamps are LTL-81HGECP1.
6. XYZ : Date Code.



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

Parameter	Maximum Rating	Unit
Power Dissipation	100	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	120	mA
Continuous Forward Current	30	mA
Derating Linear From 50°C	0.4	mA/°C
Reverse Voltage	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	



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**Electrical Optical Characteristics at TA=25°C**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I <sub>V</sub>	3.7	12.6		med	I <sub>F</sub> = 20mA Note 1,4
Viewing Angle	2θ <sub>1/2</sub>		130		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λ <sub>p</sub>		565		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λ <sub>d</sub>		569		nm	Note 3
Spectral Line Half-Width	Δ λ		30		nm	
Forward Voltage	V <sub>F</sub>		2.1	2.6	V	I <sub>F</sub> = 20mA
Reverse Current	I <sub>R</sub>			100	μA	V <sub>R</sub> = 5V
Capacitance	C		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 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. I<sub>V</sub> needs ±15% additionary for guaranteed limits.

## Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

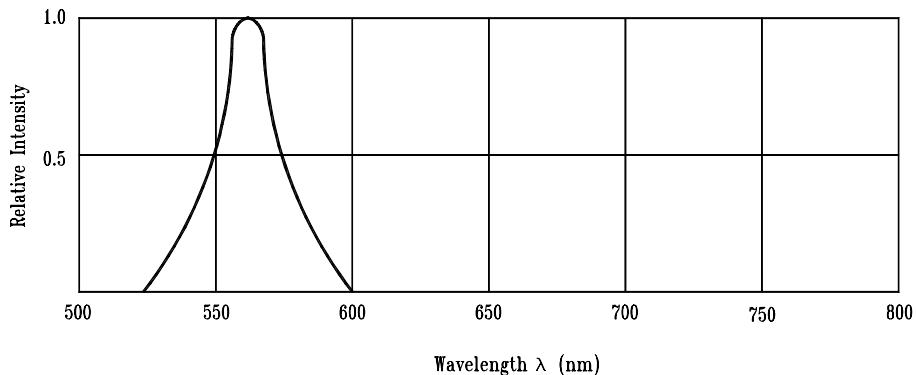


Fig.1 Relative Intensity vs. Wavelength

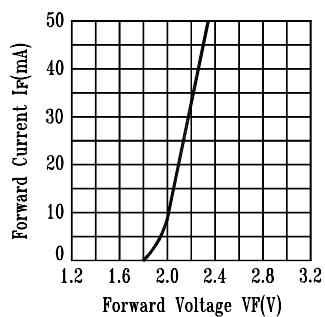


Fig.2 Forward Current vs.  
Forward Voltage

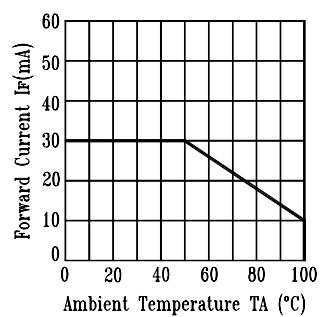


Fig.3 Forward Current  
Derating Curve

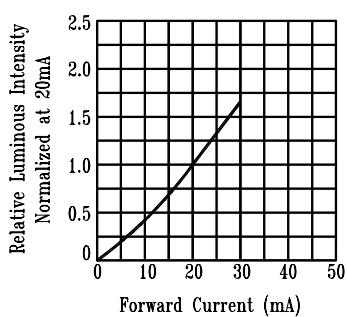


Fig.4 Relative Luminous Intensity  
vs. Forward Current

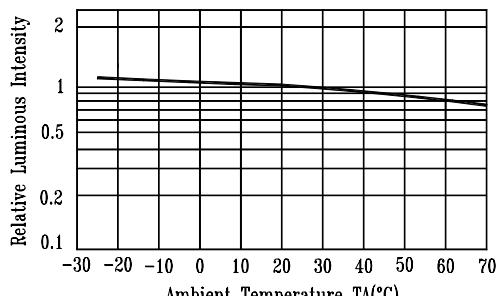


Fig.5 Luminous Intensity vs.  
Ambient Temperature

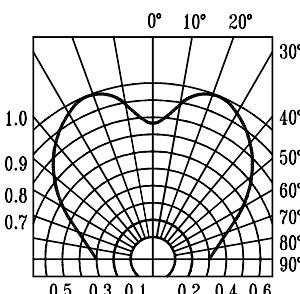


Fig.6 Spatial Distribution