## FEATURES

∗RECTANGULAR LIGHT BAR.
∗LARGE, BRIGHT, UNIFORM LIGHT EMITTING AREAS.
∗LOW POWER REQUIREMENT.
∗EXCELLENT ON-OFF CONTRAST.
∗CAN BE USED WITH PANEL AND LEGEND MOUNT.
∗CATEGORIZED FOR LIGHT OUTPUT.

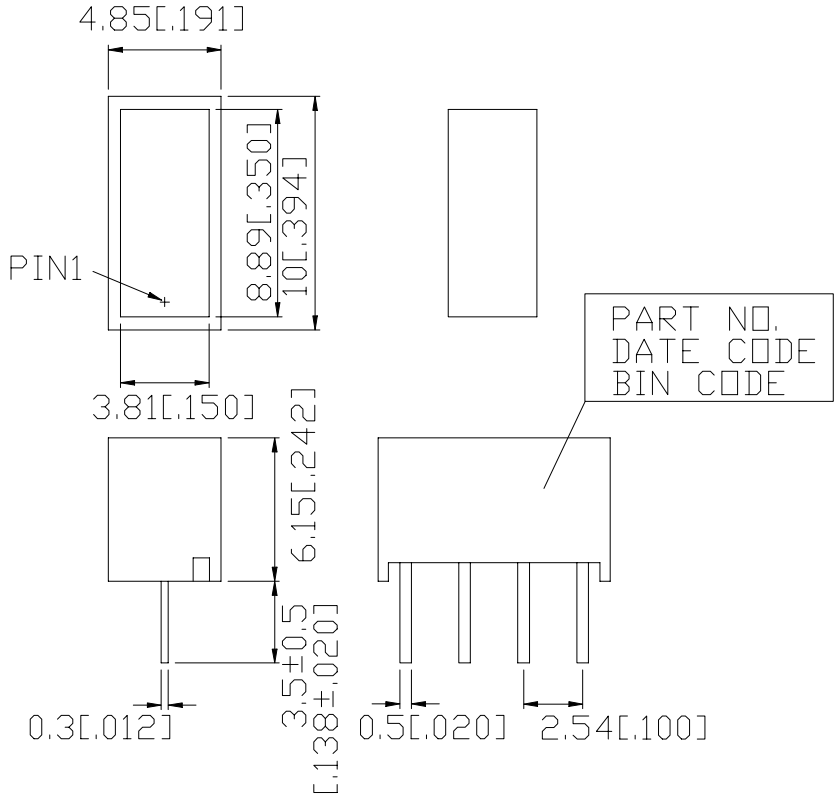
## DESCRIPTION

The LTL-2500G-K1 is a rectangular light sources designed for a variety of applications where a large bright source of light is required. The device utilizes green LED chips, which are made from GaP on a transparent GaP substrate,and has white bar.

## DEVICE

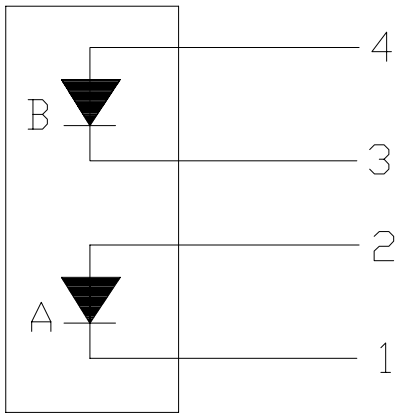
| PART NO. | DESCRIPTION |
|---|---|
| GREEN | Universal Rectangular Bar |
| LTL-2500G-K1 | |

## PACKAGE DIMENSIONS




NOTES: All dimensions are in millimeters. Tolerance is ±0.25 mm (0.01") unless otherwise noted.

## INTERNAL CIRCUIT DIAGRAM



## PIN CONNECTION

| No | CONNECTION |
|---|---|
| 1 | CATHODE A |
| 2 | ANODE A |
| 3 | CATHODE B |
| 4 | ANODE B |

## ABSOLUTE MAXIMUM RATING AT Ta=25°C

| PARAMETER | MAXIMUM RATING | UNIT |
|---|---|---|
| Power Dissipation Per Chip | 75 | mW |
| Peak Forward Current Per Chip<br>( 1/10 Duty Cycle, 0.1ms Pulse Width ) | 100 | mA |
| Continuous Forward Current Per Chip<br>Derating Linear From 25℃ Per Chip | 25<br>0.33 | mA<br>mA/℃ |
| Reverse Voltage Per Chip | 5 | V |
| Operating Temperature Range | -35℃ to +85℃ | |
| Storage Temperature Range | -35℃ to +85℃ | |
| Solder Temperature: max 260℃ for max 3sec at 1.6mm below seating plane. | | |

## ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

| PARAMETER | SYMBOL | MIN. | TYP. | MAX. | UNIT | TEST CONDITION |
|---|---|---|---|---|---|---|
| Average Luminous Intensity | $I_V$ | 1400 | 4200 | | μcd | $I_F$=10mA |
| Peak Emission Wavelength | λP | | 565 | | nm | $I_F$=20mA |
| Spectral Line Half-Width | Δλ | | 30 | | nm | $I_F$=20mA |
| Dominant Wavelength | λd | | 569 | | nm | $I_F$=20mA |
| Forward Voltage, and Chip | $V_F$ | | 2.1 | 2.6 | V | $I_F$=20MA |
| Reverse Current, and Chip | $I_R$ | | | 100 | μA | $V_R$=5V |
| Luminous Intensity Matching Ratio | Iv-m | | | 2:1 | | $I_F$=10MA |

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

## TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted )

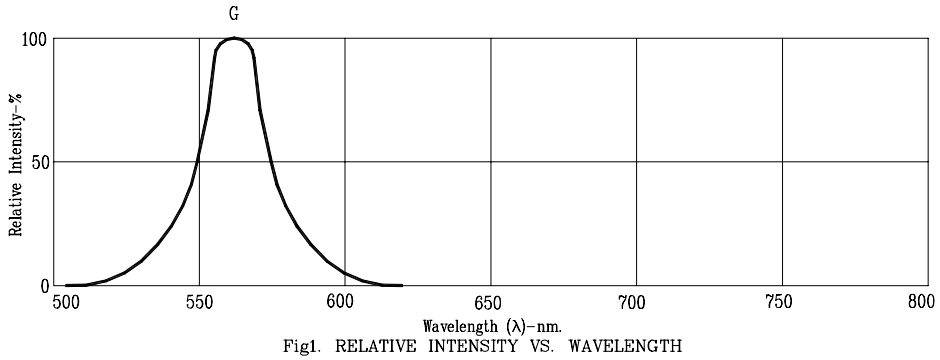


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

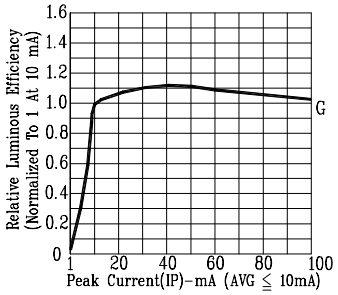


Fig2. RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT (REFRESH RATE 1KHz)

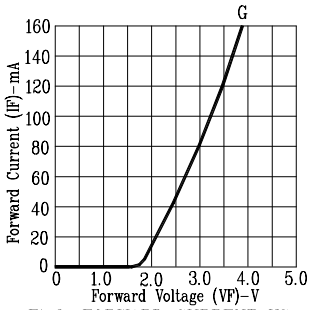


Fig3. FORWARD CURRENT VS. FORWARD VOLTAGE

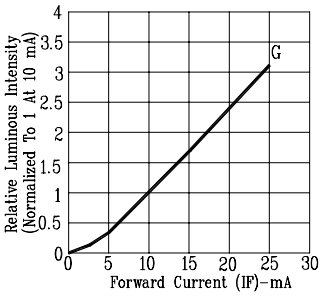


Fig4. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

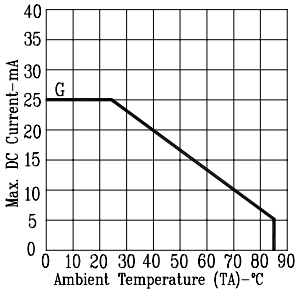


Fig5. MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE.

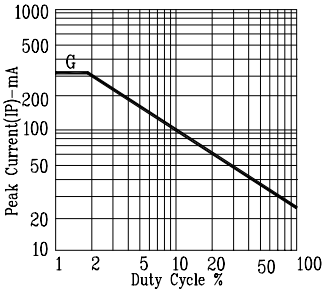


Fig6. MAX. PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE 1KHz)

NOTE: G=GREEN