



Spec No.: DS-30-99-258Effective Date: 03/31/2000

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

LITEON

LITE-ON ELECTRONICS, INC.

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FEATURES

- *LARGE, BRIGHT, UNIFORM LIGHT EMITTING AREAS.
- *LOW POWER REQUIREMENT.
- *EXCELLENT ON-OFF CONTRAST.
- *CAN BE USED WITH PANEL AND LEGEND MOUNT.
- *WIDE VIEWING ANGLE.
- * SOLID STATE RELIABILITY.
- *CATEGORIZED FOR LIGHT OUTPUT.

DESCRIPTION

The LTL-6201KY is a rectangular light source display that is designed for a variety of applications where a large bright source of light is required. This device utilizes AlInGaP amber-yellow LED chips that are made from AlInGaP on a transparent GaAs substrate. It is configured in dual-in-line package and has white bar color.

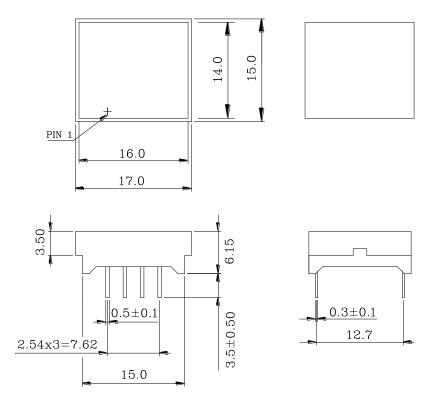
DEVICE

| PART NO. | DESCRIPTION | | |
|----------------------|-----------------|--|--|
| AlInGaP AMBER-YELLOW | Universal | | |
| LTL-6201KY | Rectangular Bar | | |

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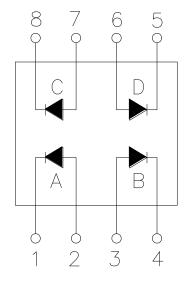
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PACKAGE DIMENSIONS



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

INTERNAL CIRCUIT DIAGRAM



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PIN CONNECTION

| No. | CONNECTION | | | |
|-----|------------|--|--|--|
| 1 | CATHODE A | | | |
| 2 | ANODE A | | | |
| 3 | ANODE B | | | |
| 4 | CATHODE B | | | |
| 5 | CATHODE D | | | |
| 6 | ANODE D | | | |
| 7 | ANODE C | | | |
| 8 | CATHODE C | | | |

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ABSOLUTE MAXIMUM RATING AT Ta=25°C

| PARAMETER | MAXIMUM RATING | UNIT | | | |
|--|----------------|-------|--|--|--|
| Power Dissipation Per Chip | 75 | mW | | | |
| Peak Forward Current Per Chip (1/10 Duty Cycle, 0.1ms Pulse Width) | 100 | mA | | | |
| Continuous Forward Current Per Chip | 25 | mA | | | |
| Derating Linear From 25°C Per Chip | 0.33 | mA/°C | | | |
| Reverse Voltage Per Chip | 5 | V | | | |
| Operating Temperature Range | -35°C to +85°C | | | | |
| Storage Temperature Range | -35°C to +85°C | | | | |
| Solder Temperature: max 260°C for max 3sec at 1.6mm[1/16inch] below seating plane. | | | | | |

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

| PARAMETER | SYMBOL | MIN. | TYP. | MAX. | UNIT | TEST CONDITION |
|------------------------------------|--------|------|------|------|------|----------------------|
| Average Luminous Intensity Per Bar | Iv | 43 | | 109 | mcd | I _F =10mA |
| Peak Emission Wavelength | λр | | 595 | | nm | I _F =20mA |
| Spectral Line Half-Width | Δλ | | 15 | | nm | I _F =20mA |
| Dominant Wavelength | λd | | 592 | | nm | I _F =20mA |
| Forward Voltage, any Chip | VF | | 2.05 | 2.6 | V | I _F =20mA |
| Reverse Current, any Chip | IR | | | 100 | μΑ | V _R =5V |

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

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TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

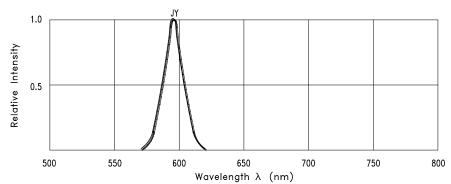
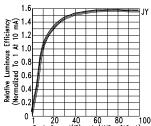


Fig1. Relative Intensity vs. Wavelength



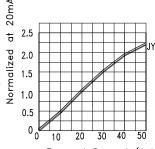
Peak Current(IP)-mA (AVG ≤10mA)

Fig2. RELATIVE LUMINOUS EFFICIENCY

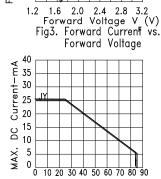
(LUMINOUS INTENSITY PER UNIECURRENT) VS. PEAK CURRENT

(REFRESH RATE 1KHz)

STOUL



Forward Current (mA) Fig4. Relative Luminous Intensity vs. Forward Current



Forward Current IF(mA)

40

30

20

Ambient Temperature (TA)—°C Fig5. MAX. Allowable DC Current VS. Ambient Temperature.

1000 500 WE 200 (a) 100 20 10 1 2 5 10 20 50 100 Duty Cycle %

Fig6. Max. Peak Current vs Duty Cycle % (Refresh Rate 1KHz)

NOTE : JY=AllnGaP Amber Yellow

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