



# **LED Display**

## **Product Data Sheet**

### **LTL-6201KY**

Spec No.: DS-30-99-258

Effective Date: 03/31/2000

Revision: -

**LITE-ON DCC**

**RELEASE**

## **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.

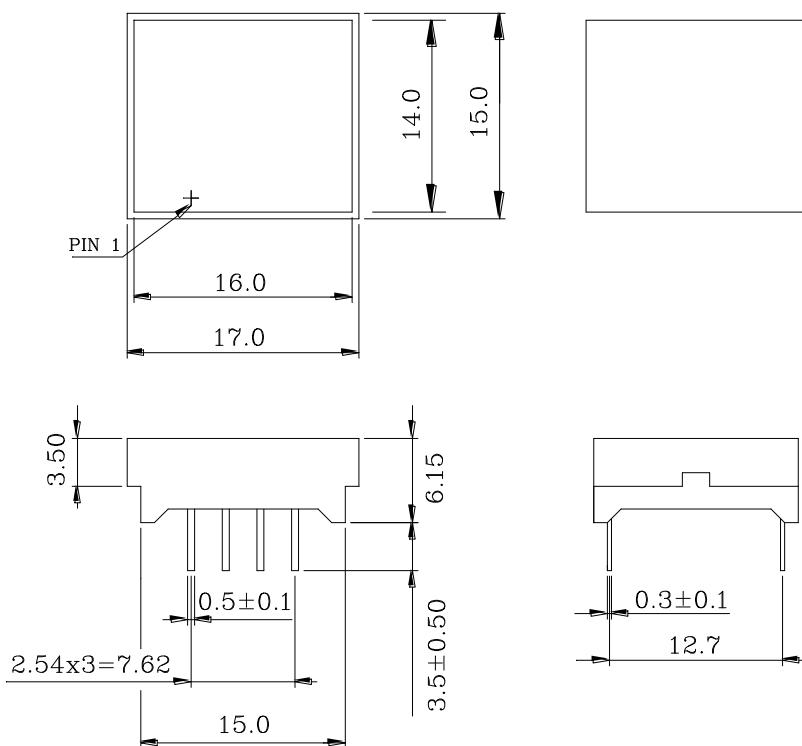
## **DESCRIPTION**

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**

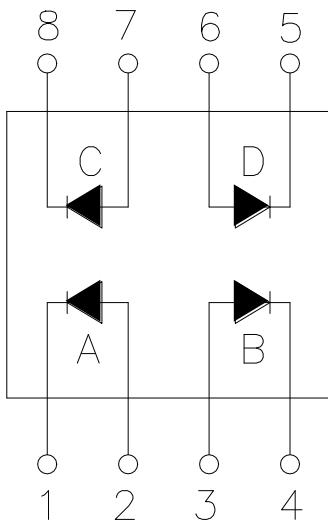
<b>PART NO.</b>	<b>DESCRIPTION</b>
AlInGaP AMBER-YELLOW	Universal
LTL-6201KY	Rectangular Bar

## PACKAGE DIMENSIONS



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

## INTERNAL CIRCUIT DIAGRAM



**PIN CONNECTION**

<b>No.</b>	<b>CONNECTION</b>
1	CATHODE A
2	ANODE A
3	ANODE B
4	CATHODE B
5	CATHODE D
6	ANODE D
7	ANODE C
8	CATHODE C

**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	I <sub>v</sub>	43		109	mcd	I <sub>F</sub> =10mA
Peak Emission Wavelength	λ <sub>p</sub>		595		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		15		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		592		nm	I <sub>F</sub> =20mA
Forward Voltage , any Chip	V <sub>F</sub>		2.05	2.6	V	I <sub>F</sub> =20mA
Reverse Current , any Chip	I <sub>R</sub>			100	μA	V <sub>R</sub> =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.

## TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

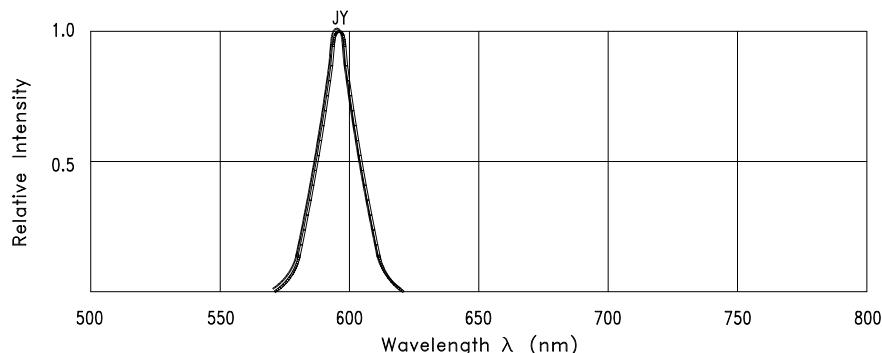


Fig1. Relative Intensity vs. Wavelength

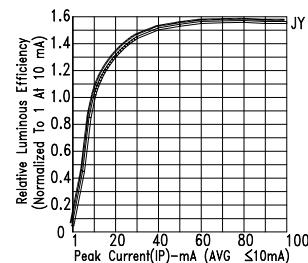


Fig2. RELATIVE LUMINOUS EFFICIENCY  
(LUMINOUS INTENSITY PER UNIT  
CURRENT) VS. PEAK CURRENT  
(REFRESH RATE 1KHz)

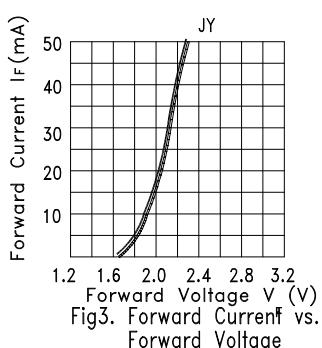


Fig3. Forward Current vs.  
Forward Voltage

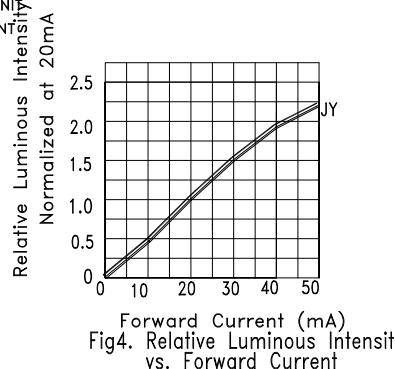


Fig4. Relative Luminous Intensity  
vs. Forward Current

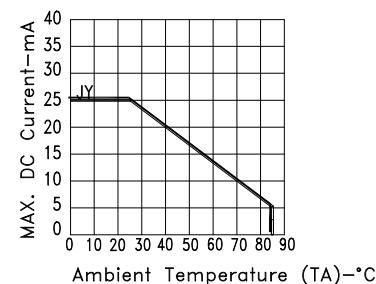


Fig5. MAX. Allowable DC Current  
VS. Ambient Temperature.

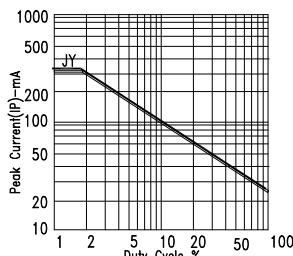


Fig6. Max. Peak Current vs.  
Duty Cycle %  
(Refresh Rate 1KHz)

NOTE : JY=AlInGaP Amber Yellow