

**LED DISPLAY****LTA-1000KG**  
**DATA SHEET**

<b>Rev</b>	<b>Description</b>	<b>By</b>
01	RDR Original Spec	Phanomkorn J. May 20, 2008
-	NPPR Original Spec	Phanomkorn J. May 30, 2008

SPEC. NO. : DS30-2008-0129DATE : May 30, 2008REV. NO. : -PAGE NO. : 0 OF 5

## **FEATURES**

- \* RECTANGULAR LIGHT BAR.
- \* LARGE, BRIGHT, UNIFORM LIGHT EMITTING AREAS.
- \* LOW POWER REQUIREMENT.
- \* HIGH BRIGHTNESS & HIGH CONTRAST.
- \* SOLID STATE RELIABILITY.
- \* CATEGORIZED FOR LUMINOUS INTENSITY.
- \* **LEAD-FREE PACKAGE (ACCORDING TO ROHS)**

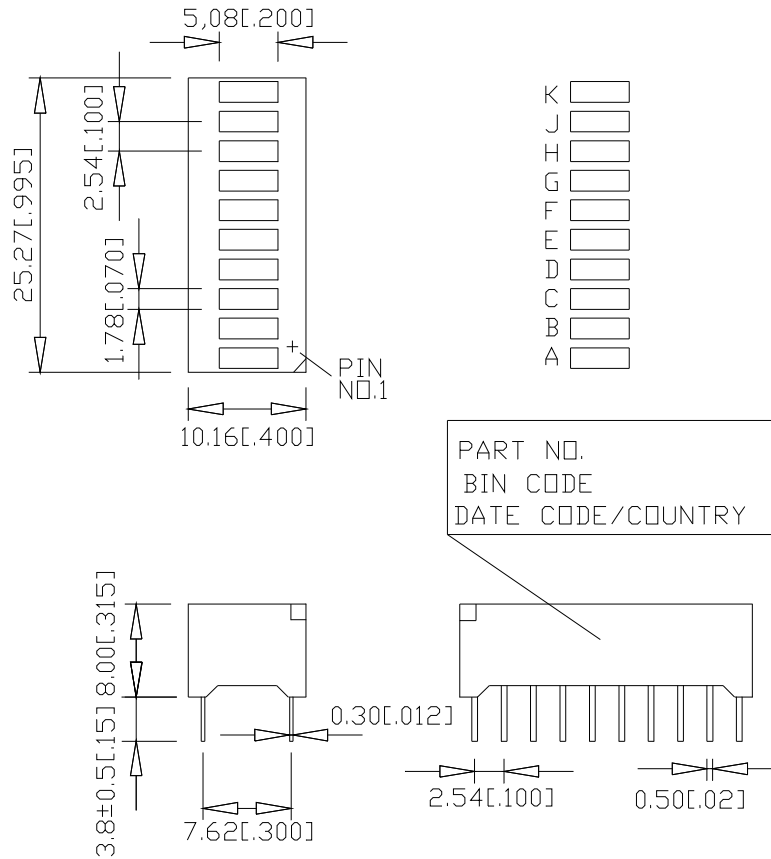
## **DESCRIPTION**

The LTA-1000KG is a ten rectangular light sources array display designed for a variety of applications where a continuously large, bright source of light is required. This device utilizes AlInGaP Green LED chips, which are made from AlInGaP on none-transparent GaAs substrate, and has a gray face and white segments.

## **DEVICE**

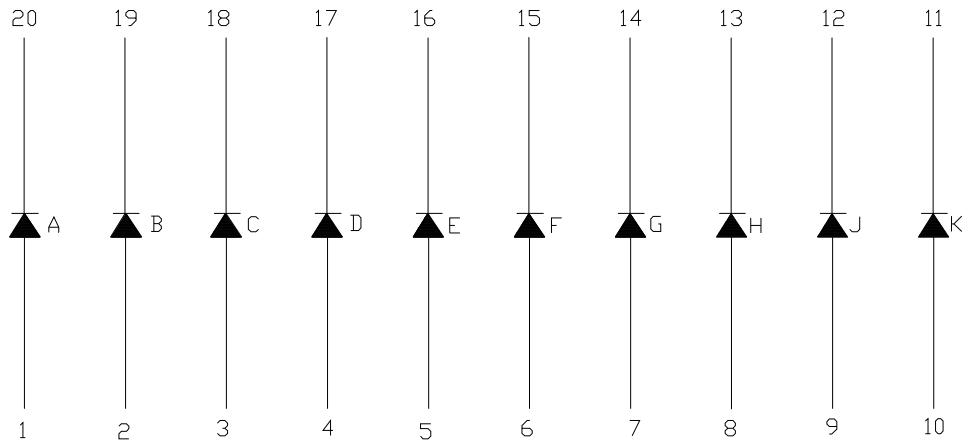
<b>PART NO.</b>	<b>DESCRIPTION</b>
AlInGaP Green	Universal
LTA-1000KG	Ten Rectangular Bar

## PACKAGE DIMENSIONS



- NOTES: 1. All dimensions are in millimeters. Tolerances are  $\pm 0.25$  mm unless otherwise note.  
2. Pin tip's shift tolerance is  $\pm 0.4$  mm.

## INTERNAL CIRCUIT DIAGRAM



**PIN CONNECTION**

<b>No.</b>	<b>CONNECTION</b>
1	ANODE A
2	ANODE B
3	ANODE C
4	ANODE D
5	ANODE E
6	ANODE F
7	ANODE G
8	ANODE H
9	ANODE J
10	ANODE K
11	CATHODE K
12	CATHODE J
13	CATHODE H
14	CATHODE G
15	CATHODE F
16	CATHODE E
17	CATHODE D
18	CATHODE C
19	CATHODE B
20	CATHODE A

## ABSOLUTE MAXIMUM RATING AT Ta=25°C

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	70	mW
Peak Forward Current Per Segment ( 1/10 Duty Cycle, 0.1ms Pulse Width )	60	mA
Continuous Forward Current Per Segment	25	mA
Derating Linear From 25°C Per Segment	0.33	mA/°C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35°C to +105°C	
Storage Temperature Range	-35°C to +105°C	
Soldering Conditions: 1/16 inch below seating plane for 3 seconds at 260 <sup>0</sup> C or of temperature unit (during assembly) not over max. temperature rating above.		

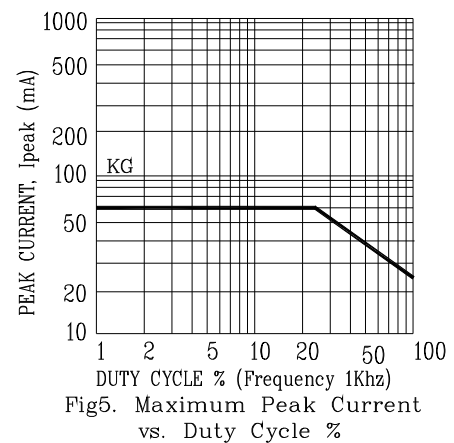
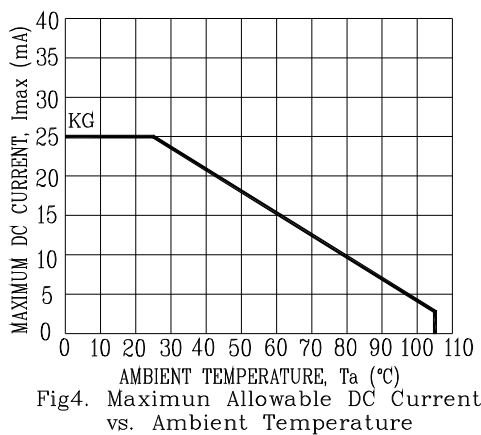
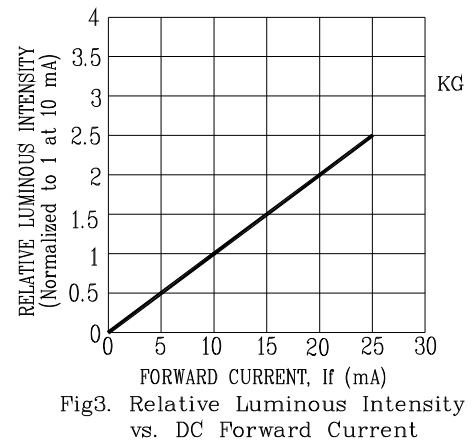
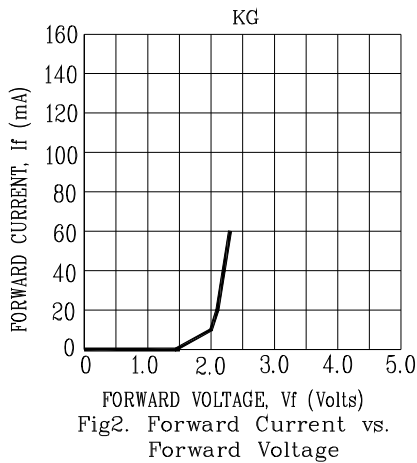
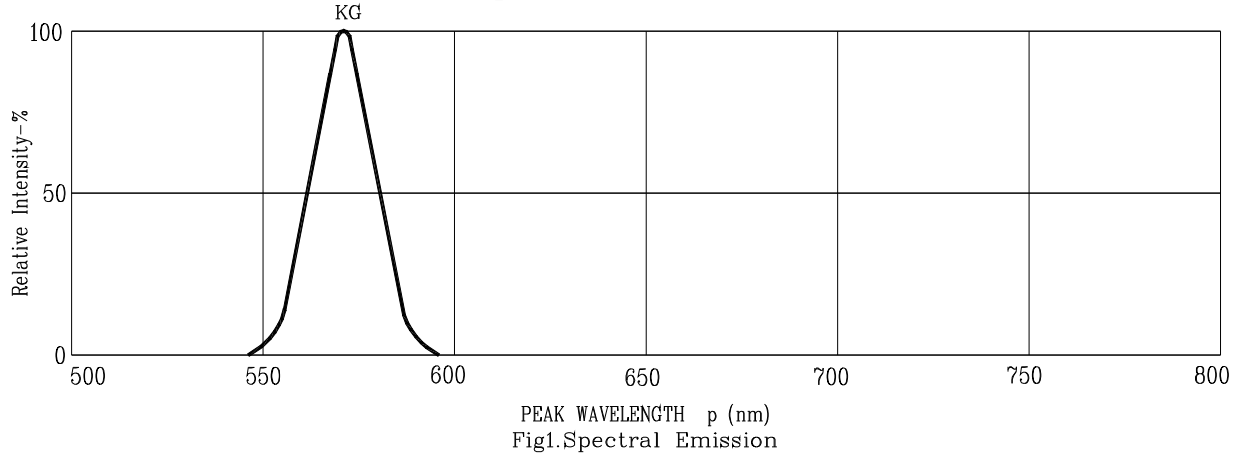
## ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I <sub>v</sub>	200	585		μcd	I <sub>F</sub> =1mA
Peak Emission Wavelength	λ <sub>p</sub>		571		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		15		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		572		nm	I <sub>F</sub> =20mA
Forward Voltage Per Segment	V <sub>F</sub>		2.05	2.6	V	I <sub>F</sub> =20mA
Reverse Current Per Segment	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V
Luminous Intensity Matching Ratio (Similar Light Area)	I <sub>v-m</sub>			2:1		I <sub>F</sub> =1mA

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)



NOTE : KG=AlInGaP Green