LITEON®
OPTOELECTRONICS

LED Display

Product Data Sheet

LTA-1000KR

Spec No.: DS30-2007-0055

Effective Date: 04/10/2007

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

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LED DISPLAY

LTA-1000KR
DATA SHEET

Rev	Description	By
-	Original Spec	Phanomkorn J.

SPEC. NO.: DS30-2007-0055

DATE : 12 March 2007

REV. NO. : -

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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)**

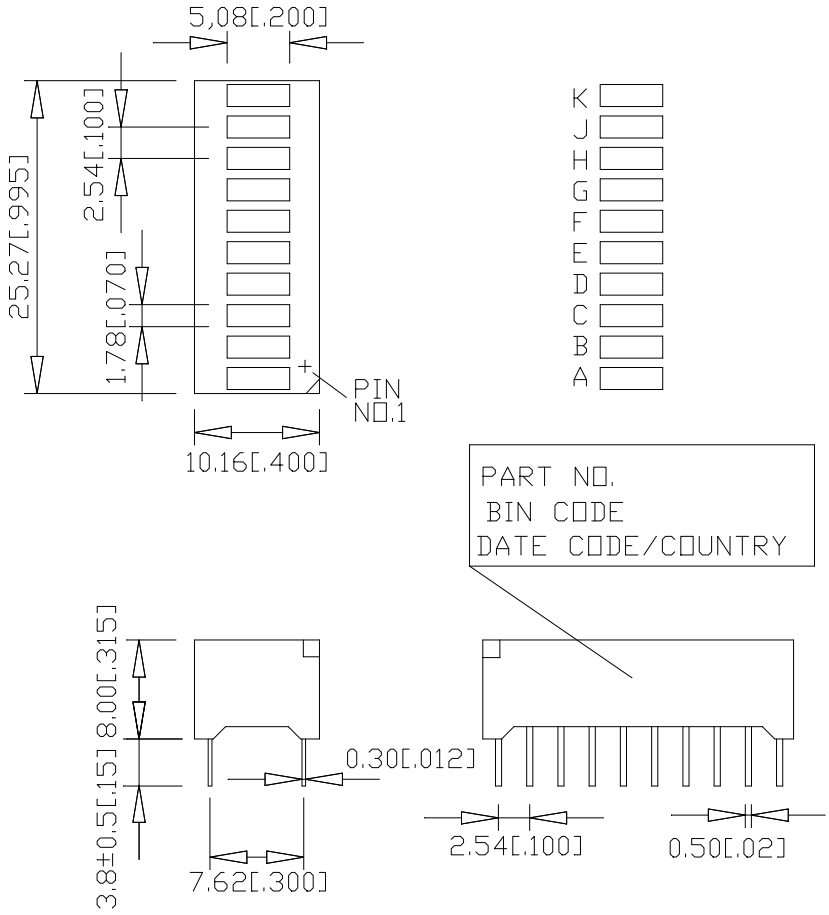
DESCRIPTION

The LTA-1000KR 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 AlIGaP Super Red LED chips, which are made from AlInGaP on none-transparent GaAs substrate, and has a gray face and white segments.

DEVICE

PART NO.	DESCRIPTION
Red Orange	Universal
LTA-1000KR	Ten Rectangular Bar

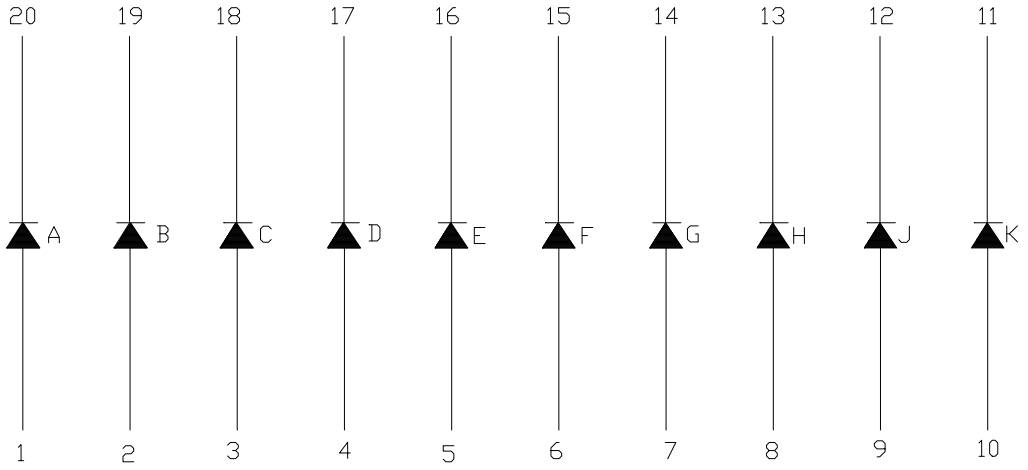
PACKAGE DIMENSIONS



NOTES: 1. All dimensions are in millimeters. Tolerances are ± 0.25 mm unless otherwise note.

2. Pin tip's shift tolerance is ± 0.4 mm.

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

No.	CONNECTION
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)	90	mA
Continuous Forward Current Per Segment Derating Linear From 25℃ Per Segment	25 0.33	mA mA/℃
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35℃ to +105℃	
Storage Temperature Range	-35℃ to +105℃	
Soldering Conditions: 1/16 inch below seating plane for 3 seconds at 260°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_V	200	675		μcd	I_F=1mA
Peak Emission Wavelength	λp		639		nm	I_F=20mA
Spectral Line Half-Width	Δλ		20		nm	I_F=20mA
Dominant Wavelength	λd		631		nm	I_F=20mA
Forward Voltage Per Segment	V_F		2	2.6	V	I_F=20mA
Reverse Current Per Segment	I_R			100	μA	V_R=5V
Luminous Intensity Matching Ratio (Similar Light Area)	I_V-m			2:1		I_F=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)

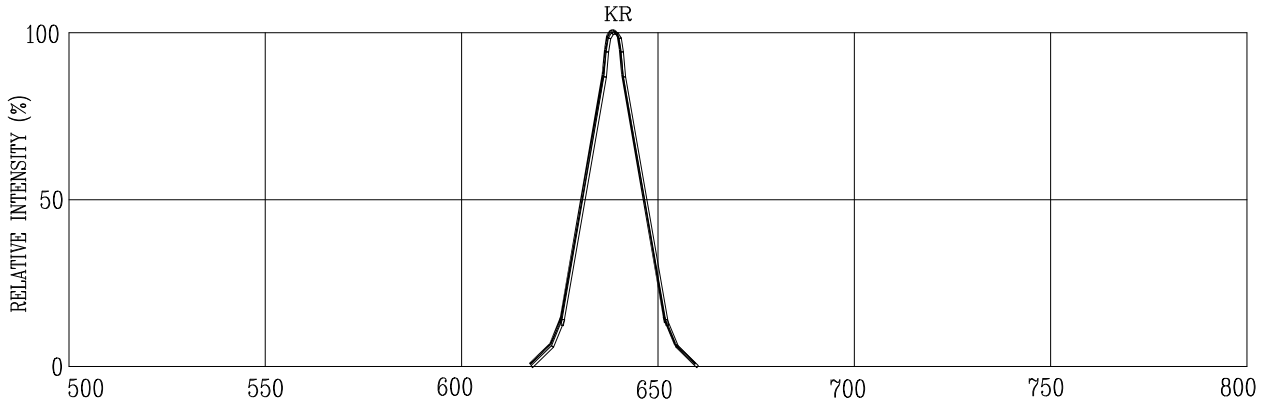


Fig1.Spectral Emission

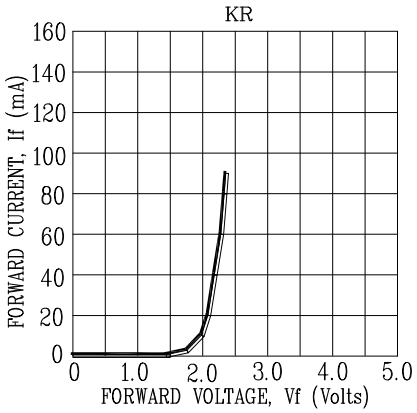


Fig2. Forward Current vs. Forward Voltage

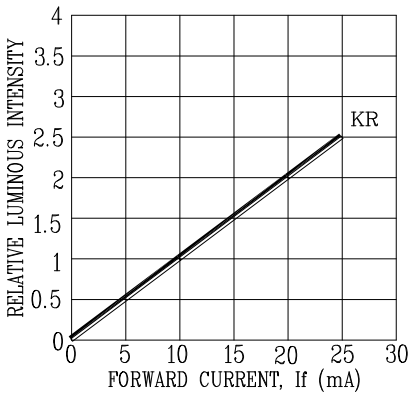


Fig3. Relative Luminous Intensity vs. DC Forward Current

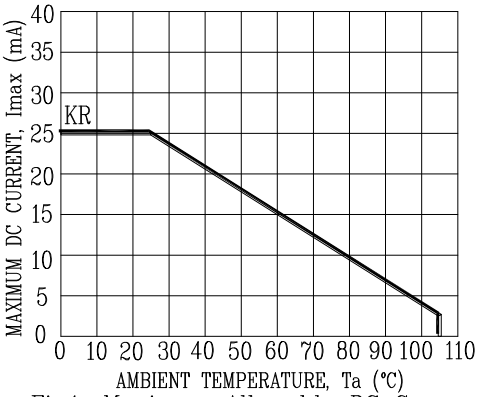


Fig4. Maximun Allowable DC Current vs. Ambient Temperature

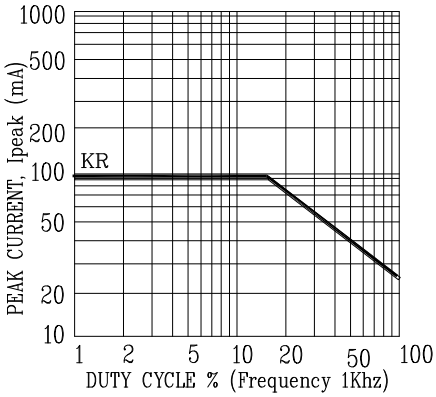


Fig5. Maximum Peak Current vs. Duty Cycle %

NOTE : KR=AlInGaP SUPER RED