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LED DISPLAY

LTA-1000KR DATA SHEET

Rev	<u>Description</u>	<u>By</u>
-	Original Spec	Phanomkorn J.

SPEC. NO.:	DS30-2007-0055		
D A T E :	12 March 2007		
REV. NO.:	-		
PAGE NO.:	0 OF 5		

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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

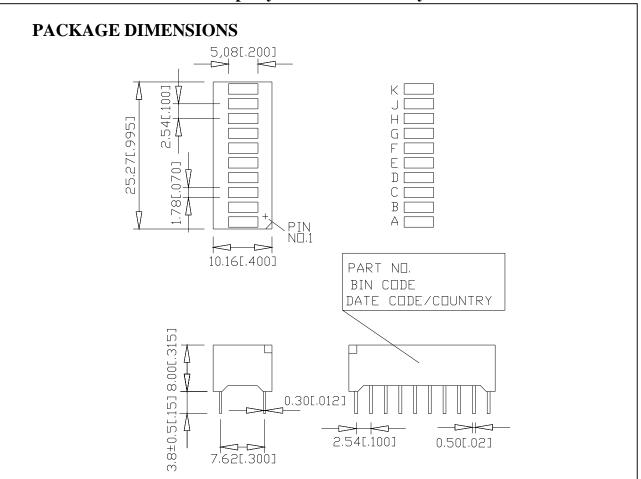
The LTA-1000KR is a ten rectangular light sources array display designed for a variety of applications where a continuously large, bright source of light is required. This device utilizes AllGaP Super Red LED chips, which are made from AlInGaP on none-transparent GaAs substrate, and has a gray face and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

DEVICE

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

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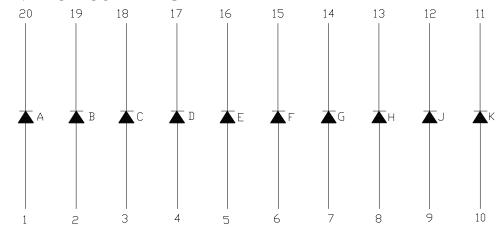
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NOTES: 1. All dimensions are in millimeters. Tolerances are \pm 0.25 mm unless otherwise note.

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

INTERNAL CIRCUIT DIAGRAM



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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

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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	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 $+105^{\circ}$ C		
Storage Temperature Range	-35°C to +105°C		

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	Iv	200	675		μcd	I _F =1mA
Peak Emission Wavelength	λр		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	Ir			100	μΑ	V _R =5V
Luminous Intensity Matching Ratio (Similar Light Area)	Iv-m			2:1		I _F =1mA

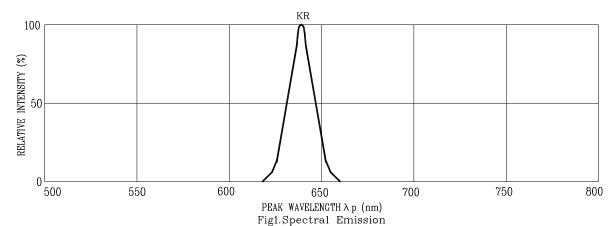
Note: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

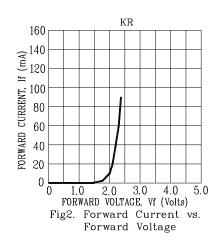
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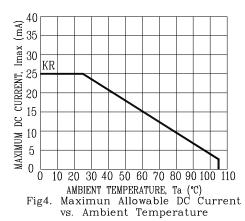
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TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)







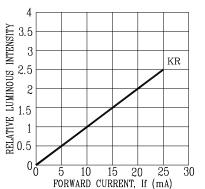
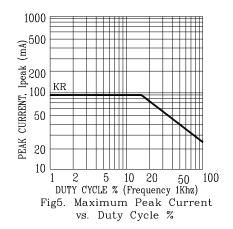


Fig3. Relative Luminous Intensity vs. DC Forward Current



NOTE: KR=AlInGaP SUPER RED

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