

LED DISPLAY

LTA-10102KR

DATA SHEET

Rev	Description	By
01	RDR Original Spec	Phanomkorn J. 24 January 2008
-	NPPR Original Spec	Phanomkorn J. 23 April 2008

SPEC. NO.: DS30-2008-0086

DATE: 23 April 2008

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)

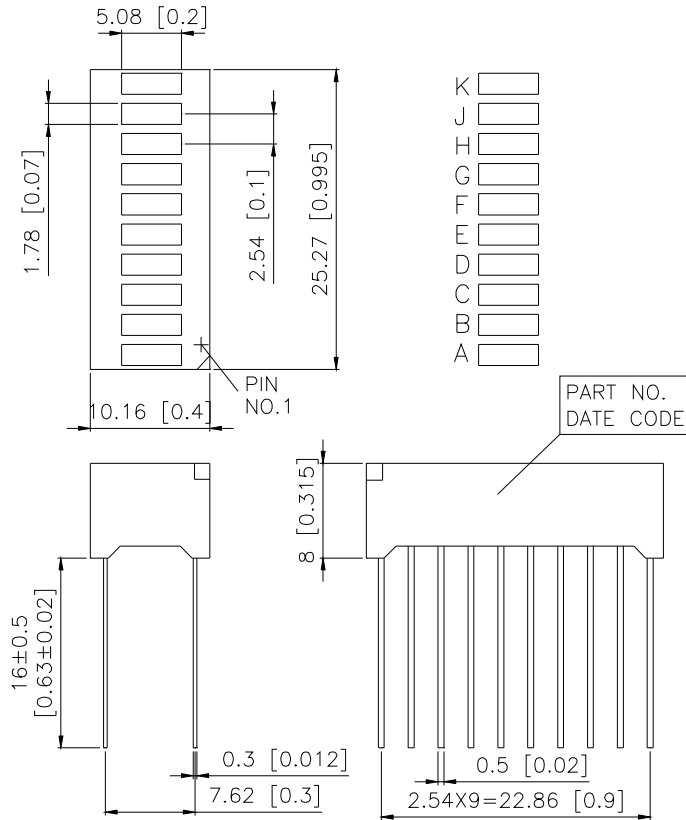
DESCRIPTION

The LTA-10102KR 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 uses AlInGaP Super Red LED chips, which are made from AlInGaP on a non-transparent GaAs substrate. The display has a black face and white segments.

DEVICE

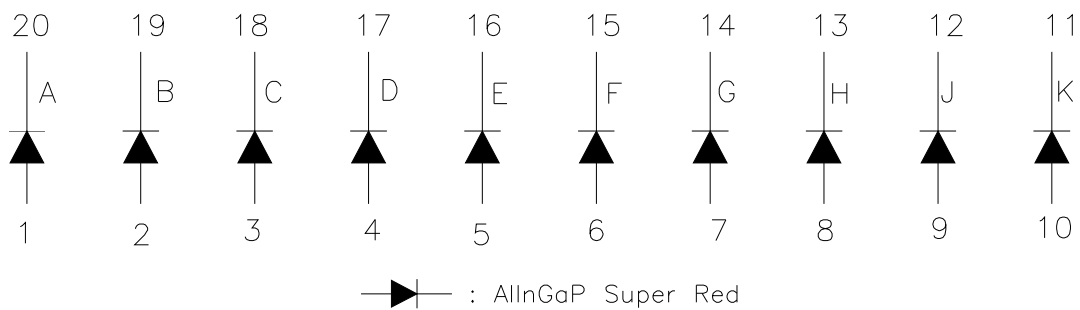
PART NO.	DESCRIPTION
AlInGaP Super Red	Universal
LTA-10102KR	Ten Rectangular Bar

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

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°C	
Storage Temperature Range	-35°C to +105°C	
Soldering Conditions: 1/16 inch below seating plane for 3 seconds at 260 ⁰ C or of temperature unit (during assembly) not over max. temperature rating above.		

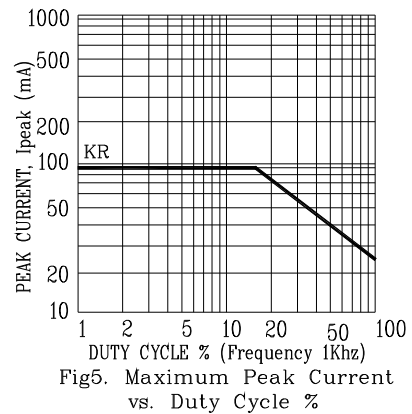
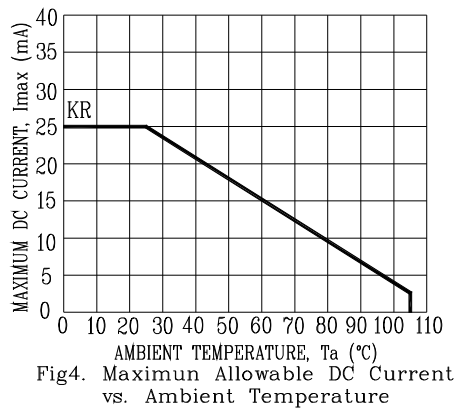
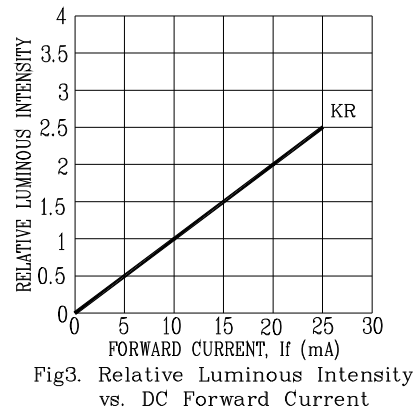
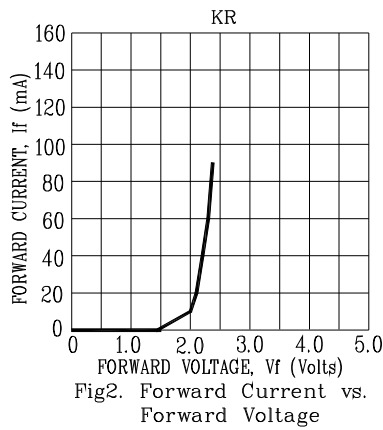
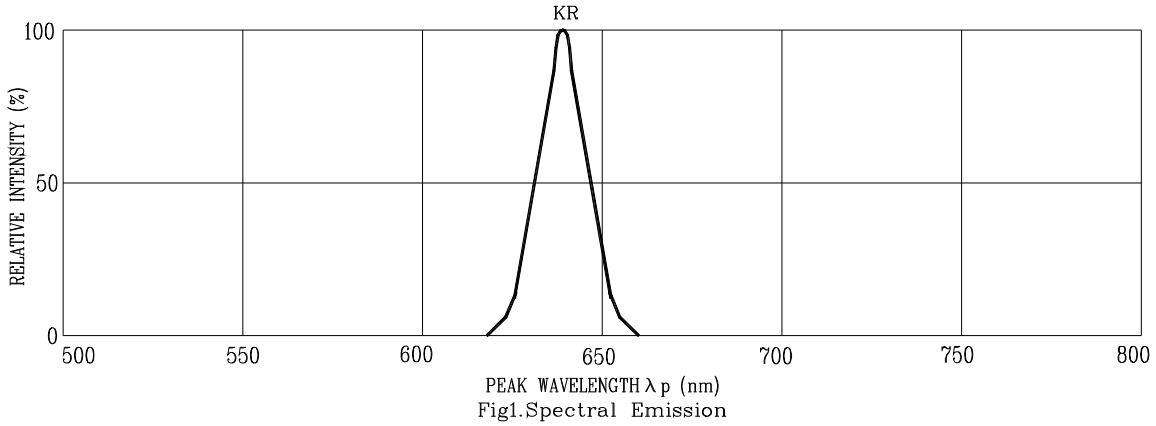
ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITION
Average Luminous Intensity Per Segment	I _v	200	675		μcd	I _F = 1mA
Peak Emission Wavelength	λ _p		639		nm	I _F = 20mA
Spectral Line Half-Width	Δλ		20		nm	I _F = 20mA
Dominant Wavelength	λ _d		631		nm	I _F = 20mA
Forward Voltage Per Segment	V _F		2.0	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)



NOTE : KR=AlInGaP SUPER RED