



LED Display

Product Data Sheet

LTS-4802KR-01J

Spec No.: DS30-2009-0103

Effective Date: 09/26/2009

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

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LED DISPLAY**LTS-4802KR-01J**
DATASHEET

<u>Rev</u>	<u>Description</u>	<u>By</u>
01	ORIGINAL (Refer to contour drawing Revision (-))	<u>KITTISAK</u> <u>Jan 10/2007</u>
02	Add min Iv 3200 on table page 4 of 5	<u>WARIN S.</u> <u>Mar 18.09</u>
03	Add spec packing and Label	<u>KITTISAK</u> <u>Mar 30/2009</u>
04	Add wave soldering process temperature profile on page 5 of 8	<u>KITTISAK</u> <u>May 13/2009</u>
(Above data for PD and Customer tracking only)		
-	NPPR Received and Upload on OPNC	<u>KITTISAK B.</u> <u>July 21/2009</u>

SPEC. NO.: DS30-2009-0103

D A T E : July 21/2009

REV. NO. : -

PAGE NO. : 0 OF 8

FEATURES

- * 0.39 inch (10.0 mm) DIGIT HEIGHT.
- * CONTINUOUS UNIFORM SEGMENTS.
- * LOW POWER REQUIREMENT.
- * EXCELLENT CHARACTERS APPEARANCE.
- * HIGH BRIGHTNESS & HIGH CONTRAST.
- * WIDE VIEWING ANGLE.
- * SOLID STATE RELIABILITY.
- * CATEGORIZED FOR LUMINOUS INTENSITY.
- * **LEAD-FREE PACKAGE (ACCORDING TO ROHS).**

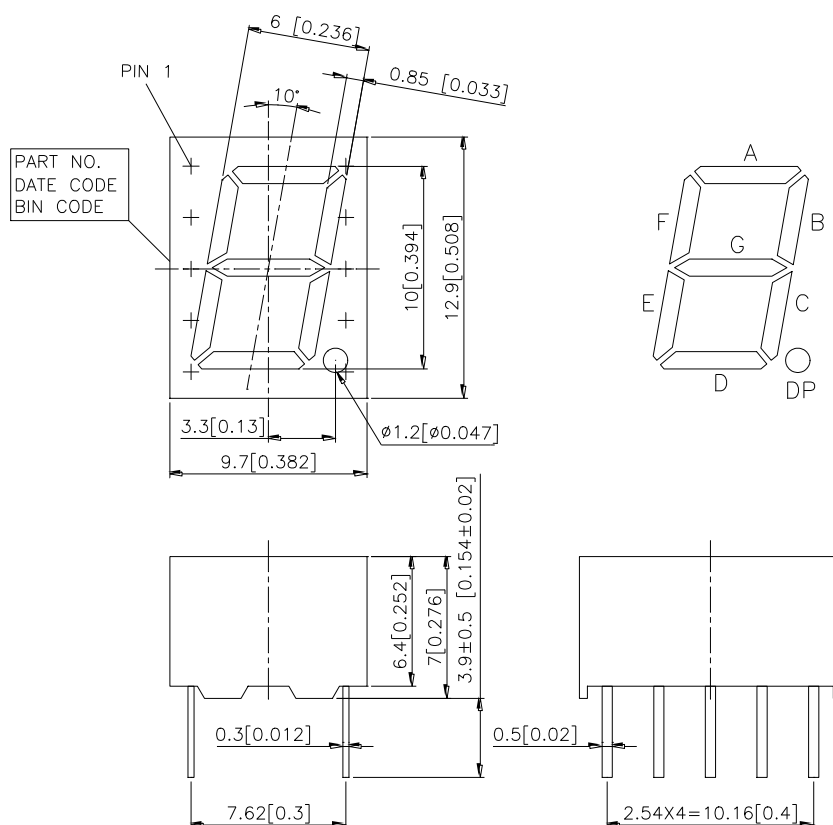
DESCRIPTION

The LTS-4802KR-01J is a 0.39 inch (10.0 mm) digit height single digit seven-segment display. This device uses AS-AlInGaP SUPER RED LED chips (AlInGaP epi on GaAs substrate).The display has a black face and white segments.

DEVICE

PART NO.	DESCRIPTION
AlInGaP Super Red	Common Anode
LTS-4802KR-01J	Rt. Hand Decimal

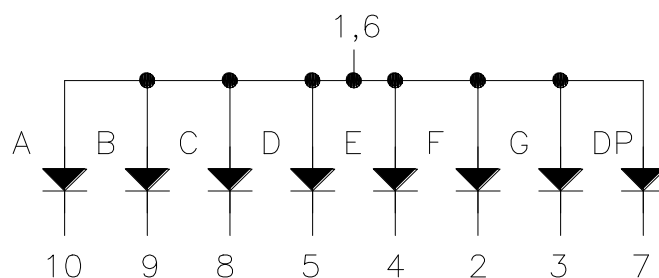
PACKAGE DIMENSIONS



NOTES: 1. All dimensions are in millimeters. Tolerance is ± 0.25 mm (0.01") unless otherwise noted.

2. Pin tip's shift tolerance is ± 0.4 mm.
3. Foreign material on segment ≤ 10 mils
4. Ink contamination (surface) ≤ 20 mils
5. Bending $\leq 1\%$ of reflector length
6. Bubble in segment ≤ 10 mils

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

No.	CONNECTION
1	COMMON ANODE
2	CATHODE F
3	CATHODE G
4	CATHODE E
5	CATHODE D
6	COMMON ANODE
7	CATHODE D.P.
8	CATHODE C
9	CATHODE B
10	CATHODE A

NOTE: PIN 1 & 6 ARE INTERNALLY CONNECTED.

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	0.28	mA/°C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35°C to +105°C	
Storage Temperature Range	-35°C to +105°C	
Solder Temperature: max 260°C for max 3sec at 1.6mm[1/16inch] below seating plane. or temperature of unit (during assembly) not over max. temperature rating above .		

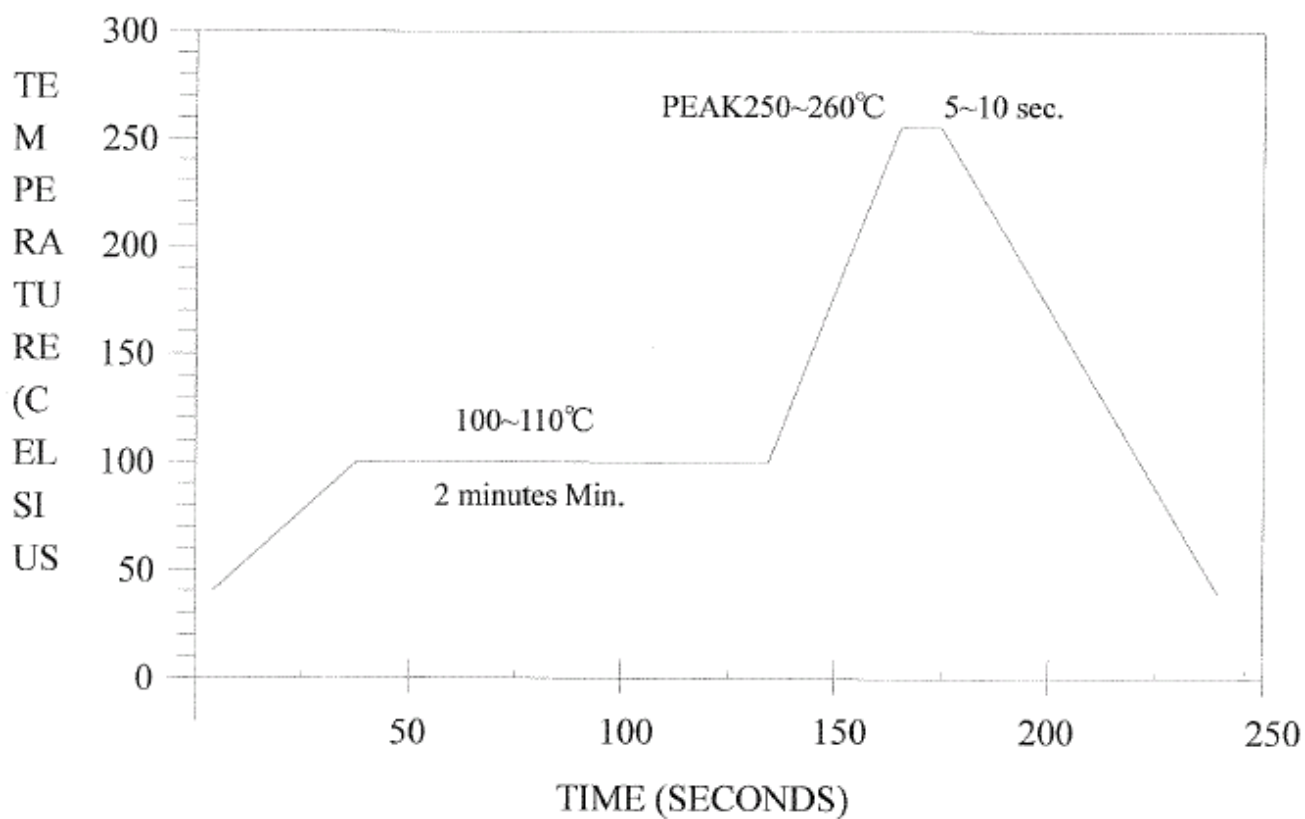
ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I _v	320 3200	975 12675		μcd	I _F =1mA I _F =10mA
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	I _v -m			2:1		I _F =1mA

Note: 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

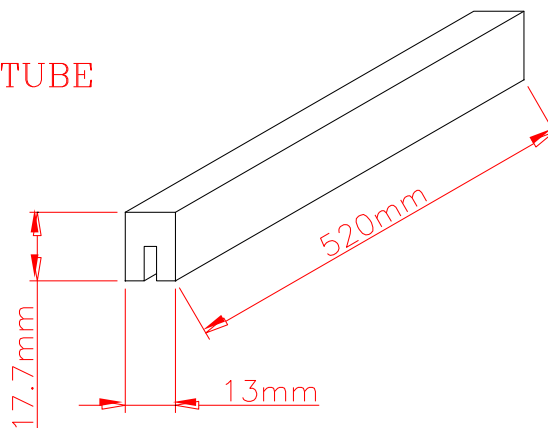
2. Cross talk specification ≅2.5%

WAVE SOLDERING PROCESS TEMPERATURE (Pb Free)

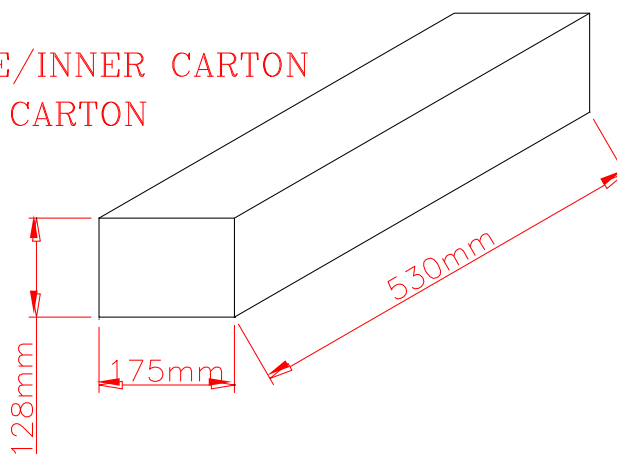


PACKING SPEC

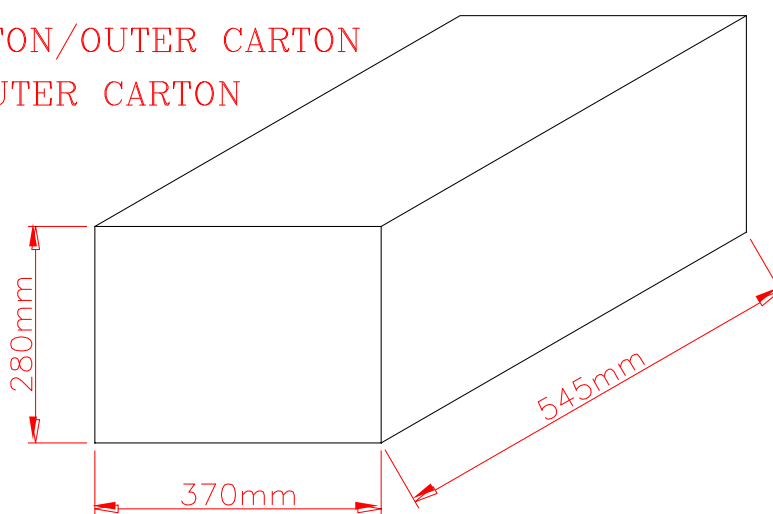
36 PCS/PACKING TUBE



90 PACKING TUBE/INNER CARTON
3240 PCS/INNER CARTON



4 INNER CARTON/OUTER CARTON
12960 PCS/OUTER CARTON



EXAMPLE: The bin rank maked on the device / tube / carton.

ON TUBE

	MATERIAL NO. :	LTS-4802KR-01J	BATCH : H
	QUANTITY :	36	
	CUS P/N :		MACHINE :
	DATE CODE :	0913	PB FREE
200/03/27 33.12.2 TPD-4			

ON INNER CARTON

	MATERIAL NO. :	LTS-4802KR-01J	BATCH : H
	QUANTITY :	3240	
	CUS P/N :		MACHINE :
	DATE CODE :	0913	PB FREE
200/03/27 33.12.2 TPD-4			

LITEON FINISHED GOODS STOCK LABEL

TAG NO. :	T025085	
CUSTOMER :		
CUSPART NO. :		
MATERIAL GROUP :		
MATERIAL NO :	LTS-4802KR-01J	
BATCH :	H	
QUANTITY :	3240	
DATE CODE :	0913	
COMMENT :	PBF	SHELF : BA1

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ON OUTER CARTON

LITEON FINISHED GOODS STOCK LABEL CTNNQ.: 1

CUSTOMER :	
CUSTOMER P/N : NA	
CUSTOMER P/N : LTS-4802KR-01J	
BATCH	QUANTITY
H	12960
TOTAL	
12960	

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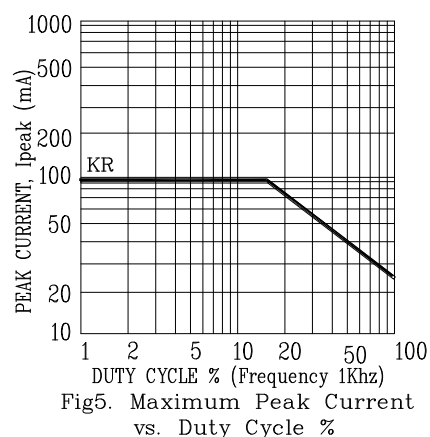
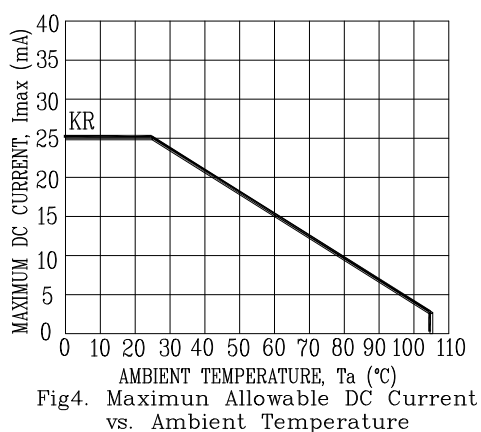
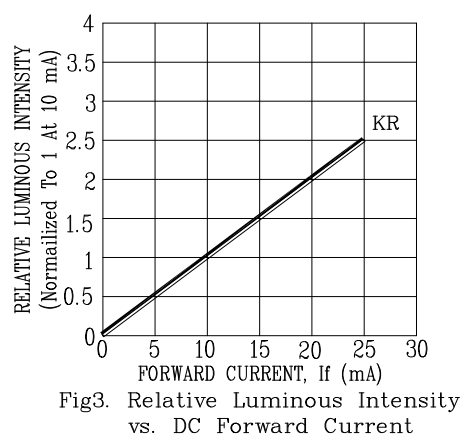
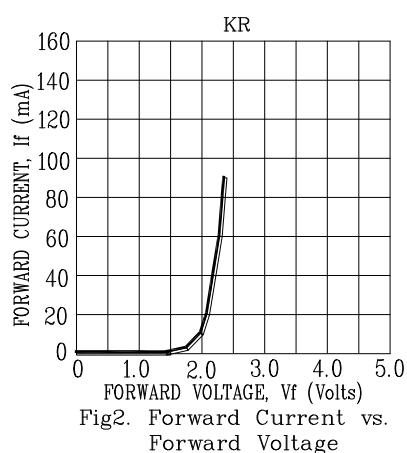
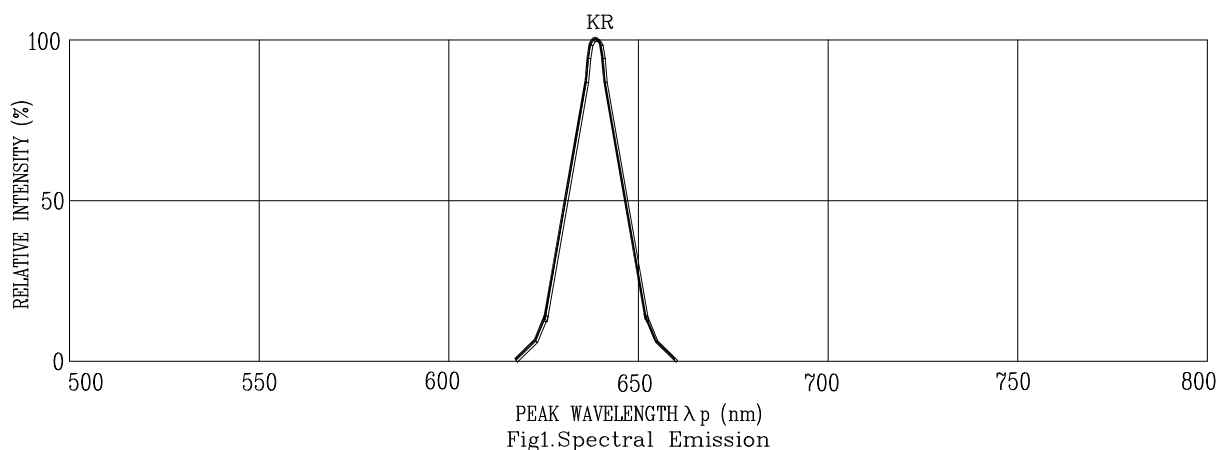
LITEON FINISHED GOODS STOCK LABEL CTNNQ.: 1

DELIVERY NOTE :	40088676
CUSTOMER PO. :	
TYPE OF PACKAGE :	92-SUC02
INVOICE NO. :	020000905
DATE CODE. :	

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TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)



NOTE : KR=AlInGaP SUPER RED