



LED Display

Product Data Sheet

LTD-3506KR

Spec No.: DS30-2012-0065

Effective Date: 07/03/2012

Revision: A

LITE-ON DCC

RELEASE

LED DISPLAY

LTD-3506KR
DATA SHEET

ITEM	DESCRIPTION	ISSUER	DATE
1	New Spec.	Reo Lin	06/06/2012
2	Revised Error for Package Dimensions	Reo Lin	06/27/2012

FEATURES

- * 0.3 inch (7.62 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)

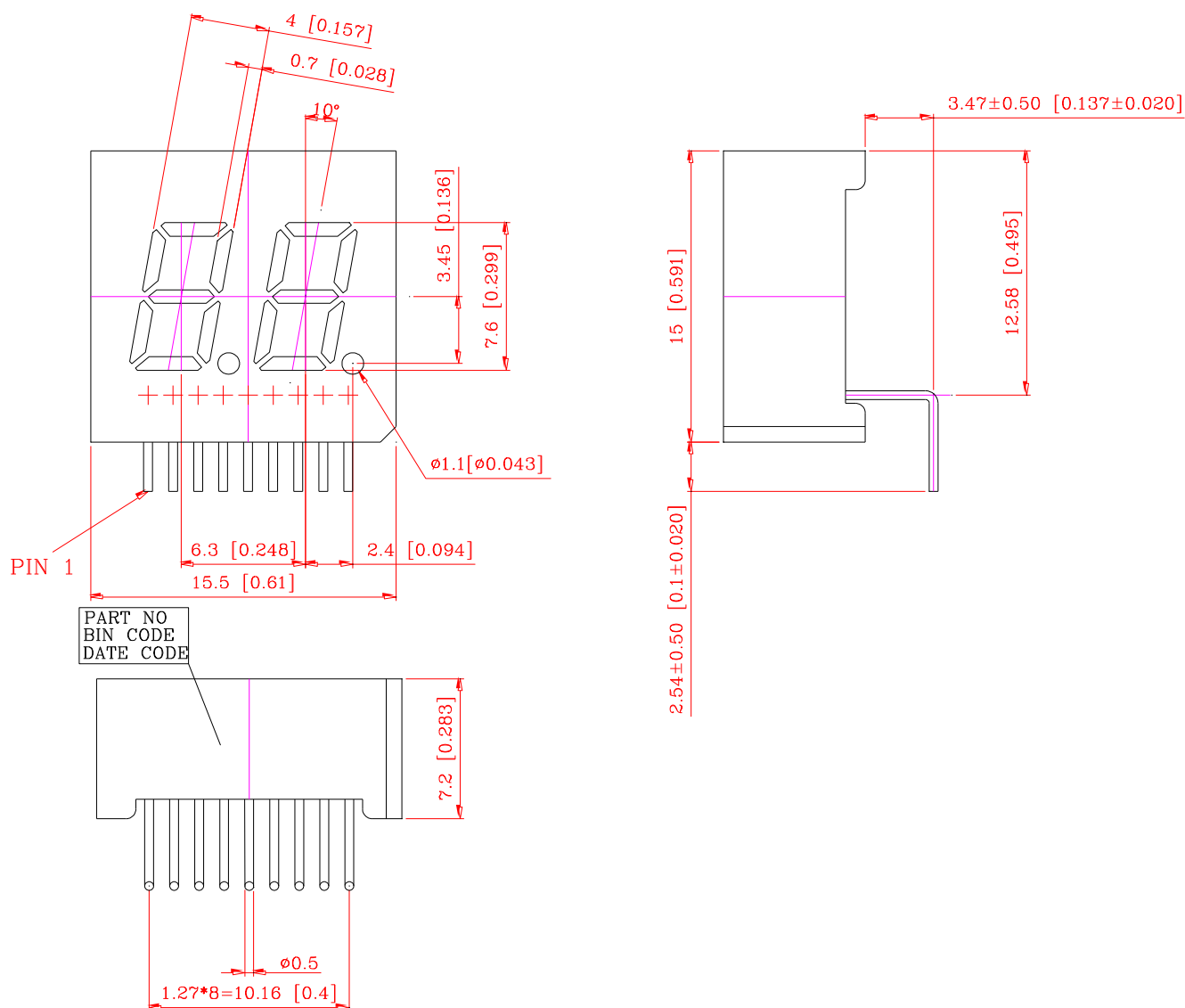
DESCRIPTION

The LTD-3506KR is a 0.3 inch (7.6 mm) digit height dual digit seven-segment display. This device uses AS-AlInGaP SUPER RED LED chips (AlInGaP epi on GaAs substrate), and has a gray face and white segments.

DEVICE

PART NO.	DESCRIPTION
AlInGap RED	Duplex Common Cathode
LTD-3506KR	

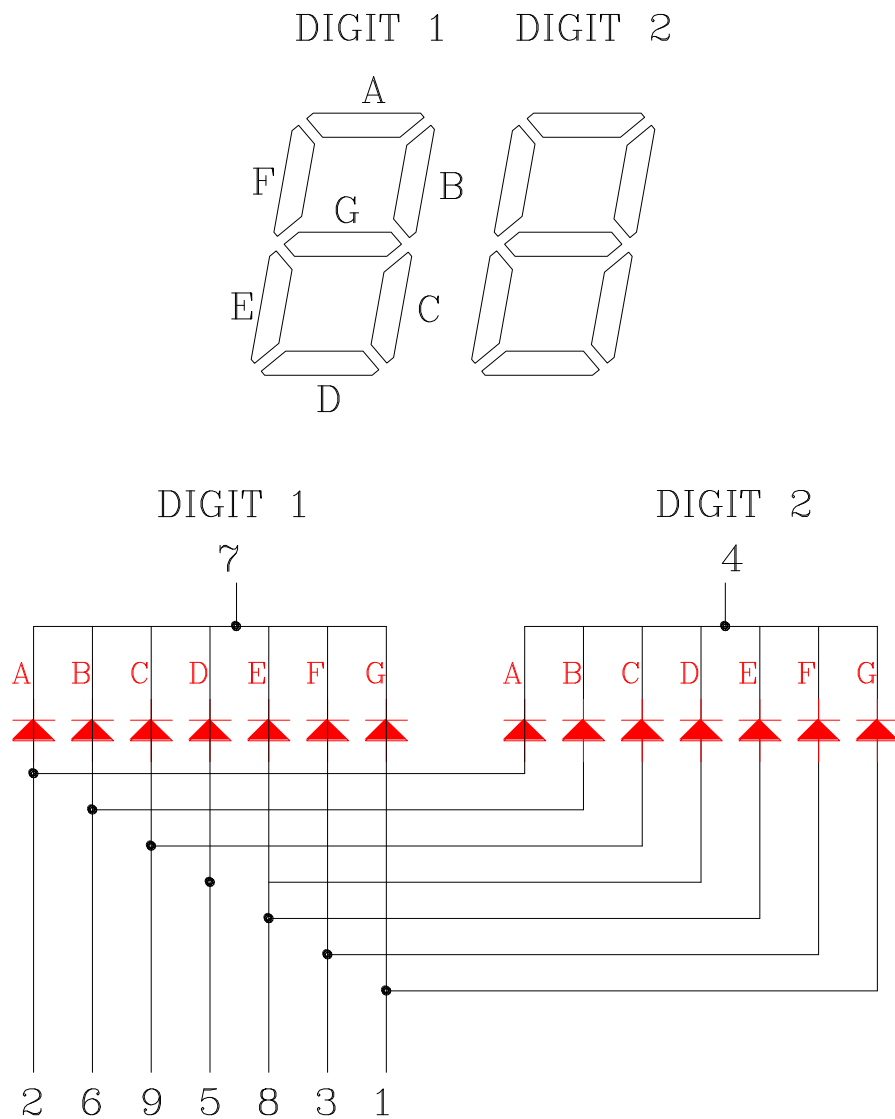
PACKAGE DIMENSIONS



NOTES:

1. All dimensions are in millimeters. Tolerances are ± 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
7. Recommend the best pcb hole : diameter 1mm

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

NO.	CONNECTION
1	ANODE G1,G2
2	ANODE A1,A2
3	ANODE F1,E2
4	COMMON CATHODE (DIGIT 2)
5	ANODE D1,D2
6	ANODE B1,C2
7	COMMON CATHODE (DIGIT 1)
8	ANODE E1,B2
9	ANODE C1,F2

ABSOLUTE MAXIMUM RATING

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	75	mW
Peak Forward Current Per Segment (Frequency 1Khz, 10% duty cycle)	90	mA
Continuous Forward Current Per Segment	25	mA
Derating Linear From 25°C Per Segment	0.33	mA/°C
Operating Temperature Range	-35°C to +85°C	
Storage Temperature Range	-35°C to +85°C	
Wave Solder Temperature: max 260°C for max 5sec at 1.6mm below seating plane.		
Manual solder Temperature : Max 295°C +/-5°C for max 3sec at 1.6mm below seating plane.		

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

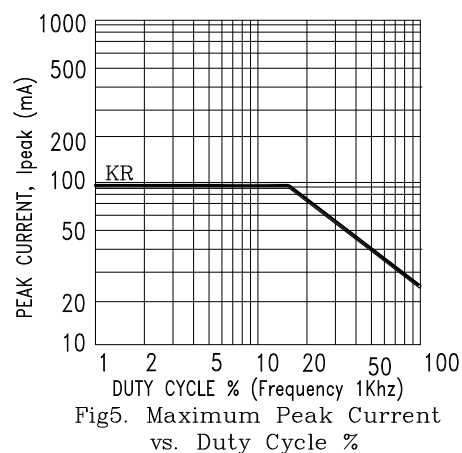
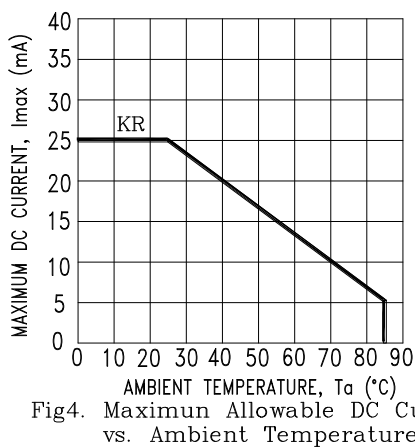
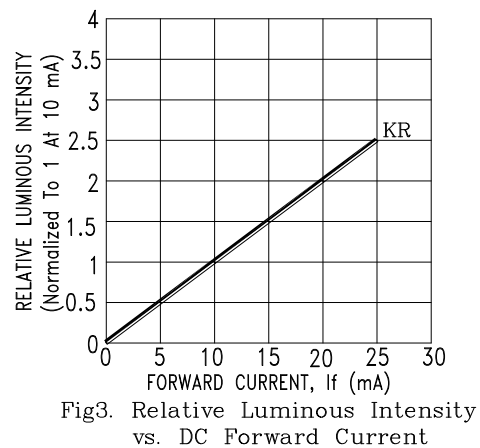
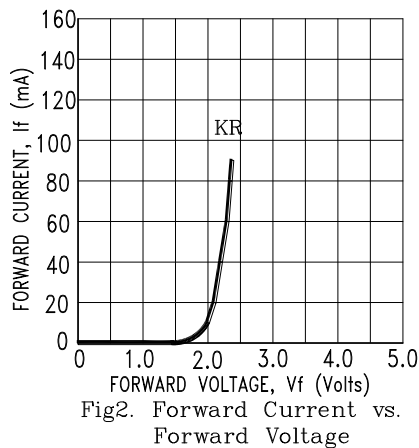
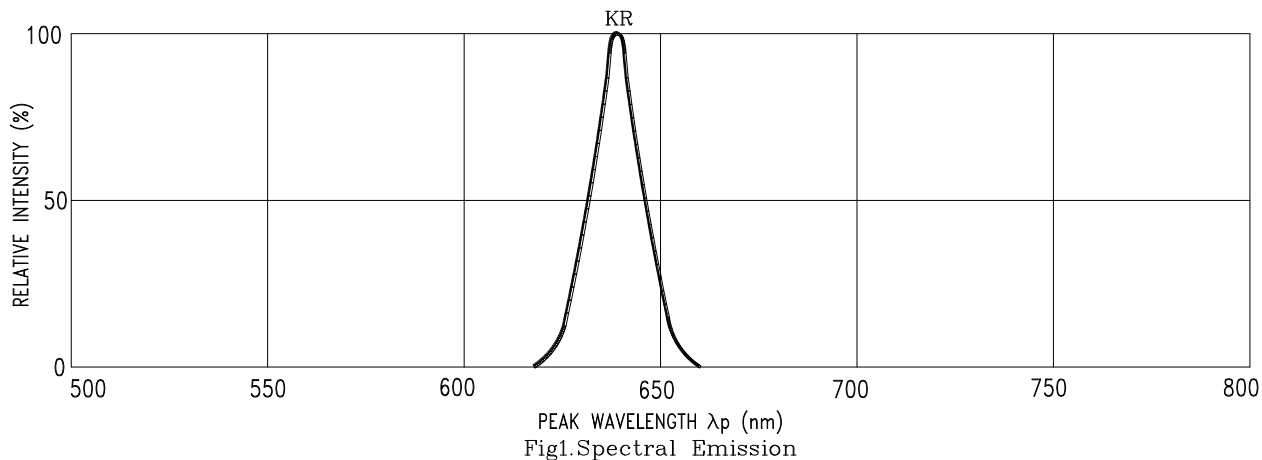
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	350	860		μcd	If=1mA
			11150			If=10mA
Peak Emission Wavelength	λp		639		nm	If=20mA
Spectral Line Half-Width	Δλ		240		nm	If=20mA
Dominant Wavelength	λd		631		nm	If=20mA
Forward Voltage Per Segment	V _F		2.0	2.6	V	If=20mA
Reverse Current Per Segment ⁽²⁾	I _R			100	μA	V _R =5V
Luminous Intensity Matching Ratio (Same Light Area)	Iv-m			2:1		If=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. Reverse voltage is only for IR test. It can not continue to operate at this situation
3. Cross talk specification ≤ 2.5%

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)



NOTE : KR=AlInGaP SUPER RED