



LED Display

Product Data Sheet

LTS-4301KD

Spec No.: DS30-2005-235

Effective Date: 01/31/2006

Revision: -

LITE-ON DCC

RELEASE

FEATURES

- * 0.4 inch (10 mm) DIGIT HEIGHT
- * EXCELLENT SEGMENT UNIFORMITY
- * LOW POWER REQUIREMENT
- * HIGH BRIGHTNESS AND HIGH CONTRAST
- * WIDE VIEWING ANGLE
- * SOLID STATE RELIABILITY
- * BINNED FOR LUMINOUS INTENSITY
- * **LEAD-FREE PACKAGE**

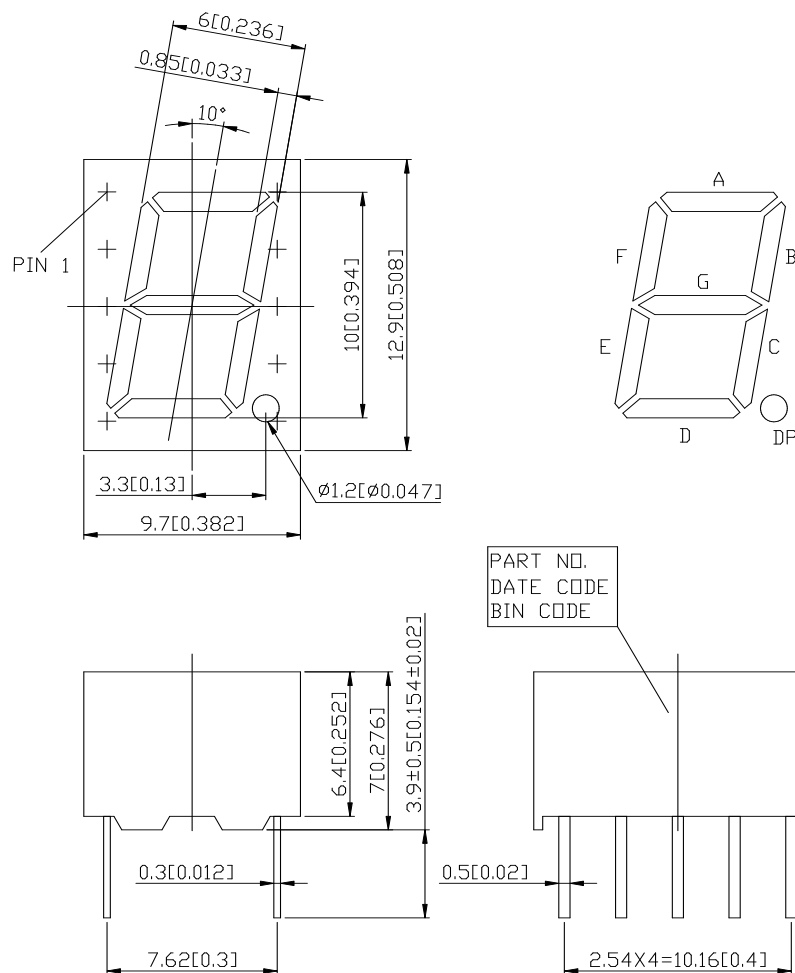
DESCRIPTION

The LTS-4301KD is a 0.4 inch (10 mm) digit height single-digit display. This device uses AlInGaP HYPER RED chips (AlInGaP epi on GaAs substrate). The display has gray face and white segments.

DEVICE

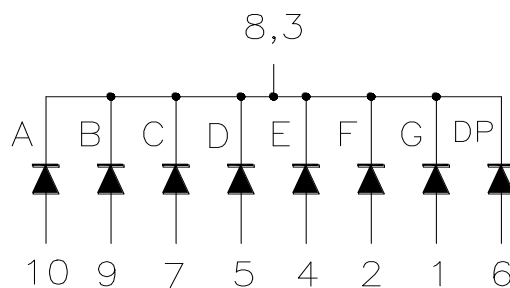
PART NO.	DESCRIPTION
AlInGaP HYPER RED	Common Cathode Rt. Hand Decimal
LTS-4301KD	

PACKAGE DIMENSIONS



NOTES: 1. All dimensions are in millimeters. Tolerances are $\pm 0.25\text{mm}$ (0.01") unless otherwise noted.
 2. Pin tip's shift tolerance is ± 0.4 mm.

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

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

ABSOLUTE MAXIMUM RATING

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	70	mW
Peak Forward Current Per Segment (Frequency 1Khz, 10% duty cycle)	90	mA
Continuous Forward Current Per Segment	25	mA
Forward Current Derating from 25 ⁰ C	0.28	mA/ ⁰ C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35 ⁰ C to +105 ⁰ C	
Storage Temperature Range	-35 ⁰ C to +105 ⁰ C	
Soldering Conditions : 1/16 inch below seating plane for 3 seconds at 260 ⁰ C, or temperature of unit (during assembly) not over max. temperature rating above		

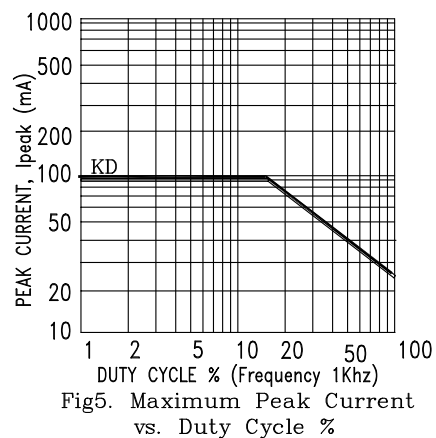
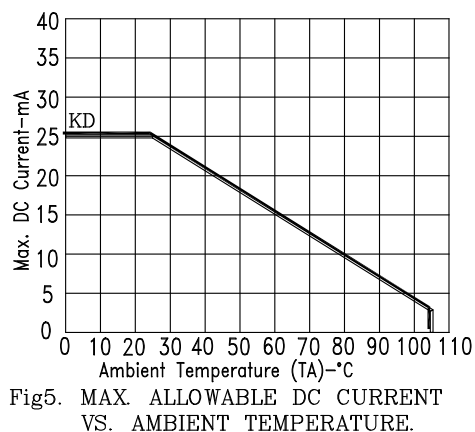
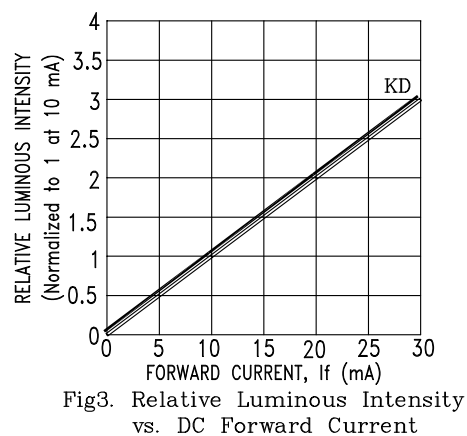
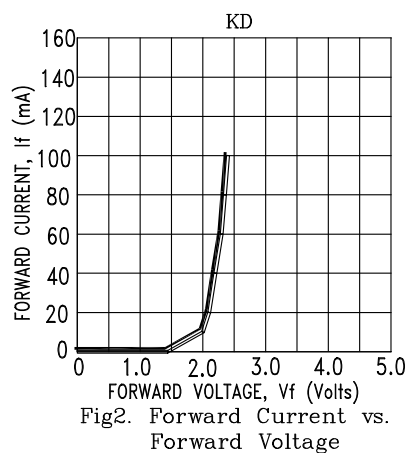
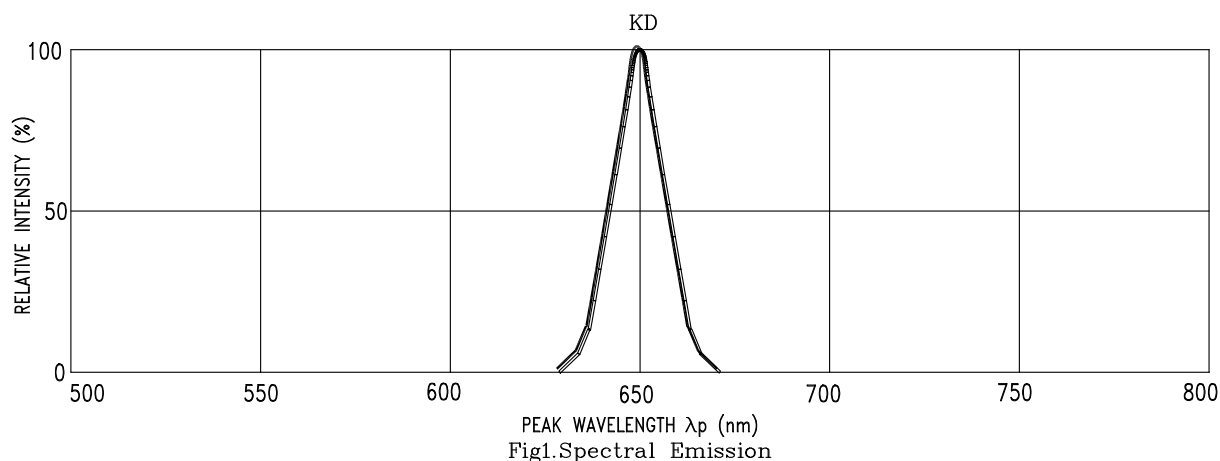
ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25⁰C

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITION
Average Luminous Intensity Per Segment	I _v	200	650		μcd	I _F = 1mA
			9750			I _F = 10mA
Peak Emission Wavelength	λ _p		650		nm	I _F = 20mA
Spectral Line Half-Width	Δλ		20		nm	I _F = 20mA
Dominant Wavelength	λ _d		639		nm	I _F = 20mA
Forward Voltage Per Segment	V _F		2.1	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 : KD=AlInGaP HYPER RED