



# **LED Display**

## **Product Data Sheet**

### **LTP-7357KS**

Spec No.: DS30-2011-0026

Effective Date: 07/08/2011

Revision: A

**LITE-ON DCC**

**RELEASE**

**BNS-OD-FC001/A4**

**LITE-ON Technology Corp. / Optoelectronics**

No.90,Chien 1 Road, Chung Ho, New Taipei City 23585, Taiwan, R.O.C.

Tel: 886-2-2222-6181 Fax: 886-2-2221-1948 / 886-2-2221-0660

<http://www.liteon.com/opto>

**LED DISPLAY****LTP-7357KS**  
**DATA SHEET**

<b>Rev</b>	<b>Description</b>	<b>By</b>
01	RDR Original Spec	Phanomkorn J. March 18, 2009
02	Add height of reflector's wall for protects splash of epoxy Due to adjusting the epoxy ratio for narrow the bin grade	Phanomkorn J. December 23, 2010
-	NPPR Original Spec	Phanomkorn J. February 16, 2011
A	Revise the product width's tolerance on Page 2 of 6 from 12.6mm $\pm 0.1$ mm to 12.6mm +0.18/-0.25mm	Phanomkorn J. June 02, 2011

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<b>Customer Approval</b>	
<b>Date</b>	

## **FEATURES**

- \* 0.678 inch ( 17.22 mm) MATRIX HEIGHT.
- \* LOW POWER REQUIREMENT.
- \* SINGLE PLANE, WIDE VIEWING ANGLE.
- \* SOLID STATE RELIABILITY.
- \* 5×7 ARRAY WITH X-Y SELECT.
- \* COMPATIBLE WITH USASCII AND EBCDIC CODES.
- \* STACKABLE HORIZONTALLY.
- \* CATEGORIZED FOR LUMINOUS INTENSITY.
- \* LEAD-FREE PACKAGE (ACCORDING TO ROHS)

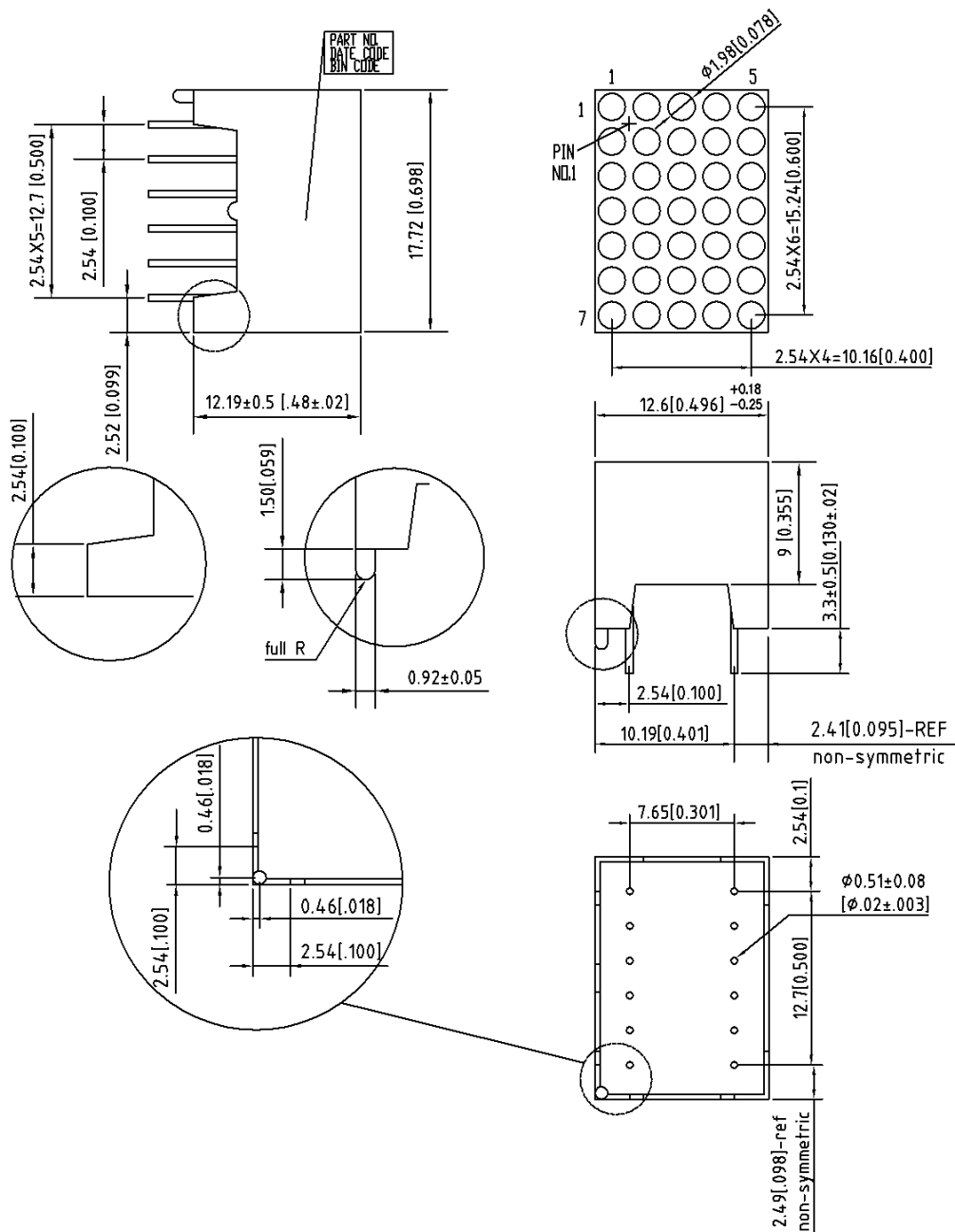
## **DESCRIPTION**

The LTP-7357KS is a 0.678-inch (17.22 mm) matrix height 5×7 dot matrix display. This device utilizes AlInGaP Yellow LED chips, which are made from AlInGaP on a non-transparent GaAs substrate, and has a gray face and white dot color.

## **DEVICE**

<b>PART NO.</b>	<b>DESCRIPTION</b>
AlInGaP Yellow	CATHODE COLUMN
LTP-7357KS	ANODE ROW

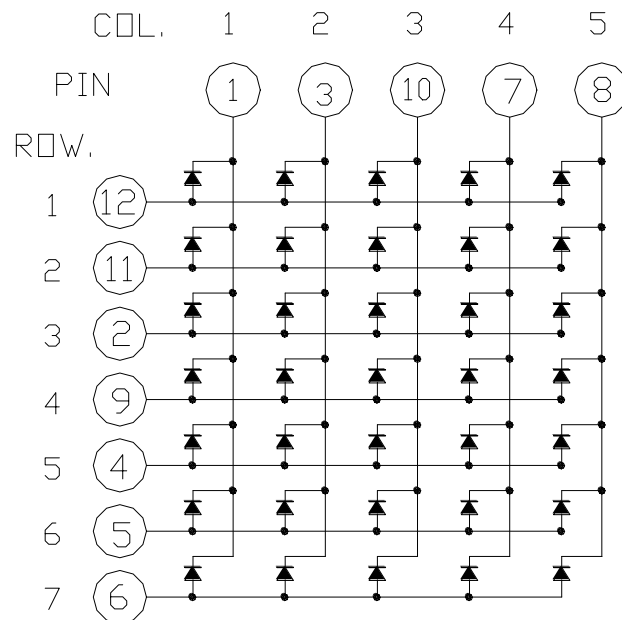
## PACKAGE DIMENSIONS



NOTES: 1. All dimensions are in millimeters. Tolerances are  $\pm 0.25$  mm (0.01") unless otherwise noted.

2. Pin tip's shift tolerance is  $\pm 0.4$  mm.
3. Foreign material on segment  $\leq 10$  mils
4. Ink contamination (surface)  $\leq 20$  mils
5. Bending  $\leq 1/100$
6. Bubble in segment  $\leq 10$  mils

## INTERNAL CIRCUIT DIAGRAM



**PIN CONNECTION**

<b>No.</b>	<b>CONNECTION</b>
1	CATHODE COLUMN 1
2	ANODE ROW 3
3	CATHODE COLUMN 2
4	ANODE ROW 5
5	ANODE ROW 6
6	ANODE ROW 7
7	CATHODE COLUMN 4
8	CATHODE COUUMN 5
9	ANODE ROW 4
10	CATHODE COLUMN 3
11	ANODE ROW 2
12	ANODE ROW 1

**ABSOLUTE MAXIMUM RATING AT Ta=25°C**

PARAMETER	MAXIMUM RATING	UNIT
Average Power Dissipation Per Dot	70	mW
Peak Forward Current Per Dot	60	mA
Average Forward Current Per Dot	25	mA
Derating Linear From 25°C Per Dot	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	
Soldering Conditions: 1/16 inch below seating plane for 3 seconds at 260 <sup>0</sup> C or of temperature unit (during assembly) not over max. temperature rating above.		

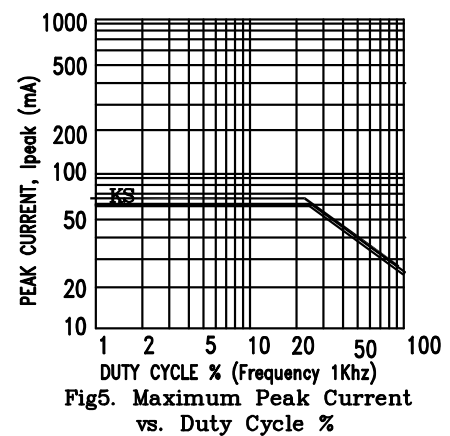
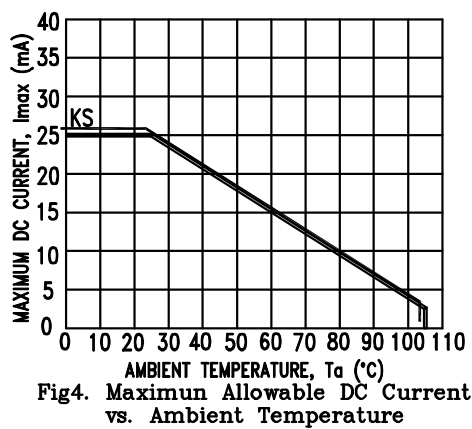
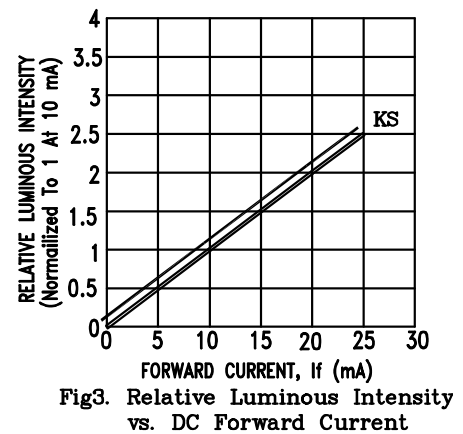
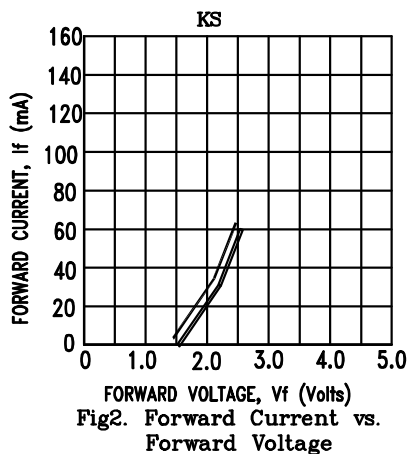
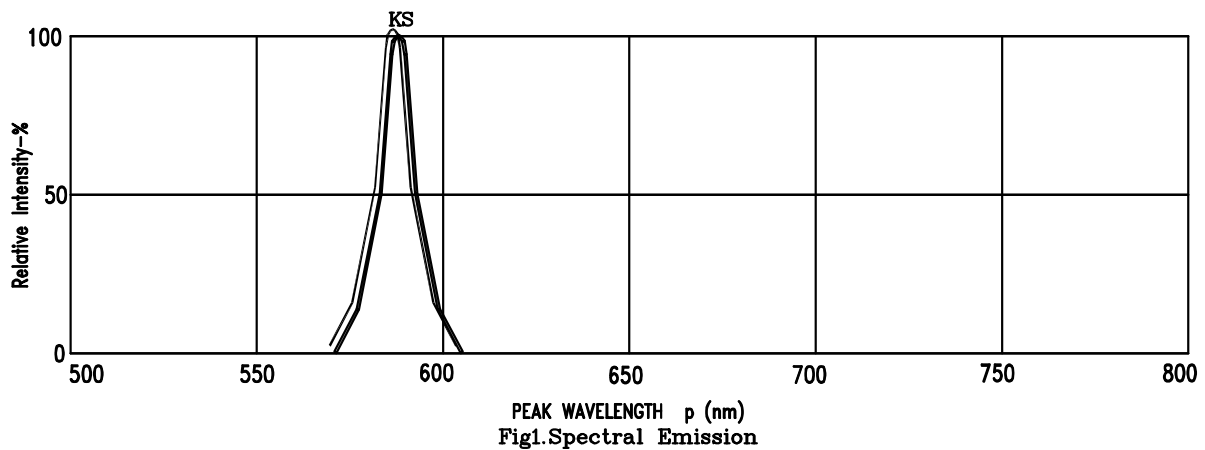
**ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C**

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I <sub>v</sub>	630	1650		μcd	I <sub>p</sub> =32mA 1/16Duty
Peak Emission Wavelength	λ <sub>p</sub>		588		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		15		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		587		nm	I <sub>F</sub> =20mA
Forward Voltage any Dot	V <sub>F</sub>		2.05	2.6	V	I <sub>F</sub> =20mA
Reverse Current any Dot	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V
Luminous Intensity Matching Ratio (Similar Light Area)	I <sub>v-m</sub>			2:1		I <sub>p</sub> =32mA 1/16Duty

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 : KS=AlInGaP YELLOW