



# LED Display Product Data Sheet LTP-2157AKS

Spec No.: DS30-2006-166

Effective Date: 11/01/2006

Revision: -

**LITE-ON DCC**

**RELEASE**

BNS-OD-FC001/A4

# **LITEON** LITE-ON TECHNOLOGY CORPORATION

Property of Lite-On Only

## **FEATURES**

- \* 2.0 inch (50.8 mm) MATRIX HEIGHT.
- \* LOW POWER REQUIREMENT.
- \* EXCELLENT CHARACTERS APPEARANCE..
- \* HIGH BRIGHTNESS & HIGH CONTRAST.
- \* 5×7 ARRAY WITH X-Y SELECT.
- \* HIGH BRIGHTNESS & HIGH CONTRAST.
- \* SOLID STATE RELIABILITY.
- \* **LEAD-FREE PACKAGE (ACCORDING TO ROHS)**

## **DESCRIPTION**

The LTP-2157AKS is a 2.0 inch (50.8 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 black face and white dot color.

## **DEVICE**

<b>PART NO.</b>	<b>DESCRIPTION</b>
AllnGaP Yellow	CATHODE COLUMN
LTP-2157AKS	ANODE ROW



## PIN CONNECTION

No.	CONNECTION
1	ANODE ROW 5
2	ANODE ROW 7
3	CATHODE COLUMN 2
4	CATHODE COLUMN 3*1
5	ANODE ROW 4*2
6	CATHODE COLUMN 5
7	ANODE ROW 6
8	ANODE ROW 3
9	ANODE ROW 1
10	CATHODE COLUMN 4
11	CATHODE COLUMN 3*1
12	ANODE ROW 4*2
13	CATHODE COLUMN 1
14	ANODE ROW 2

NOTES: 1. Pin 4 & 11 are internally connected.

2. Pin 5 & 12 are internally connected.

**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 Dot	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°C or of temperature unit (during assembly) not over max temperature rating above.		

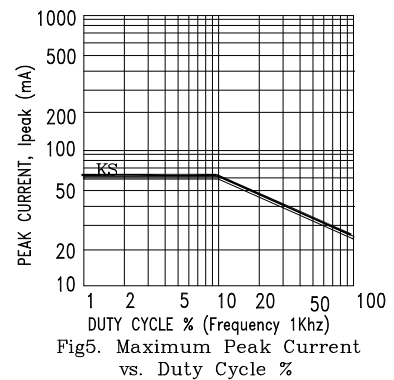
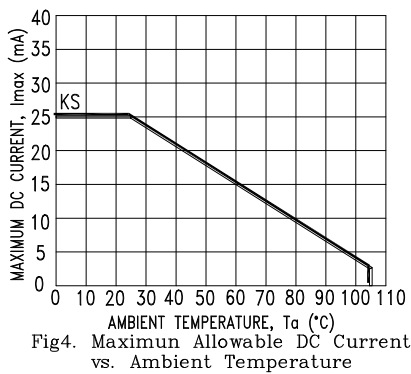
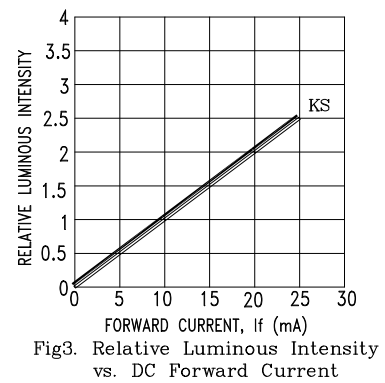
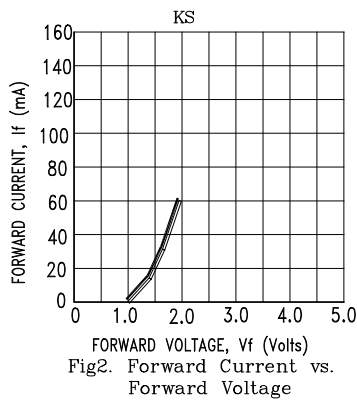
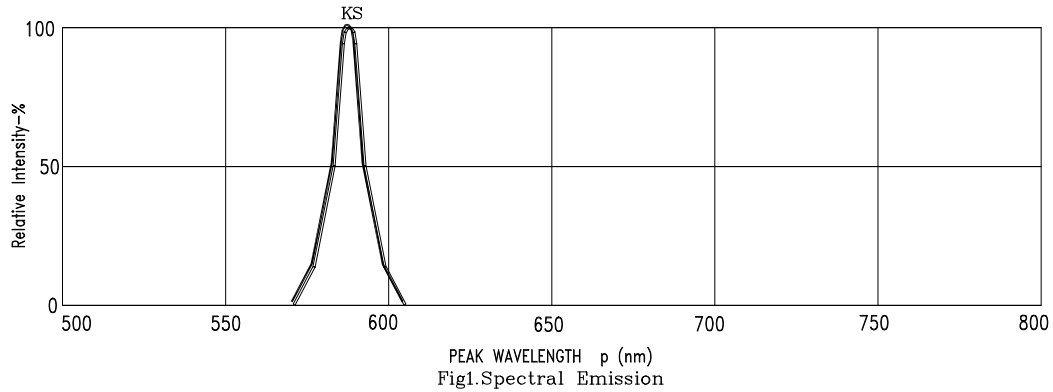
**ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C**

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I <sub>v</sub>	2100	3600		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 Per Segment	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</sub> -m			2:1		I <sub>F</sub> =1mA

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

## TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)



NOTE : KS=AlInGaP YELLOW