



LED Display

Product Data Sheet

LTP-2157AKY-01

Spec No.: DS30-2002-255

Effective Date: 10/16/2002

Revision: -

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>

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

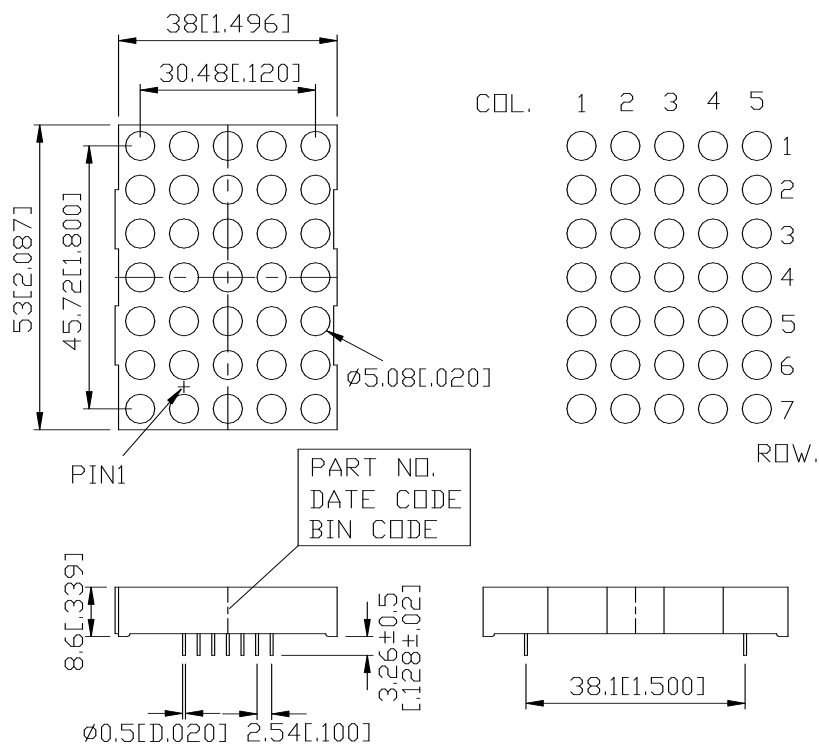
DESCRIPTION

The LTP-2157AKY-01 is a 2.0 inch (50.8 mm) matrix height 5×7 dot matrix display. This device uses AS-AlInGaP AMBER YELLOW LED chips (AlInGaP epi on GaAs substrate). The display has a black face and white dot color.

DEVICE

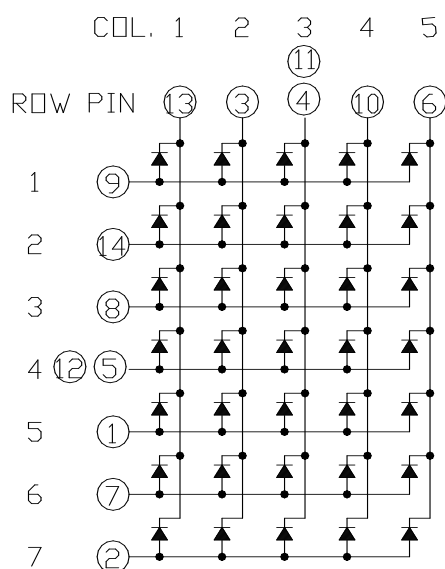
PART NO.	DESCRIPTION
AlInGaP AMBER YELLOW	Cathode Column
LTP-2157AKY-01	Anode Row

PACKAGE DIMENSIONS



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

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

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

ABSOLUTE MAXIMUM RATING

PARAMETER	MAXIMUM RATING	UNIT
Average Power Dissipation Per Dot	35	mW
Peak Forward Current Per Dot (Frequency 1Khz, 25% duty cycle)	60	mA
Average Forward Current Per Dot	13	mA
Forward Current From 25°C	0.17	mA/°C
Reverse Voltage Per Dot	5	V
Operating Temperature Range	-35°C to +85°C	
Storage Temperature Range	-35°C to +85°C	
Soldering Conditions:1/16 inch below seating plane for 3 seconds at 260°C		

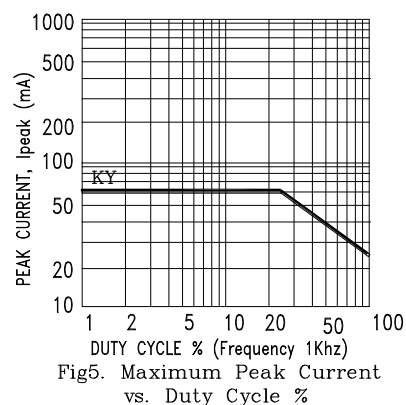
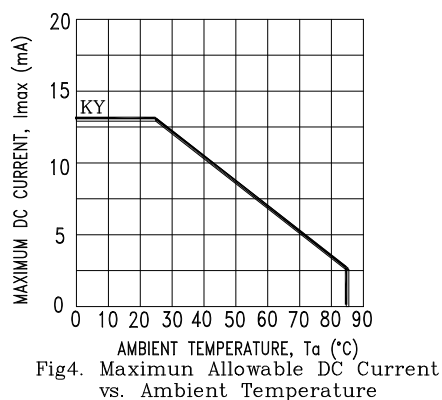
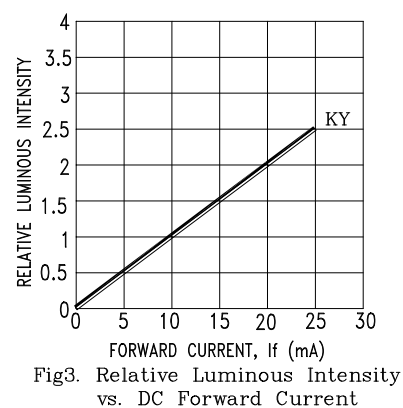
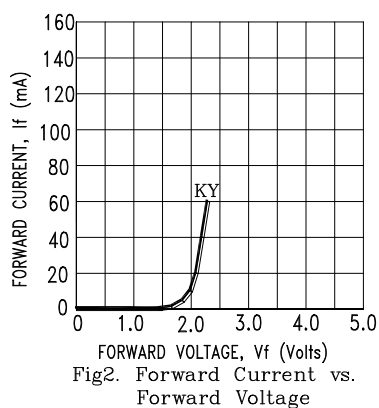
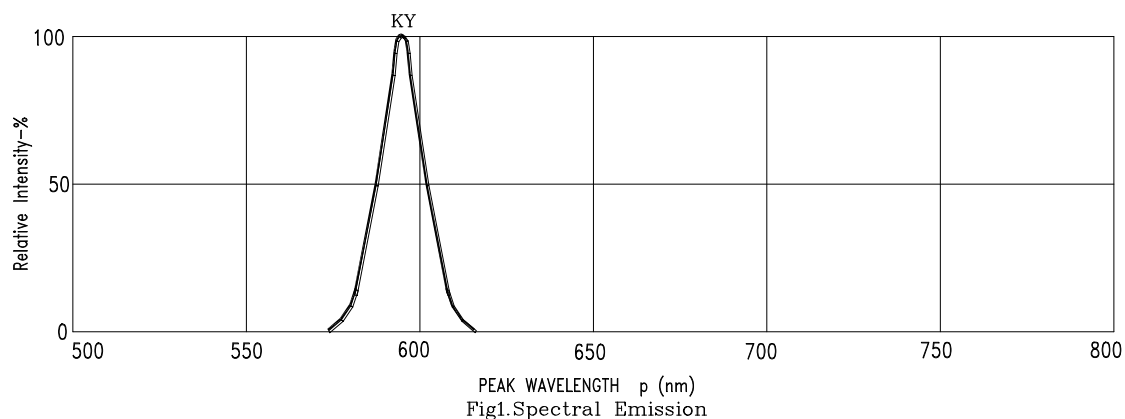
ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta = 25°C

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITION
Average Luminous Intensity Per Dot	I _v	1650	3600		μcd	I _p = 32mA 1/16Duty
Peak Emission Wavelength	λ _p		595		nm	I _F = 20mA
Spectral Line Half-Width	Δλ		15		nm	I _F = 20mA
Dominant Wavelength	λ _d		592		nm	I _F = 20mA
Forward Voltage Per Segment	V _F		2.05	2.6	V	I _F = 20mA
			2.3	2.8		I _F = 80mA
Reverse Current any Dot	I _R			100	μA	V _R = 5V
Luminous Intensity Matching Ratio	I _v -m			2:1		I _p = 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: KY=AlInGaP AMBER YELLOW