



LED Display

Product Data Sheet

LTP-2157AKY

Spec No.: DS-30-99-106

Effective Date: 03/23/2002

Revision: -

LITE-ON DCC

RELEASE

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.

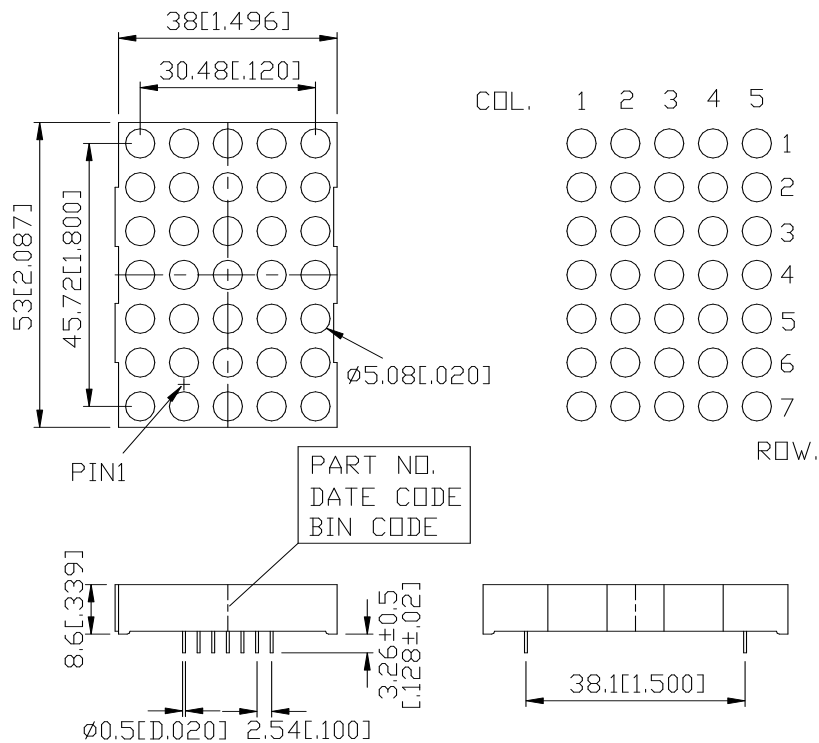
DESCRIPTION

The LTP-2157AKY is a 2.0 inch (50.8 mm) matrix height 5×7 dot matrix display. This device utilizes AlInGaP Amber Yellow LED chips, which are made from AlInGaP on a non-transparent GaAs substrate, and has a gray face and white dot color.

DEVICE

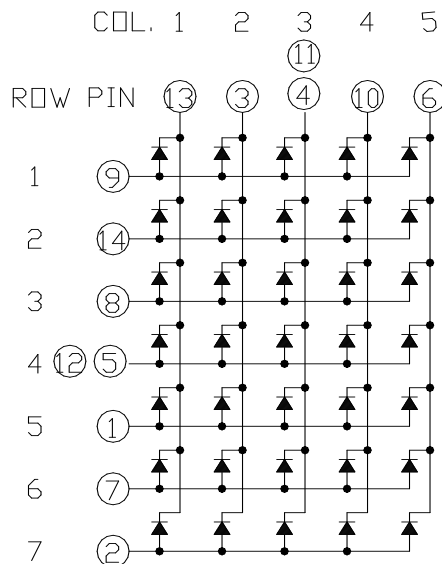
PART NO.	DESCRIPTION
AlInGaP Amber Yellow	CATHODE COLUMN
LTP-2157AKY	ANODE ROW

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*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	35	mW
Peak Forward Current Per Dot	60	mA
Average Forward Current Per Dot	13	mA
Derating Linear From 25°C Per Dot	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	
Solder Temperature: max 260°C for max 3sec at 1.6mm[1/16inch] below seating plane.		

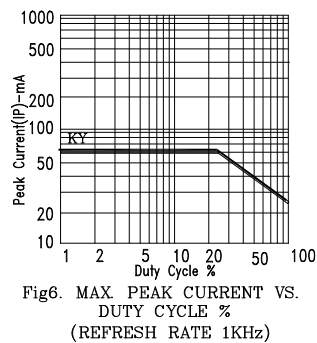
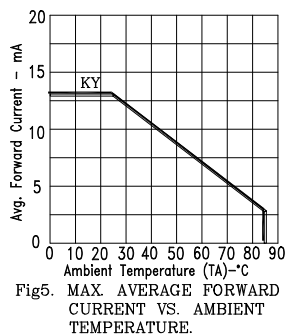
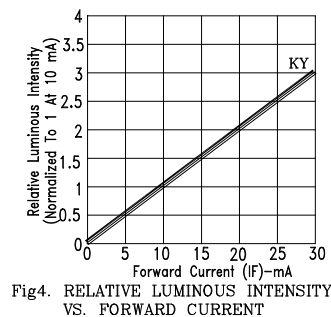
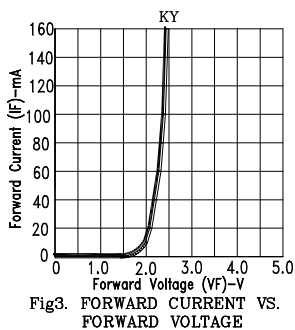
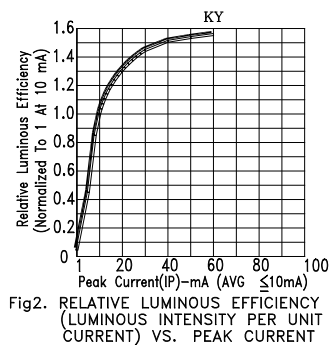
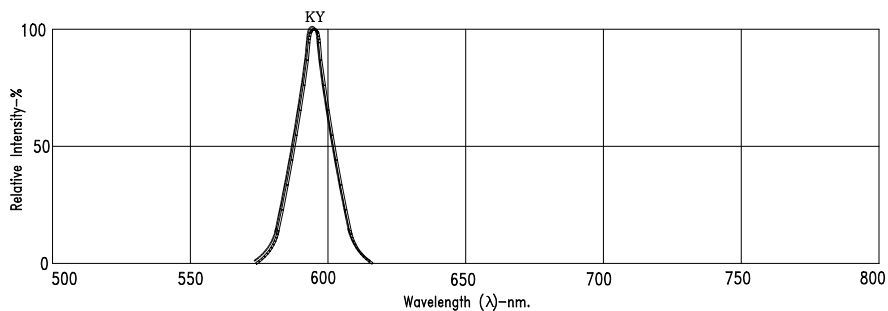
ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I _v	2100	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
Reverse Current any Dot	I _R			100	μA	V _R =5V
Luminous Intensity Matching Ratio	I _v -m			2:1		I _F =2mA

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