



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

FEATURES

- * 2.0 inch (50.8 mm) MATRIX HEIGHT.
- * LOW POWER REQUIREMENT.
- * EXCELLENT CHARACTERS APPEARANCE..
- * HIGH BRIGHTNESS & HIGH CONTRAST.
- * 5x7 ARRAY WITH X-Y SELECT.
- * HIGH BRIGHTNESS & HIGH CONTRAST.
- * SOLID STATE RELIABILITY.
- * **LEAD-FREE PACKAGE(ACCORDING TO ROHS)**

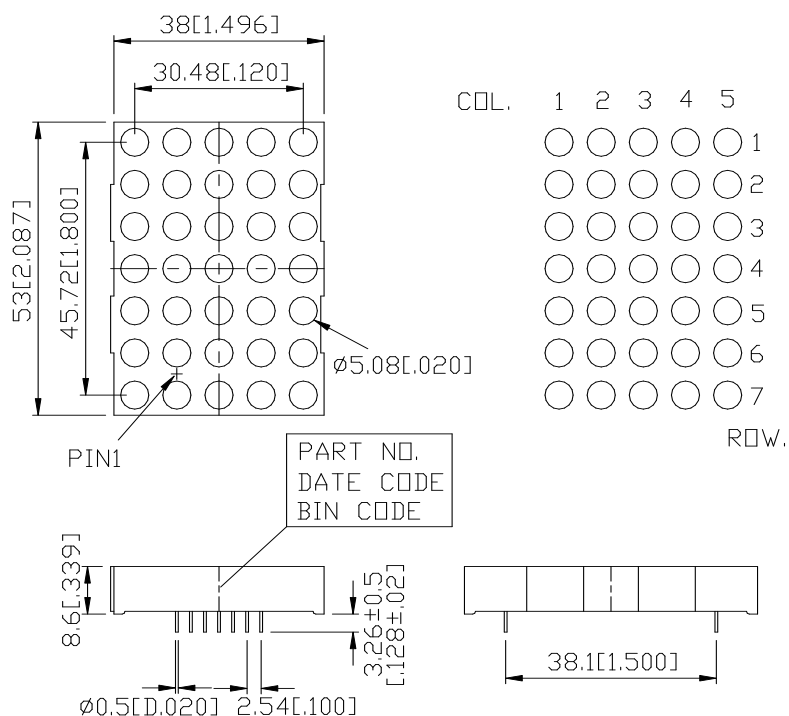
DESCRIPTION

The LTP-2157AKS is a 2.0 inch (50.8 mm) matrix height 5x7 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

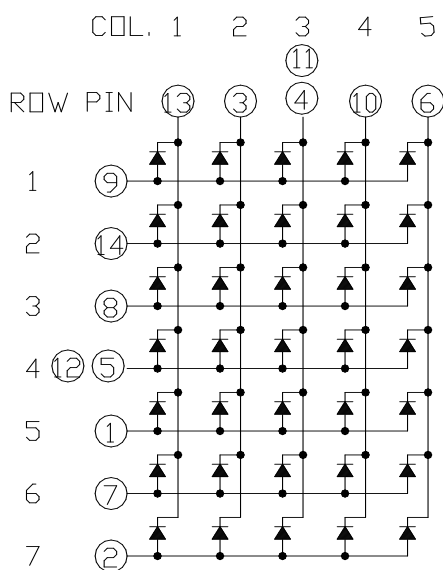
PART NO.	DESCRIPTION
AlInGaP Yellow	CATHODE COLUMN
LTP-2157AKS	ANODE ROW

PACKAGE DIMENSIONS



- NOTES: 1. All dimensions are in millimeters. Tolerances are ± 0.25 mm unless otherwise note.
2. Pin tip's shift tolerance is ± 0.4 mm.

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	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 ⁰ C or of temperature unit (during assembly) not over max temperature rating above.		

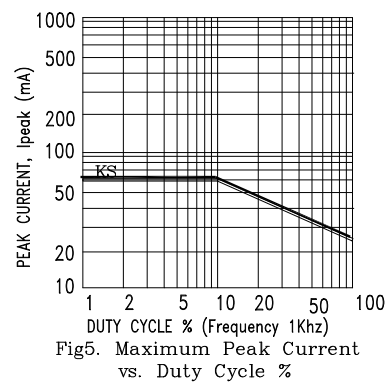
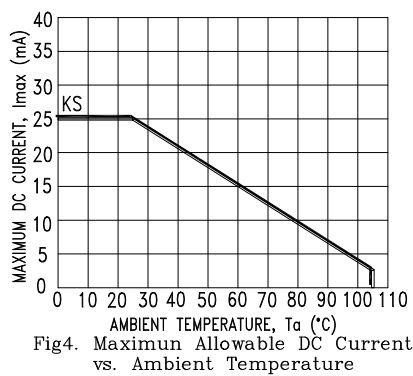
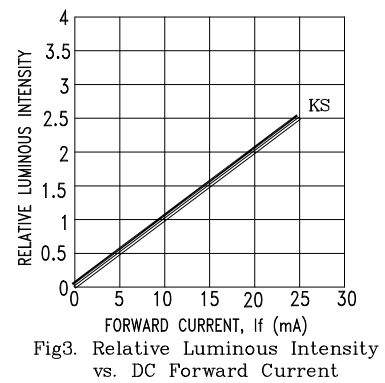
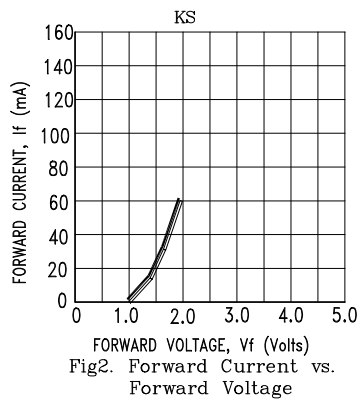
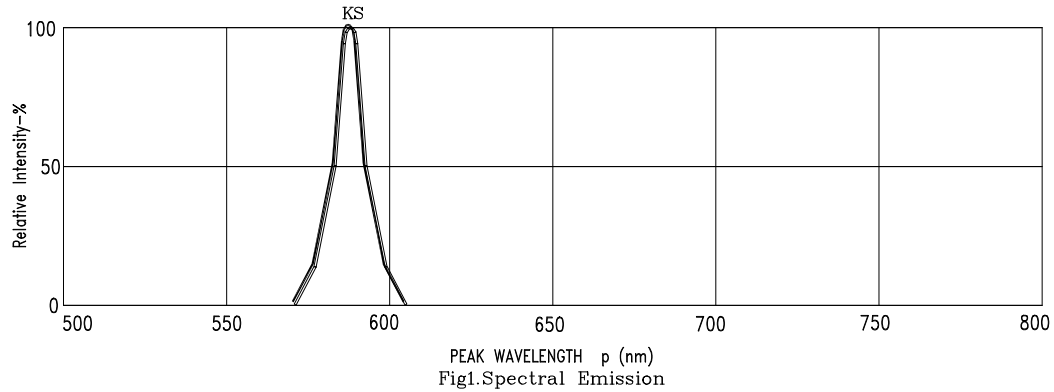
ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I _v	2100	3600		μcd	I _p =32mA 1/16Duty
Peak Emission Wavelength	λ _p		588		nm	I _F =20mA
Spectral Line Half-Width	Δλ		15		nm	I _F =20mA
Dominant Wavelength	λ _d		587		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 (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 : KS=AlInGaP YELLOW