



LED Display

Product Data Sheet

LTP-7188KE

Spec No.: DS30-2002-283

Effective Date: 12/31/2002

Revision: -

LITE-ON DCC

RELEASE

FEATURES

- * 0.764 inch (19.4 mm) MATRIX HEIGHT
- * LOW POWER REQUIREMENT
- * SINGLE PLANE, WIDE VIEWING ANGLE
- * SOLID STATE RELIABILITY
- * 8 X 8 ARRAY WITH X-Y SELECT
- * COMPATIBLE WITH USASCLL AND EBCDIC CODES
- * STACKABLE HORIZONTALLY
- * CATEGORIZED FOR LUMINOUS INTENSITY

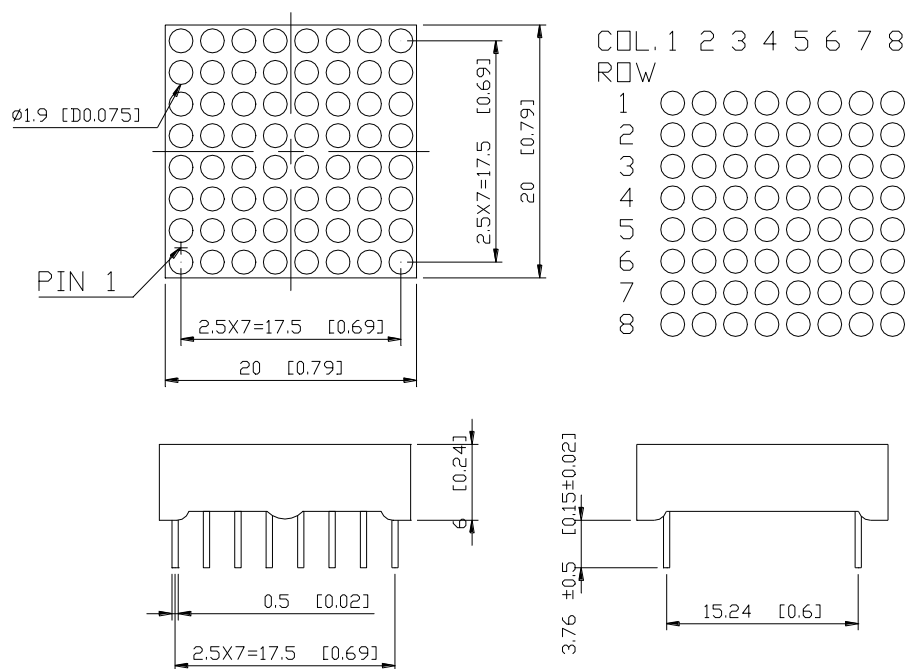
DESCRIPTION

The LTP-7188KE is a 0.764 inch (19.4 mm) matrix height 8x8 dot matrix display. This device uses AS-AlInGaP RED LED chips (AlInGaP epi on GaAs substrate). The display has gray face and white segments.

DEVICE

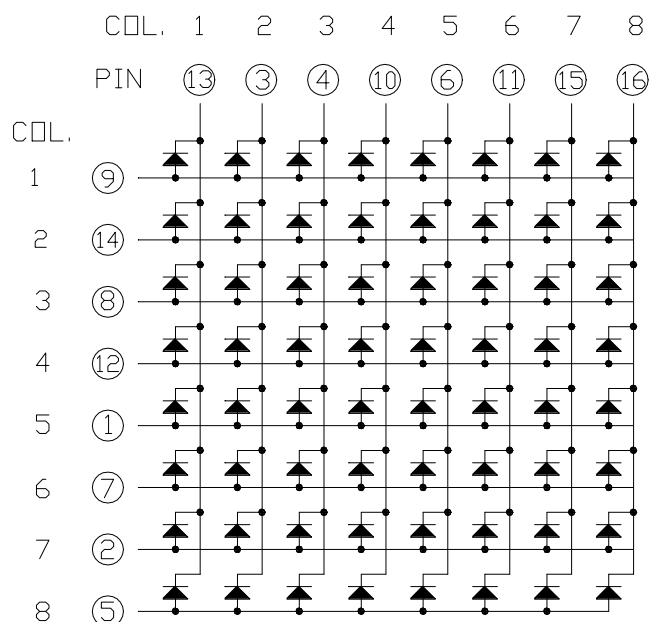
PART NO.	DESCRIPTION
AlInGaP RED	Anode Row, Cathode Column
LTP-7188KE	

PACKAGE DIMENSIONS



NOTES: All dimensions are in millimeters. Tolerance is ± 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 8
6	CATHODE COLUMN 5
7	ANODE ROW 6
8	ANODE ROW 3
9	ANODE ROW 1
10	CATHODE COLUMN 4
11	CATHODE COLUMN 6
12	ANODE ROW 4
13	CATHODE COLUMN 1
14	ANODE ROW 2
15	CATHODE COLUMN 7
16	CATHODE COLUMN 8

ABSOLUTE MAXIMUM RATING

PARAMETER	MAXIMUM RATING	UNIT
Average Power Dissipation Per Dot	40	mW
Peak Forward Current Per Dot (Frequency 1Khz, 18% duty cycle)	90	mA
Average Forward Current Per Dot	15	mA
Forward Current From 25°C	0.2	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		

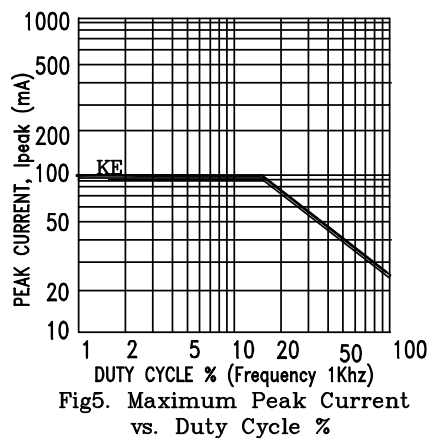
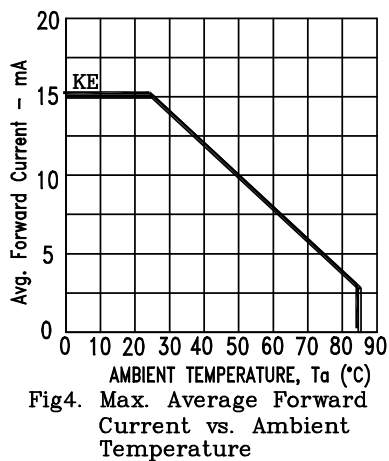
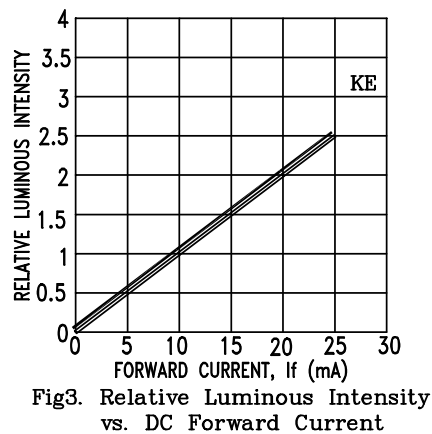
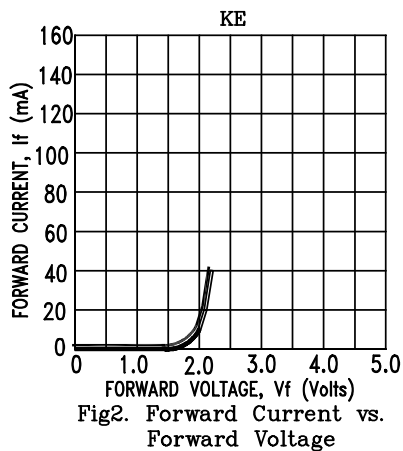
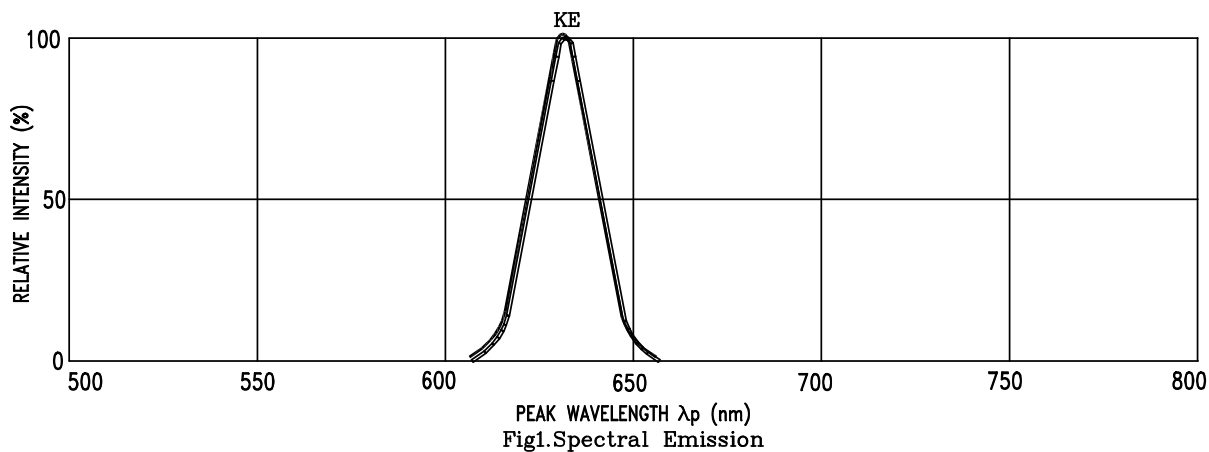
ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta = 25°C

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITION
Average Luminous Intensity Per Dot	I _v	630	1650		μcd	I _p = 32mA 1/16Duty
Peak Emission Wavelength	λ _p		632		nm	I _F = 20mA
Spectral Line Half-Width	Δλ		20		nm	I _F = 20mA
Dominant Wavelength	λ _d		624		nm	I _F = 20mA
Forward Voltage any Dot	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 : KE=AlInGaP RED