



# LED Display Product Data Sheet LTP-747KF

Spec No.: DS30-2008-0036

Effective Date: 03/20/2008

Revision: A

**LITE-ON DCC**

**RELEASE**

BNS-OD-FC001/A4

**LED DISPLAY****LTP-747KF**  
**DATA SHEET**

<b>Rev</b>	<b>Description</b>	<b>By</b>
01	RDR Original Spec	Phanomkorn J. Jan/28/2008
-	NPPR Original Spec	Phanomkorn J. Mar/03/2008
A	REVISE PACKAGE DIMENSION	Phanomkorn J. Mar/12/2008

SPEC. NO.: DS30-2008-0036DATE : Mar/12/2008REV. NO. : APAGE NO. : 0 OF 5

## **FEATURES**

- \* 0.7INCH (17.22mm) DIGIT HEIGHT.
- \* CONTINUOUS UNIFORM SEGMENTS.
- \* LOW POWER REQUIREMENT.
- \* EXCELLENT CHARACTERS APPEARANCE.
- \* HIGH BRIGHTNESS & HIGH CONTRAST.
- \* WIDE VIEWING ANGLE.
- \* SOLID STATE RELIABILITY.
- \* CATEGORIZED FOR LUMINOUS INTENSITY.
- \* **LEAD-FREE PACKAGE (ACCORDING TO ROHS)**

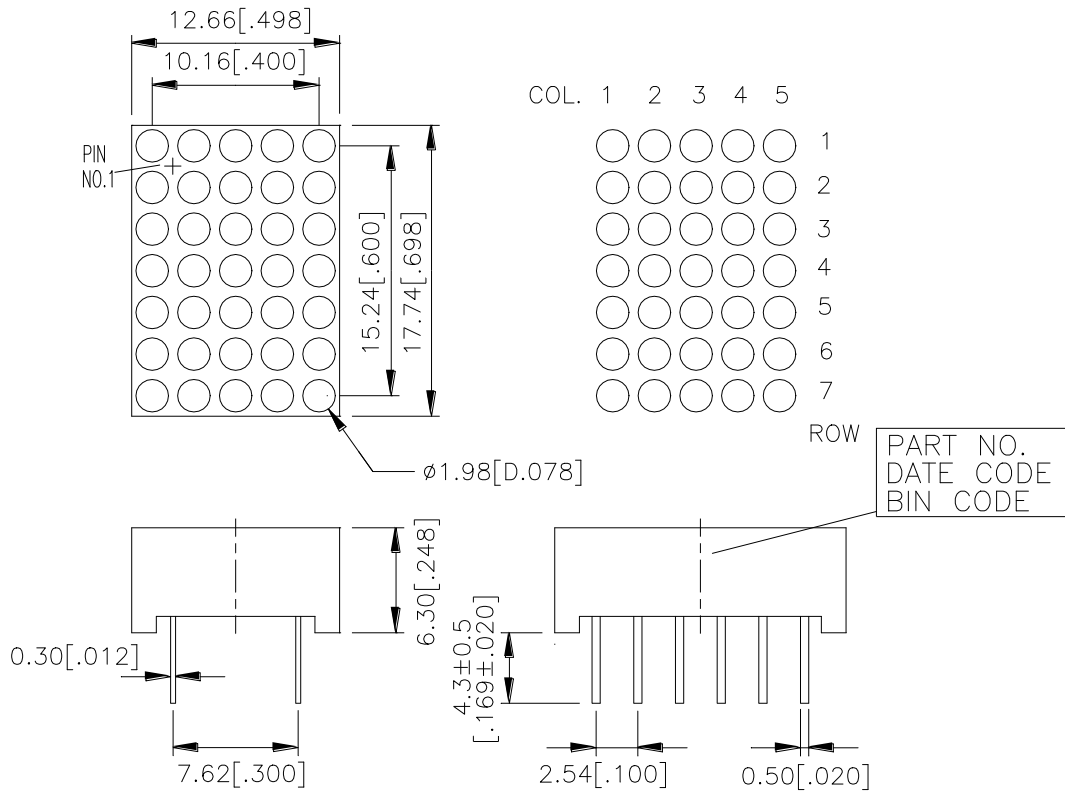
## **DESCRIPTION**

The LTP-747KF is a 0.7inch (17.22mm) matrix height 5 x 7 dot matrix display. This device utilizes AlInGaP Yellow Orange LED chips, which are made from AlInGaP on a non-transparent GaAs substrate, and has a gray face and white dots.

## **DEVICE**

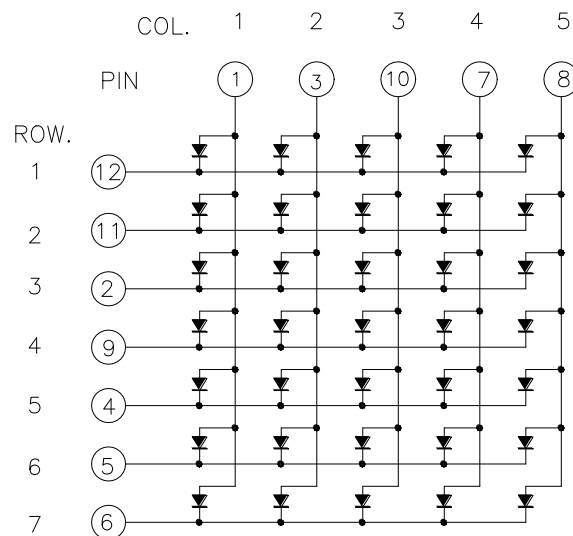
<b>PART NO.</b>	<b>DESCRIPTION</b>
AllnGaP Yellow Orange	Anode Column
LTP-747KF	Cathode Row

## PACKAGE DIMENSIONS



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

## INTERNAL CIRCUIT DIAGRAM



**PIN CONNECTION**

<b>No.</b>	<b>CONNECTION</b>
1	ANODE COLUMN 1
2	CATHODE ROW 3
3	ANODE COLUMN 2
4	CATHODE ROW 5
5	CATHODE ROW 6
6	CATHODE ROW 7
7	ANODE COLUMN 4
8	ANODE COLUMN 5
9	CATHODE ROW 4
10	ANODE COLUMN 3
11	CATHODE ROW 2
12	CATHODE ROW 1

## ABSOLUTE MAXIMUM RATING AT T<sub>A</sub>=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	0.33	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.		

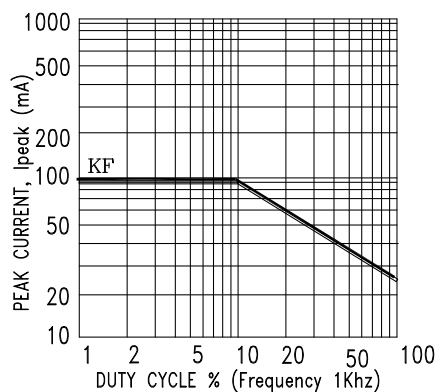
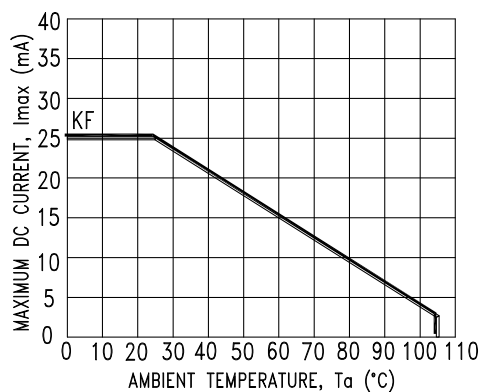
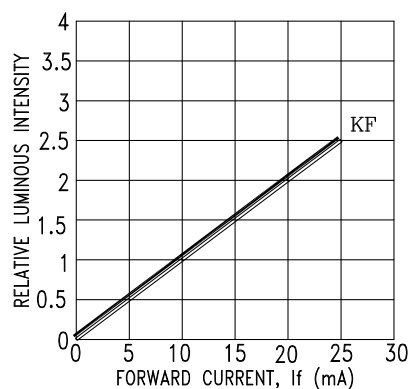
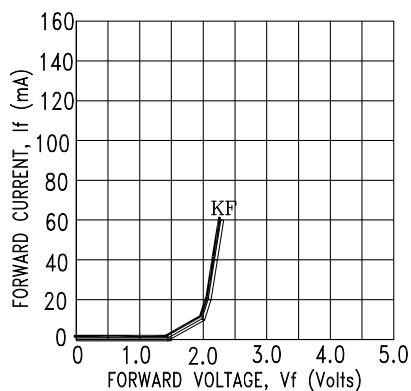
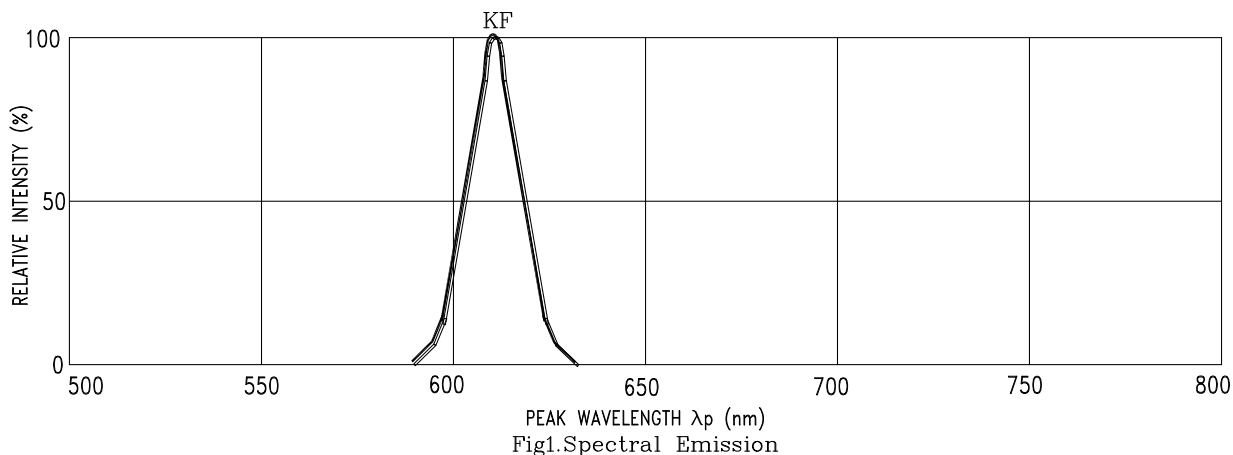
## ELECTRICAL / OPTICAL CHARACTERISTICS AT T<sub>A</sub>=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I <sub>v</sub>	630	1650		μcd	I <sub>F</sub> =32mA , 1/16Duty
Peak Emission Wavelength	λ <sub>p</sub>		611		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		17		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		605		nm	I <sub>F</sub> =20mA
Forward Voltage Per dot	V <sub>F</sub>		2.05	2.6	V	I <sub>F</sub> =20mA
Reverse Current Per dot	I <sub>R</sub>			100	μA	V <sub>R</sub> =5V
Luminous Intensity Matching Ratio (Similar Light Area)	I <sub>v-m</sub>			2:1		I <sub>F</sub> =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 : KF=AlInGaP YELLOW ORANGE