



**Spec No.: DS30-2007-0165** Effective Date: 10/03/2007

Revision: -

**LITE-ON DCC** 

**RELEASE** 

BNS-OD-FC001/A4

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LED	DISPI	$\Delta \mathbf{V}$

### **LTP-4823KF**

### **DATA SHEET**

Rev	Description	Ву
-	Original Spec	Phanomkorn J.

DATE: 05/September/'07

REV. NO.: \_\_\_\_\_

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#### **FEATURES**

- \*0.4 inch (10 mm) 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-4823KF is a 0.4 inch (10 mm) digit height dual digit 16-segments alphanumeric 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 segments.

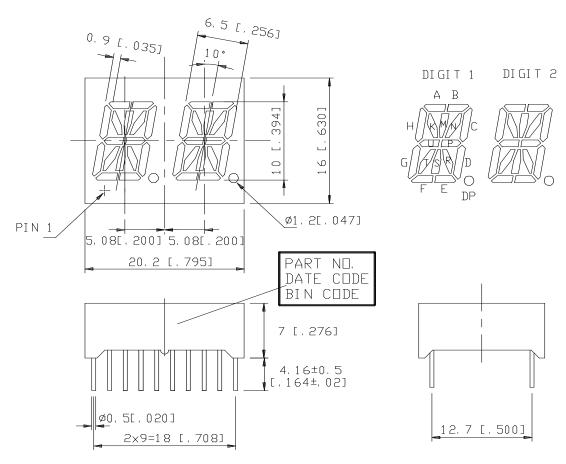
#### **DEVICE**

PART NO.	DESCRIPTION
AlInGaP Yellow Orange	DUPLEX COMMON ANODE
LTP-4823KF	RT. HAND DECIMAL

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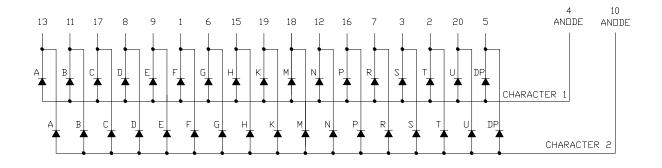
#### PACKAGE DIMENSIONS



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



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### **PIN CONNECTION**

No.	CONNECTION
1	CATHODE F
2	CATHODE T
3	CATHODE S
4	COMMON ANODE CHARACTER 1
5	CATHODE D.P.
6	CATHODE G
7	CATHODE R
8	CATHODE D
9	CATHODE E
10	COMMON ANODE CHARACTER 2
11	CATHODE B
12	CATHODE N
13	CATHODE A
14	NO CONNECTION
15	CATHODE H
16	CATHODE P
17	CATHODE C
18	CATHODE M
19	CATHODE K
20	CATHODE U

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#### ABSOLUTE MAXIMUM RATING AT Ta=25°C

PARAMETER	MAXIMUM RATING	UNIT
Average Power Dissipation Per Segment	70	mW
Peak Forward Current Per Segment	60	mA
Average Forward Current Per Segment	25	mA
Derating Linear From 25°C Per Segment	0.33	mA/°C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35°C to +105°C	
Storage Temperature Range	$-35^{\circ}\text{C}$ to $+105^{\circ}\text{C}$	

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 Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	500	1300		μcd	I <sub>F</sub> =1mA
Peak Emission Wavelength	λр		611		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		17		nm	I <sub>F</sub> =20mA
Dominant Wavelength	λd		605		nm	I <sub>F</sub> =20mA
Forward Voltage Per Segment	VF		2.05	2.6	V	I <sub>F</sub> =20mA
Reverse Current Per Segment	Ir			100	μΑ	V <sub>R</sub> =5V
Luminous Intensity Matching Ratio (Similar Light Area)	Iv-m			2:1		I <sub>F</sub> =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.

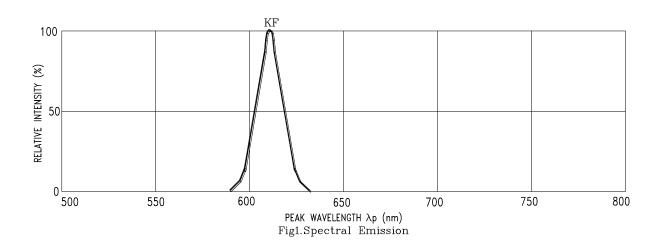
BIN TABLE 2						
RANGE	321-500	501-800	801-1300	1301-2100	2101-3400	
BIN	F	G	Н	J	K	

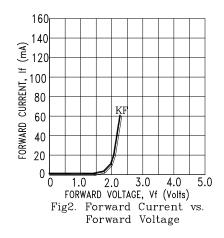
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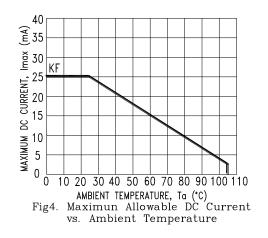
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#### TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)







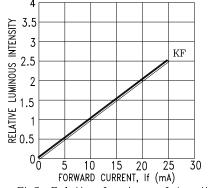
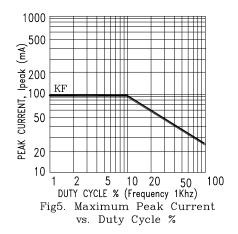


Fig3. Relative Luminous Intensity vs. DC Forward Current



NOTE: KF=AlInGaP YELLOW ORANGE

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