



**Spec No.: DS30-2006-042** Effective Date: 06/24/2010

Revision: C

**LITE-ON DCC** 

**RELEASE** 

BNS-OD-FC001/A4

**Property of Lite-on Only** 

#### **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 LTS-4801KF is a 0.4 inch (10 mm) height single digit seven-segment 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.

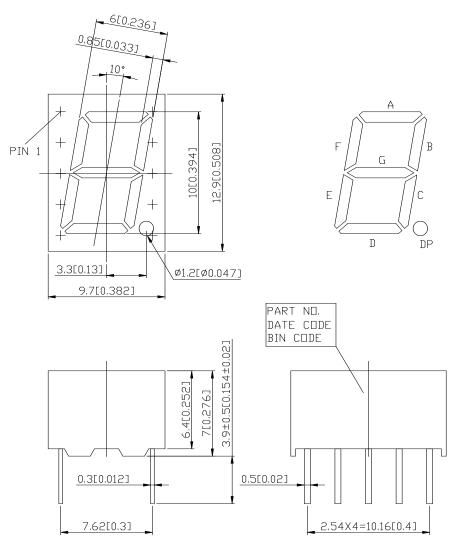
#### **DEVICE**

PART NO.	DESCRIPTION			
AlInGaP Yellow Orange	Common Anode			
LTS-4801KF	Rt. Hand Decimal			

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#### PACKAGE DIMENSIONS



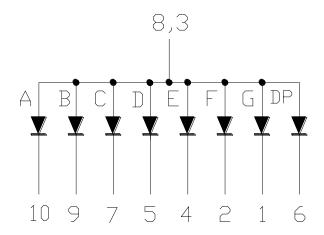
NOTES: 1.All dimensions are in millimeters. Tolerances are ± 0.25mm(0.01") unless otherwise noted.

2. Pin tip's shift tolerance is  $\pm$  0.4 mm.

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#### INTERNAL CIRCUIT DIAGRAM



#### PIN CONNECTION

No	CONNECTION
1	CATHODE G
2	CATHODE F
3	COMMON ANODE
4	CATHODE E
5	CATHODE D
6	CATHODE D.P.
7	CATHODE C
8	COMMON ANODE
9	CATHODE B
10	CATHODE A

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

PARAMETER	MAXIMUM RATING	UNIT		
Power Dissipation Per Segment	70	mW		
Peak Forward Current Per Segment	60	mA		
(1/10 Duty Cycle, 0.1ms Pulse Width)				
Continuous Forward Current Per Segment	25	mA		
Derating Linear From 25°C Per Segment	0.28	mA/°C		
Reverse Voltage Per Segment	5	V		
Operating Temperature Range	-35°C to +105°C			
Storage Temperature Range	-35°C to +105°C			

Solder Conditions: 1/16 inch below seating plane for 3 seconds at 260°C., or temperature of 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	27520	44000		μcd	IF=20mA
Peak Emission Wavelength	λр		611		nm	IF=20mA
Spectral Line Half-Width	Δλ		17		nm	IF=20mA
Dominant Wavelength	λd		605		nm	IF=20mA
Forward Voltage Per Segment	VF		2.05	2.6	V	IF=20mA
Reverse Current Per Segment	IR			100	μΑ	VR=5V
Luminous Intensity Matching Ratio (Similar Light Area)	IV-m			2:1		IF=20mA

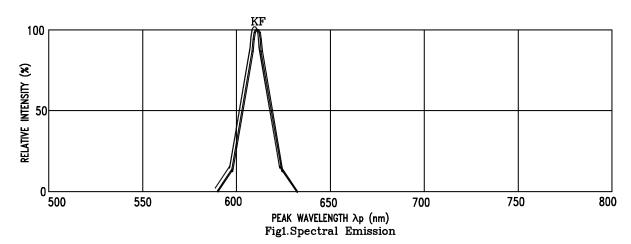
Note: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

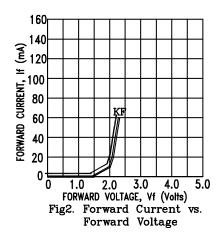
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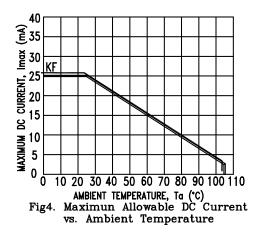
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#### TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)







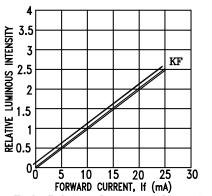
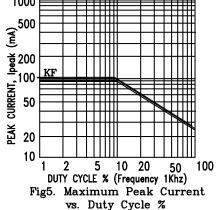


Fig3. Relative Luminous Intensity vs. DC Forward Current



NOTE: KF=AlinGaP YELLOW ORANGE

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Lite-On: