



LED Display

Product Data Sheet

LTS-10804KF

Spec No.: DS30-2009-0133

Effective Date: 03/04/2014

Revision: A

LITE-ON DCC

RELEASE

**LED DISPLAY
LTS-10804KF**

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<u>Rev</u>	<u>Description</u>	<u>By</u>	<u>Date</u>
01	Preliminary SPEC	MINALIN	09-Sep-2009
Above data for PD and Customer tracking only			
-	NPPR Received and Upload on system	MINALIN	09-Sep-2009
A	Add cosmetics spec as note on page 3 of 6 Add Operating and Storage Temperature Range to -35°C to +105°C And VF	ANON/ James	26-Feb-2014

LED DISPLAY LTS-10804KF

1. Description

The LTS-10804KF is a 1.0 inch (25.4 mm) digit height single digit low current seven-segment display. This device uses AS-AlInGaP yellow orange LED chips (AlInGaP epi on GaAs substrate). The display has a black face and white segments.

1.1 Features

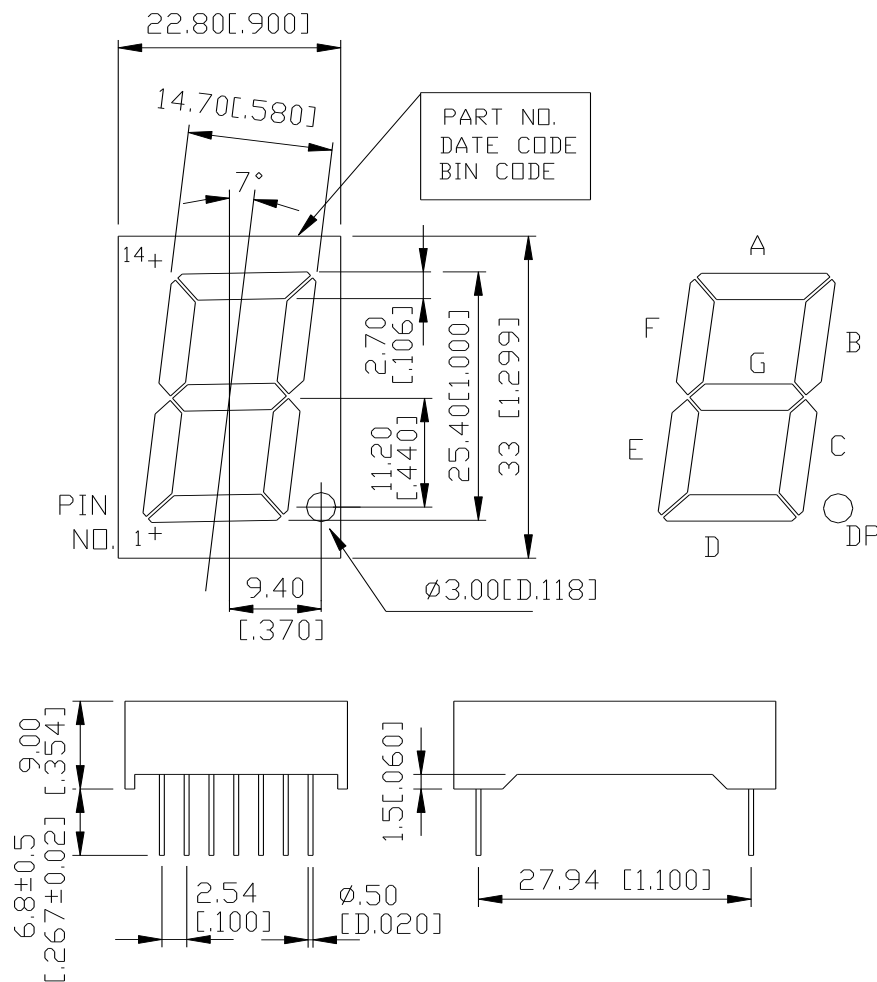
- 1.0 inch (25.40 mm) DIGIT HEIGHT
- CONTINUOUS UNIFORM SEGMENTS
- LOW POWER REQUIREMENT
- EXCELLENT CHARACTERS APPEARANCE
- HIGH BRIGHTNESS & HIGH CONTRAST
- WIDE VIEWING ANGLE
- SOLID STATE RELIABILITY
- CATEGORIZED FOR LUMINOUS INTENSITY
- LEAD-FREE PACKAGE (ACCORDING TO ROHS)

1.2 Device

Part No	Description
AlInGaP Yellow Orange	COMMON ANODE RT. HAND DECIMAL
LTS-10804KF	

LED DISPLAY LTS-10804KF

2. Package Dimensions

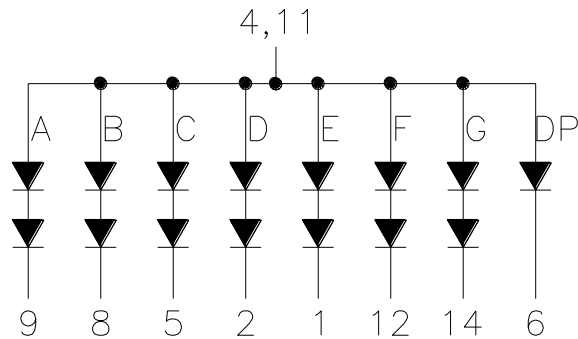


Notes :

1. All dimensions are in millimeters. Tolerances are $\pm 0.25\text{mm}$ (0.01") unless otherwise noted.
2. Foreign materials on segment $\leq 20\text{mils}$
3. Bubble in segment $\leq 20\text{mils}$
4. Bending $\leq 1\%$ of reflector length
5. Ink contamination (surface) $\leq 20\text{mils}$
6. Pin tip's shift tolerance is $\pm 0.40\text{ mm}$.
7. Recommend the best pcb hole : diameter 1.00 mm

LED DISPLAY LTS-10804KF

3. Internal Circuit Diagram



4. Pin Connection

No	Connection
1	CATHODE E
2	CATHODE D
3	NO PIN
4	COMMON ANODE
5	CATHODE C
6	CATHODE D.P.
7	NO PIN
8	CATHODE B
9	CATHODE A
10	NO PIN
11	COMMON ANODE
12	CATHODE F
13	NO PIN
14	CATHODE G

LED DISPLAY LTS-10804KF

5. Rating and Characteristics

5.1. Absolute Maximum Rating at Ta=25°C

Parameter	Maximum Rating	Unit
Power Dissipation Per Segment	134	mW
Peak Forward Current Per Segment (1/10 Duty Cycle, 0.1ms Pulse Width)	60	mA
Continuous Forward Current Per Segment	25	mA
Derating Linear From 25°C Per Segment	0.33	mA/°C
Operating Temperature Range	-35°C to +105°C	
Storage Temperature Range	-35°C to +105°C	
Solder Condition: 1/16 inch below seating plane for 3 seconds at 260°C or temperature of unit (during assembly) not over max. temperature rating above		

5.2. Electrical / Optical Characteristics at Ta=25°C

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Test Condition
Average Luminous Intensity Per Segment	IV	420	1400		μcd	IF=1mA
Peak Emission Wavelength	λp		611		nm	IF=20mA
Spectral Line Half-Width	Δλ		17		nm	IF=20mA
Dominant Wavelength	λd		605		nm	IF=20mA
Forward Voltage Per segment(DP)	VF		4.20 (2.1)	5.20 (2.6)	V	IF=20mA
Reverse Current Per Segment (DP) ⁽²⁾	IR			100	μA	VR=10V (5V)
Luminous Intensity Matching Ratio (Similar Light Area)	IV-m			2:1		IF=10mA

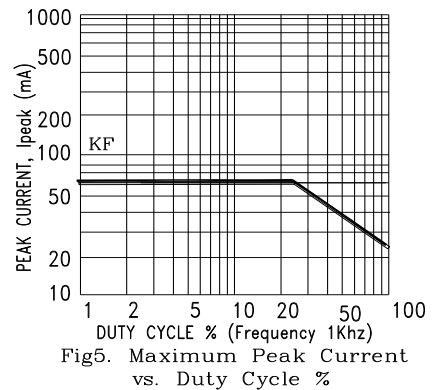
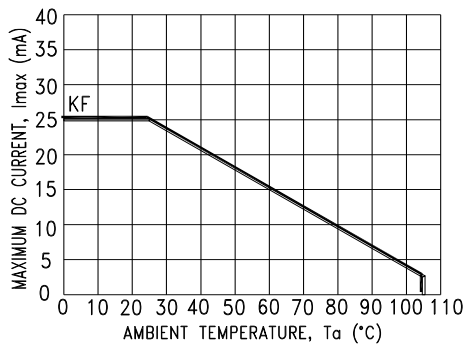
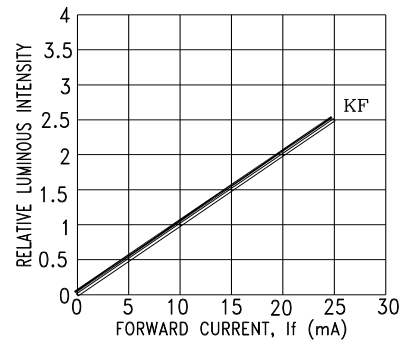
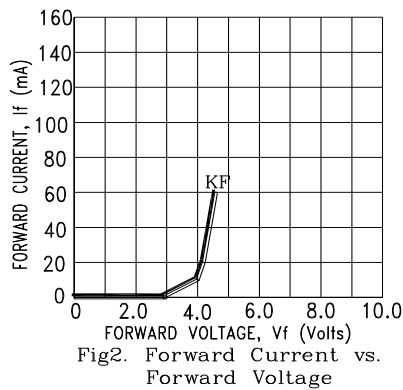
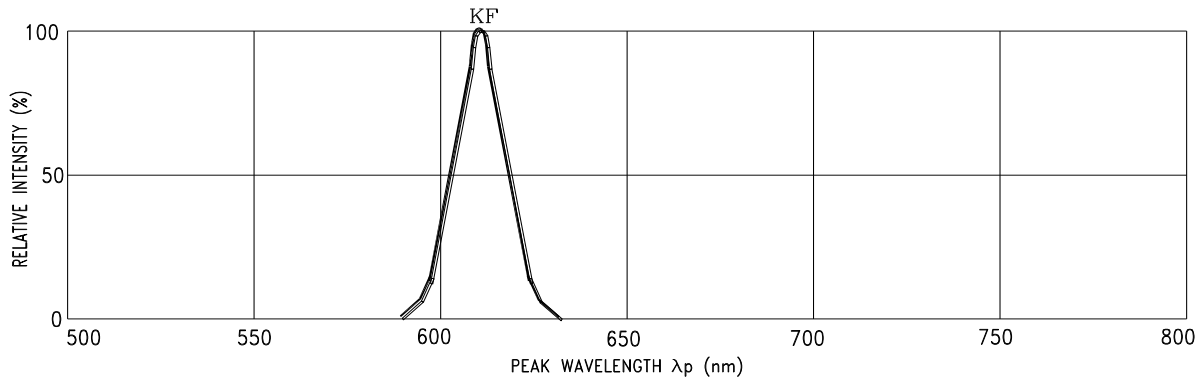
Notes :

- Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commission International De L'Eclairage) eye-response curve
- Reverse voltage is only for IR test. It cannot continue to operate at this situation
- Cross talk specification ≤ 1.0%

LED DISPLAY LTS-10804KF

5.3. Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)



NOTE : KF=AlInGaP YELLOW ORANGE