



Spec No.: DS30-2006-043 Effective Date: 07/16/2008

Revision: C

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

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LED DISPLAY

LTD-5721AKF DATA SHEET

Rev	Description	By
-	ODICINAL	PHANOMKORN
	ORIGINAL	MAY 20,2006
A	CHANGE LIGHT GRAY FACE TO DARK GRAY FACE	PHANOMKORN
		AUGUST 31,2006
В	REVISE THE TYPIGSAL ELECTRICAL / OPTICAL	PHANOMKORN
	CHARACTERISTIC CURVES ON PAGE 5/5	JANUARY 5,2008
С	CHANGE THE TEST CONDITION OF AVERAGE LUMINOUS	PHANOMKORN
	INTENSITY ON PAGE 4/5 FROM 1mA TO 20 mA	JULY 7, 2008

 SPEC. NO.:
 DS30-2006-043

 D A T E :
 July 7, 2008

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FEATURES

- *0.56 INCH (14.22 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 LTD-5721AKF is a 0.56 inch (14.22 mm) height digit display. The device utilizes AlInGaP yellow orange LED chips which are made from AlInGaP on a non-transparent GaAs substrate, and have gray face and white segment color.

DEVICE

PART NO	DESCRIPTION		
AlInGaP Yellow Orange	Common Anode		
LTD-5721AKF	Rt. Hand Decimal		

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PACKAGE DIMENSIONS 7.9(0.3117 1.5(0.0597) PIN 1 4.9(0.1931 25(0.9841) PART ND. DATE CIDE BIN CIDE BIN CIDE

NOTES: 1. All dimensions are in millimeters. Tolerances are $\pm\,0.25$ mm unless otherwise note.

0.3[0.012]

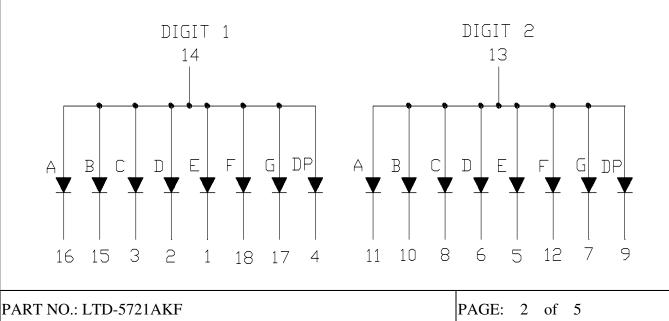
15.24[0.6] -

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

2.54×8=20.32[0.8]

INTERNAL CIRCUIT DIAGRAM

0.5[0.02]



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PIN CONNECTION

No	CONNECTION				
1	CATHODE E (DIGIT 1)				
2	CATHODE D (DIGIT 1)				
3	CATHODE C (DIGIT 1)				
4	CATHODE D.P. (DIGIT 1)				
5	CATHODE E (DIGIT 2)				
6	CATHODE D (DIGIT 2)				
7	CATHODE G (DIGIT 2)				
8	CATHODE C (DIGIT 2)				
9	CATHODE D.P. (DIGIT 2)				
10	CATHODE B (DIGIT 2)				
11	CATHODE A (DIGIT 2)				
12	CATHODE F (DIGIT 2)				
13	COMMON ANODE (DIGIT 2)				
14	COMMON ANODE (DIGIT 1)				
15	CATHODE B (DIGIT 1)				
16	CATHODE A (DIGIT 1)				
17	CATHODE G (DIGIT 1)				
18	CATHODE F (DIGIT 1)				

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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 (Frequency 1Khz, 10% duty cycle)	60	mA		
Continuous Forward Current Per Segment	25	mA		
Forward Current Derating from 25°C	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			

Soldering Conditions: 1/16 inch below seating plane for 3 seconds at 260^{0} 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	43750	70000		μcd	I _F =20mA
Peak Emission Wavelength	λρ		611		nm	$I_F = 20 \text{mA}$
Spectral Line Half-Width	Δλ		17		nm	$I_F = 20 \text{mA}$
Dominant Wavelength	λd		605		nm	IF = 20mA
Forward Voltage Per Segment	V_{F}		2.05	2.6	V	$I_F = 20 \text{mA}$
Reverse Current Per Segment	Ir			100	μΑ	$V_R = 5V$
Luminous Intensity Matching Ratio (Similar Light Area)	Iv-m			2:1		IF = 20mA

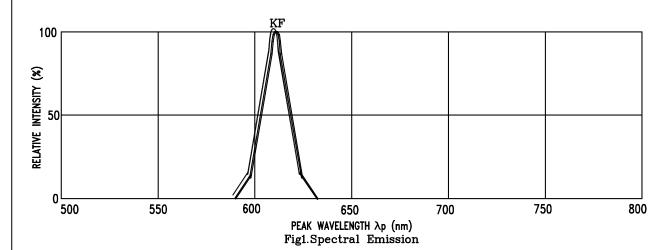
Note: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

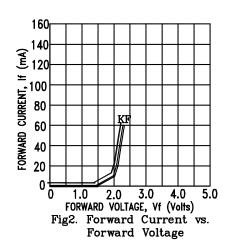
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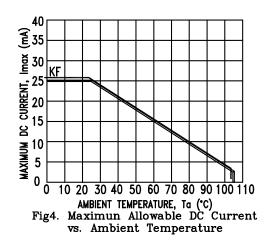
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(25°C Ambient Temperature Unless Otherwise Noted)







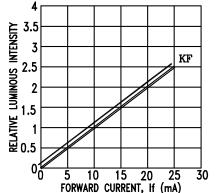
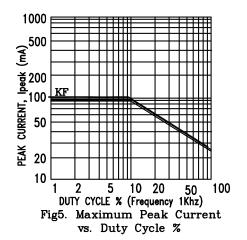


Fig3. Relative Luminous Intensity vs. DC Forward Current



NOTE: KF=AlingaP YELLOW ORANGE

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