



LED Display

Product Data Sheet

LTD-5521AKE-TJ

Spec No.: DS30-2004-228

Effective Date: 10/03/2007

Revision: B

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

LITE-ON Technology Corp. / Optoelectronics

No.90,Chien 1 Road, Chung Ho, New Taipei City 23585, Taiwan, R.O.C.

Tel: 886-2-2222-6181 Fax: 886-2-2221-1948 / 886-2-2221-0660

<http://www.liteon.com/opto>

LED DISPLAY**LTD-5521AKE-TJ****DATA SHEET**

Rev	Description	By
-	Original Spec	TH Chen
A	Modify some Parameter wrong	TH Chen
B	Add packing spec, date code description and some info	Phanomkorn J.

SPEC. NO.: DS30-2004-228DATE : 03/Sep/'07REV. NO. : B

FEATURES

- * 0.56 inch (14.22 mm) DIGIT HEIGHT
- * EXCELLENT SEGMENT UNIFORMITY
- * LOW POWER REQUIREMENT
- * HIGH BRIGHTNESS AND HIGH CONTRAST
- * WIDE VIEWING ANGLE
- * SOLID STATE RELIABILITY
- * BINNED FOR LUMINOUS INTENSITY
- * **LEAD-FREE PACKAGE (ACCORDING TO ROHS)**

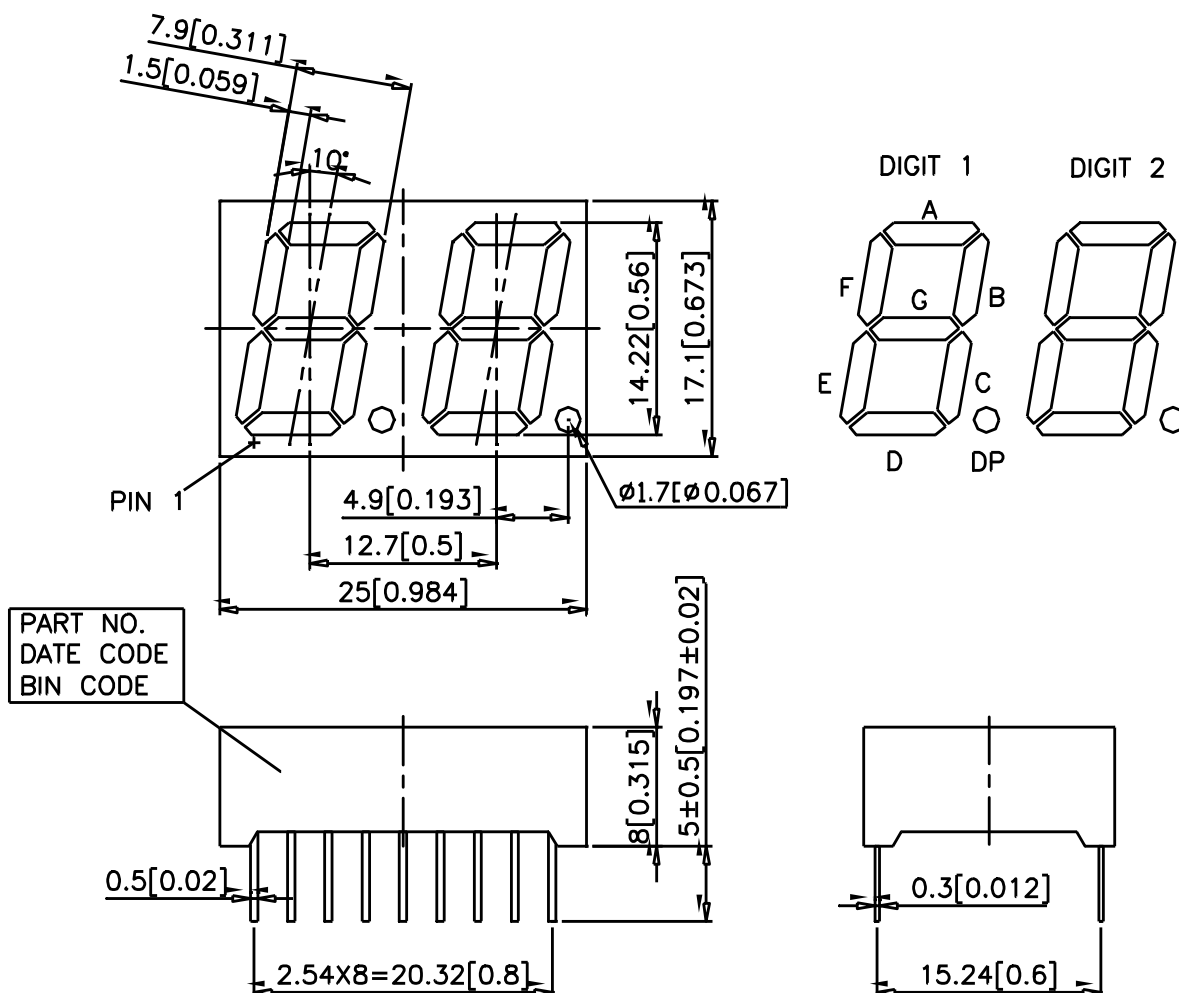
DESCRIPTION

The LTD-5521AKE-TJ is a 0.56 inch (14.22 mm) digit height dual-digit display. This device uses AlInGaP RED LED chips (AlInGaP RED epi on GaAs substrate). The display has gray face and white segments.

DEVICE

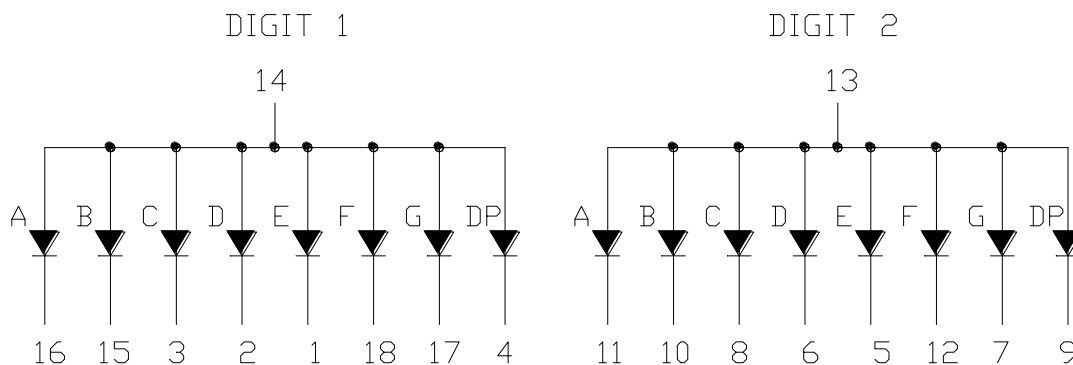
PART NO.	DESCRIPTION
AlInGaP RED	COMMON ANODE RT. HAND DECIMAL
LTD-5521AKE-TJ	

PACKAGE DIMENSIONS



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

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

No.	CONNECTION
1	Cathode E (Digit 1)
2	Cathode D (Digit 1)
3	Cathode C (Digit 1)
4	Cathode DP (Digit 1)
5	Cathode E (Digit 2)
6	Cathode D (Digit 2)
7	Cathode G (Digit 2)
8	Cathode C (Digit 2)
9	Cathode DP (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)

ABSOLUTE MAXIMUM RATING

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	70	mW
Peak Forward Current Per Segment (Frequency 1Khz, 10% duty cycle)	90	mA
Continuous Forward Current Per Segment	25	mA
Forward Current Derating from 25 ⁰ C	0.33	mA/ ⁰ C
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35 ⁰ C to +105 ⁰ C	
Storage Temperature Range	-35 ⁰ C to +105 ⁰ 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.		

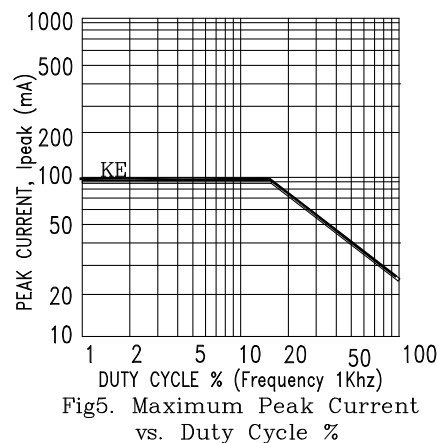
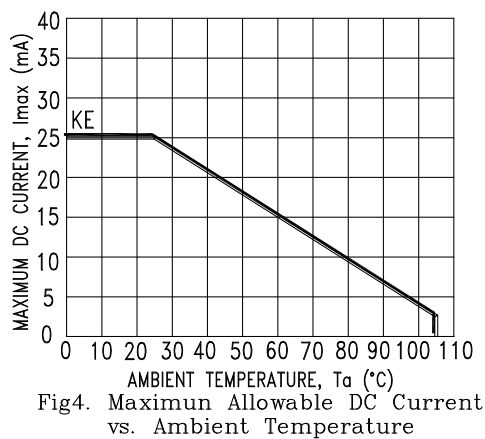
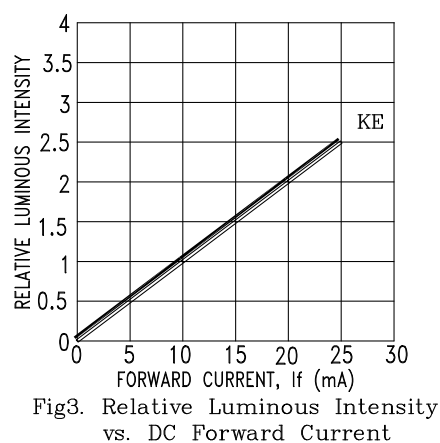
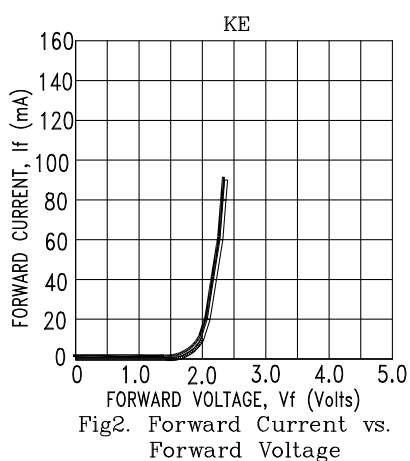
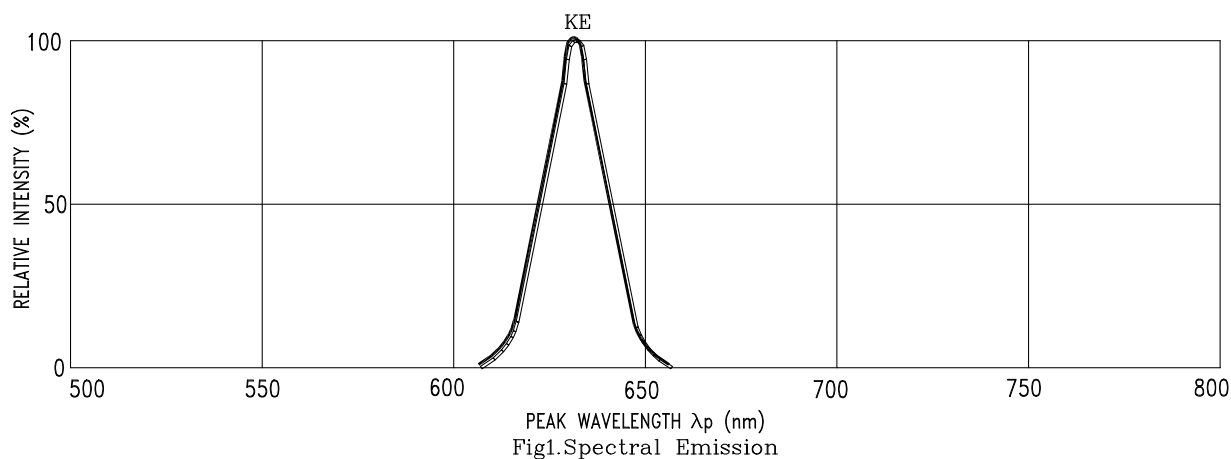
ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25⁰C

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITION
Average Luminous Intensity Per Segment	I _v	800	1667		μcd	I _F = 1mA
Peak Emission Wavelength	λ _p		632		nm	I _F = 20mA
Spectral Line Half-Width	Δλ		20		nm	I _F = 20mA
Dominant Wavelength	λ _d		624		nm	I _F = 20mA
Forward Voltage Per Segment	V _F		2.05	2.6	V	I _F = 20mA
Reverse Current Per Segment	I _R			100	μA	V _R = 5V
Luminous Intensity Matching Ratio (Similar Light Area)	I _v -m			2 : 1		I _F = 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.

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

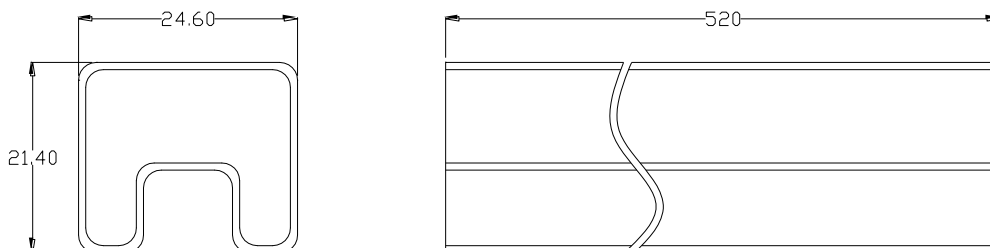
(25°C Ambient Temperature Unless Otherwise Noted)



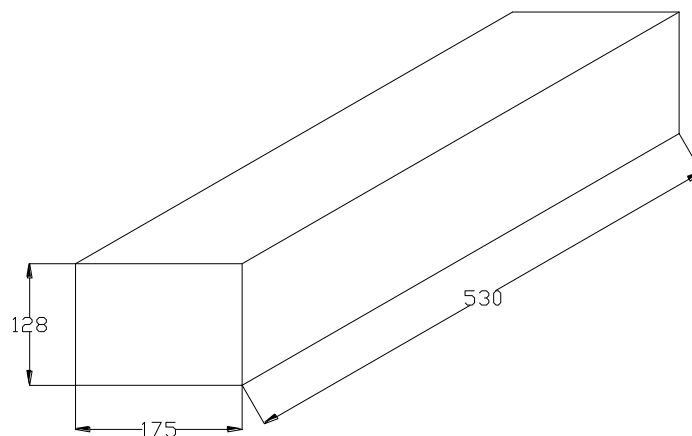
NOTE : KE=AlInGaP RED

PACKING SPEC

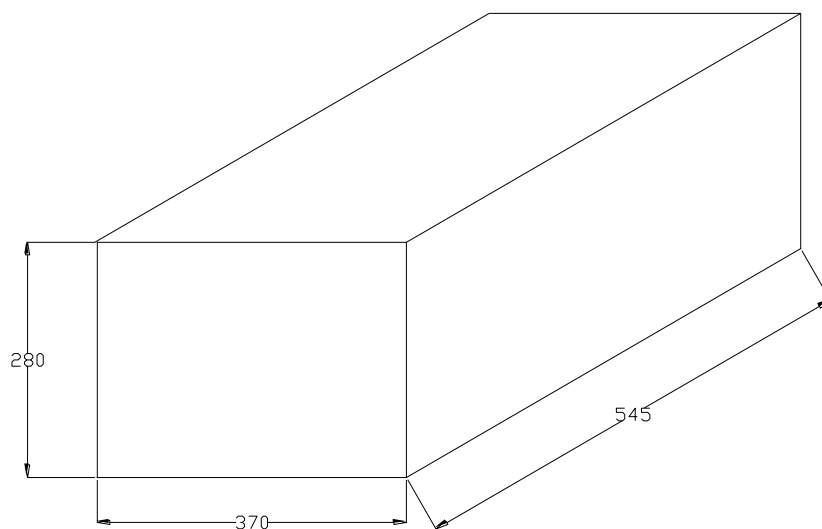
20 PCS / PACKING TUBE



40 PCS PACKING TUBE / INNER CARTON



4 INNER CARTON / OUTER CARTON



LITEON LITE-ON TECHNOLOGY CORPORATION

Property of Lite-On Only

Date Code

The first three number shows date code

The date code is composed of the following characters;

7 3 6
└─┬─> 36 = Work Week number of year
└─> 7 = Year (7 for 2007, 8 for 2008)

Label Indication

TUBE

LITEON MADE IN THAILAND 1019137	MATREIAL NO. : LTD-5521AKE-TJ	BATCH : H
	QUANTITY : 20	
	CUS. P/N :	MACHINE :
	DATE CODE : 0736	2006/06/01 15:15:15 TIS0699

LITEON MADE IN THAILAND 1019137	MATREIAL NO. : LTD-5521AKE-TJ	BATCH : H
	QUANTITY : 800	
	CUS. P/N :	MACHINE :
	DATE CODE : 0736	2006/06/01 15:15:15 TIS0699

INNER CARTON

LITEON	FINISHED GOODS STOCK LABLE
TAG NO. : T1941247	
CUSTOMER : Hitachi	
CUS.PART NO. :	
MATERIAL GROUP : O30200DPR	
MATERIAL NO : LTD-5521AKE-TJ	
BATCH :	H
QUANTITY :	800
DATE CODE :	0736
COMMENT :	0736 PBF H
Pb-free/RoHS SHELF HC3	
TBNZ027 2007/09/05 17:00:00	

OUTER CARTON

LITEON	FINISHED GOODS STOCK LABLE	CTN.NO : 1
CUSTOMER : Hitachi		
CUSTOMER P/N : N/A		
MATERIAL NO : LTD-5521AKE-TJ		
Pb-Free/RoHS		
BATCH	QUANTITY	
H	3200	
TOTAL		3200
TBNZ027 2007/09/05 15:30:00		

LITEON	FINISHED GOODS STOCK LABLE	CTN.NO : 1
DELIVERY NOTE :	4101644342	
CUSTOMER PO. :	0200132607	
TYPE OF PACKAGE :	92-SUC02	
INVOICE NO. :	0200132607	
DATE CODE. :		
TBNZ027 2007/09/05 15:30:00		

PART NO.: LTD-5521AKE-TJ

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