



Spec No.: DS30-2010-0171Effective Date: 10/13/2012

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4



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LED DISPLAY

LTS-5501AE-09J **DATA SHEET**

ITEM	DESCRIPTION	ISSUER	DATE
1	New	Lester Chen	2010/06/01
2	Delete Reverse Voltage Per Dice at absolute maximum rating. Add Reverse voltage remark at electrical/ optical characteristics.	Eason Lin	2010/08/05

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FEATURES

- *0.56inch (14.22mm) DIGIT HEIGHT
- *CONTINUOUS UNIFORM SEGMENTS
- ***LOW POWER REQUIREMENT**
- *EXCELLENT CHARACTERS APPEARANCE
- *HIGH BRIGHTNESS AND HIGH CONTRAST
- *WIDE VIEWING ANGLE
- ***SOLID STATE RELIABILITY**
- *CATEGORIZED FOR LUMINOUS INTENSITY
- ***LEAD-FREE PACKAGE (ACCORDING TO RoHS)**

DESCRIPTION

The LTS-5501AE-09J is a 0.56 inch (14.22 mm) digit height single digit display. This device utilizes red orange LED chips which are made from GaAsP on GaP substrate, and has a gray face and white segments.

DEVICE

PART NO.	DESCRIPTION			
Red Orange	Common Anode			
LTS-5501AE-09J	Rt. Hand Decimal			

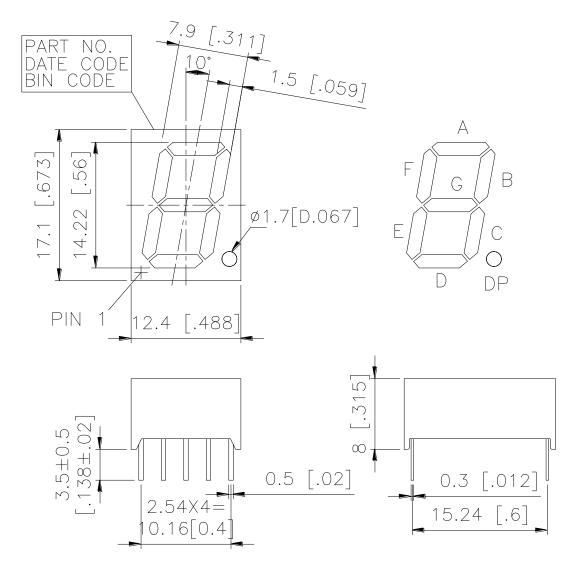
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PACKAGE DIMENSIONS



NOTES: 1.All dimensions are in millimeters. Tolerances are $\pm~0.25~\text{mm}$ (0.01") unless otherwise noted.

2. Pin tip's shift tolerance is ± 0.4 mm

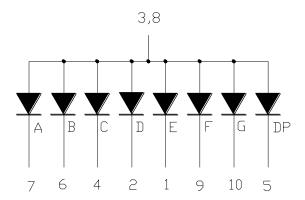
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INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

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

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ABSOLUTE MAXIMUM RATING

PARAMETER	MAXIMUM RATING	UNIT			
Power Dissipation Per Segment	75	mW			
Peak Forward Current Per Segment (Frequency 1Khz, 10% duty cycle)	100	mA			
Continuous Forward Current Per Segment	25	mA			
Derating Linear From 25°C Per Segment	0.28	mA/ ⁰ C			
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 5 seconds at 260°C					

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITION
Average Luminous Intensity Per Segment	lv	800	2400		μcd	IF = 10mA
Peak Emission Wavelength	λр		630		nm	IF = 20mA
Spectral Line Half-Width	Δλ		40		nm	IF = 20mA
Dominant Wavelength	λd		621		nm	IF = 20mA
Forward Voltage Per Segment	VF		2.0	2.6	V	IF = 20mA
Reverse Current Per Segment ⁽²⁾	lR			100	μΑ	$V_R = 5V$
Luminous Intensity Matching Ratio (Similar Light Area)	Iv-m			2:1		IF= 10mA

BIN TABLE ucd/seg-10mA

Bin Grade	Н	J	K	L	M
Range	801~1300	1301~2100	2101~3400	3401~5400	5401~8600

Note:

- 1. Luminous Intensity is measured with a light sensor and filter combination that approximates the CIE (Commission Internationale De L'Eclairage) eye-response curve.
- 2. Reverse voltage is only for IR test. It can not continue to operate at this situation.

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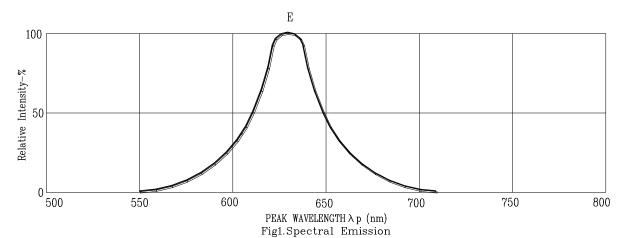


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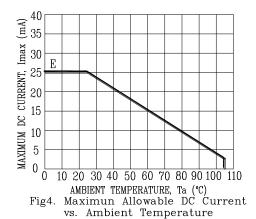
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TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)



160 (YE) 120 120 100 60 0 1.0 2.0 3.0 4.0 5.0 FORWARD VOLTAGE, Vf (Volts) Fig2. Forward Current vs. Forward Voltage



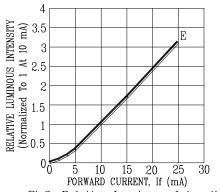
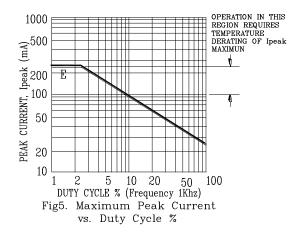


Fig3. Relative Luminous Intensity
vs. DC Forward Current



NOTE: E=RED ORANGE

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