



LED Display

Product Data Sheet

LTD-2402C

Spec No.: DS30-2007-0020

Effective Date: 02/07/2007

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

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LED DISPLAY**LTD-2402C**
DATA SHEET

<u>Rev</u>	<u>Description</u>	<u>By</u>
-	Original Spec	<u>Phanomkorn J.</u>

S P E C . N O . : DS30-2007-0020

D A T E : Jan 19'2007

R E V . N O . : -

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FEATURES

- * 0.28 inch (7.0 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)

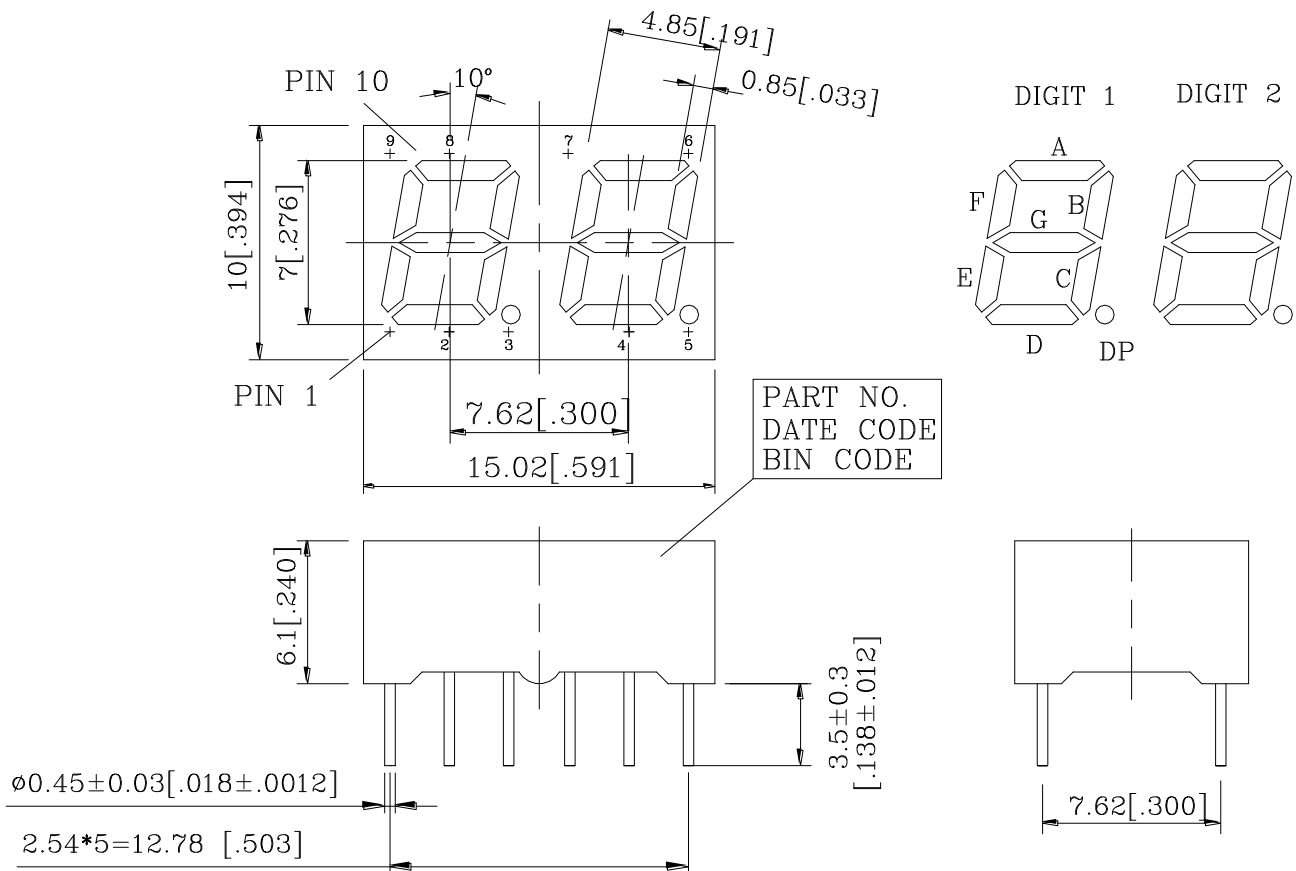
DESCRIPTION

The LTD-2402C is a 0.28 inch (7.0 mm) digit height dual digit seven-segment display. This device utilizes AlGaAs red LED chips, which are made from AlGaAs on a non-transparent GaAs substrate, and has a gray face and white segments.

DEVICE

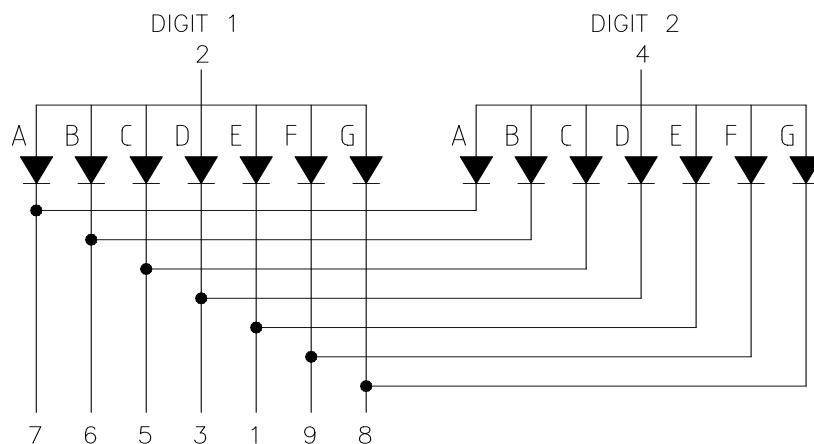
PART NO.	DESCRIPTION
AlGaAs RED	DUPLEX COMMON ANODE Rt.Hand Decimal
LTD-2402C	

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
2	COMMON ANODE DIGIT 1
3	CATHODE D
4	COMMON ANODE DIGIT 2
5	CATHODE C
6	CATHODE B
7	CATHODE A
8	CATHODE G
9	CATHODE F

ABSOLUTE MAXIMUM RATING AT Ta=25°C

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	75	mW
Peak Forward Current Per Segment (1/10 Duty Cycle, 0.1ms Pulse Width)	125	mA
Continuous Forward Current Per Segment Derating Linear From 25°C Per Segment	30 0.4	mA 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°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	I _v	2100	6000		μcd	I _F =10mA
Peak Emission Wavelength	λ _p		660		nm	I _F =20mA
Spectral Line Half-Width	Δλ		35		nm	I _F =20mA
Dominant Wavelength	λ _d		638		nm	I _F =20mA
Forward Voltage Per Segment	V _F		1.8	2.4	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 =10mA

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

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

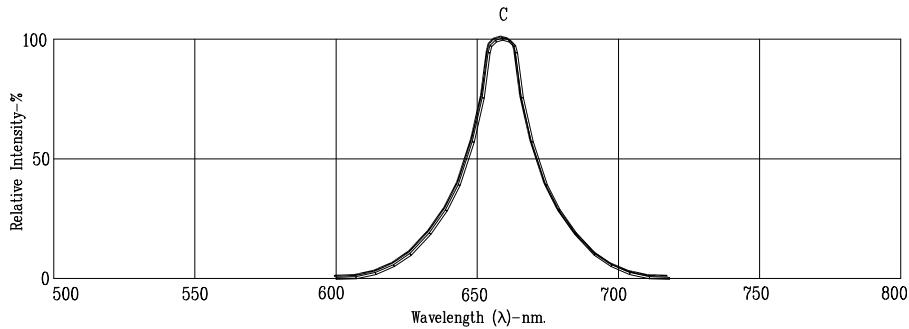


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

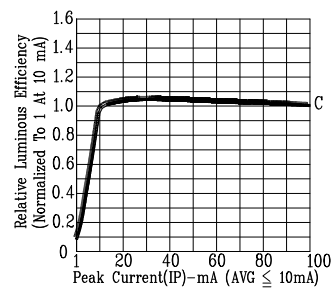


Fig2. RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT (REFRESH RATE 1KHz)

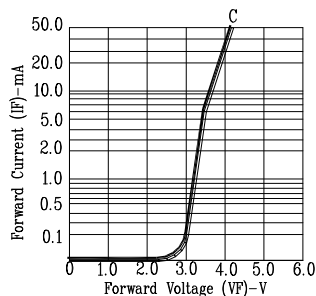


Fig3. FORWARD CURRENT VS. FORWARD VOLTAGE

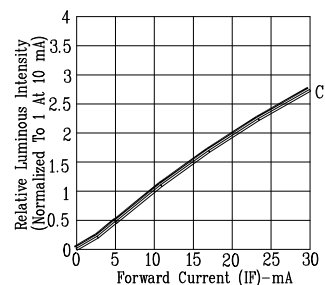


Fig4. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

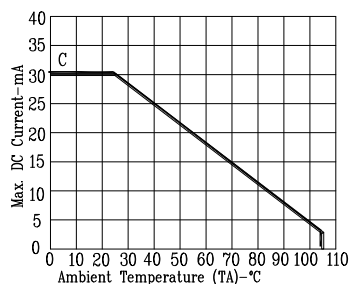


Fig5. MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE.

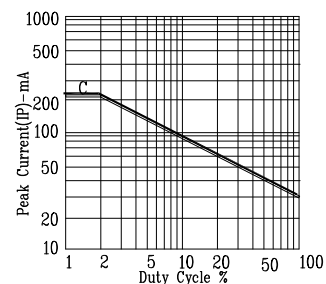


Fig6. MAX. PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE 1KHz)

NOTE: C=AlGaAs RED (REFRESH RATE 1KHz)