



**LED Display**  
**Product Data Sheet**  
LTD-323G-23

Spec No. :DS30-2004-096  
Effective Date: 09/22/2020  
Revision: C

**LITE-ON DCC**

**RELEASE**

**BNS-OD-FC001/A4**

**LED DISPLAY  
LTD-323G-23**

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LTD-323G-23

<u>Rev</u>	<u>Description</u>	<u>By</u>	<u>Date</u>
01	Preliminary Spec.	Vicky Liao	05/11/2004
<b>Above data for PD and Customer tracking only</b>			
-	NPPR Received and Upload on System	Vicky Liao	05/11/2004
A	Change Pin Spec.	YG Shi	12/01/2005
B	Change Pin Bending Spec.	YG Shi	03/08/2006
C	Add Packing Spec. in page 7	Reo Lin	09/16/2020

## LED DISPLAY LTD-323G-23

### 1. Description

The LTD-323G-23 is a 0.3 inch (7.6 mm) digit height dual digit seven-segment display. This device uses Green LED chips (GaP epi on Gap substrate). The display has black face and green segments.

#### 1.1 Features

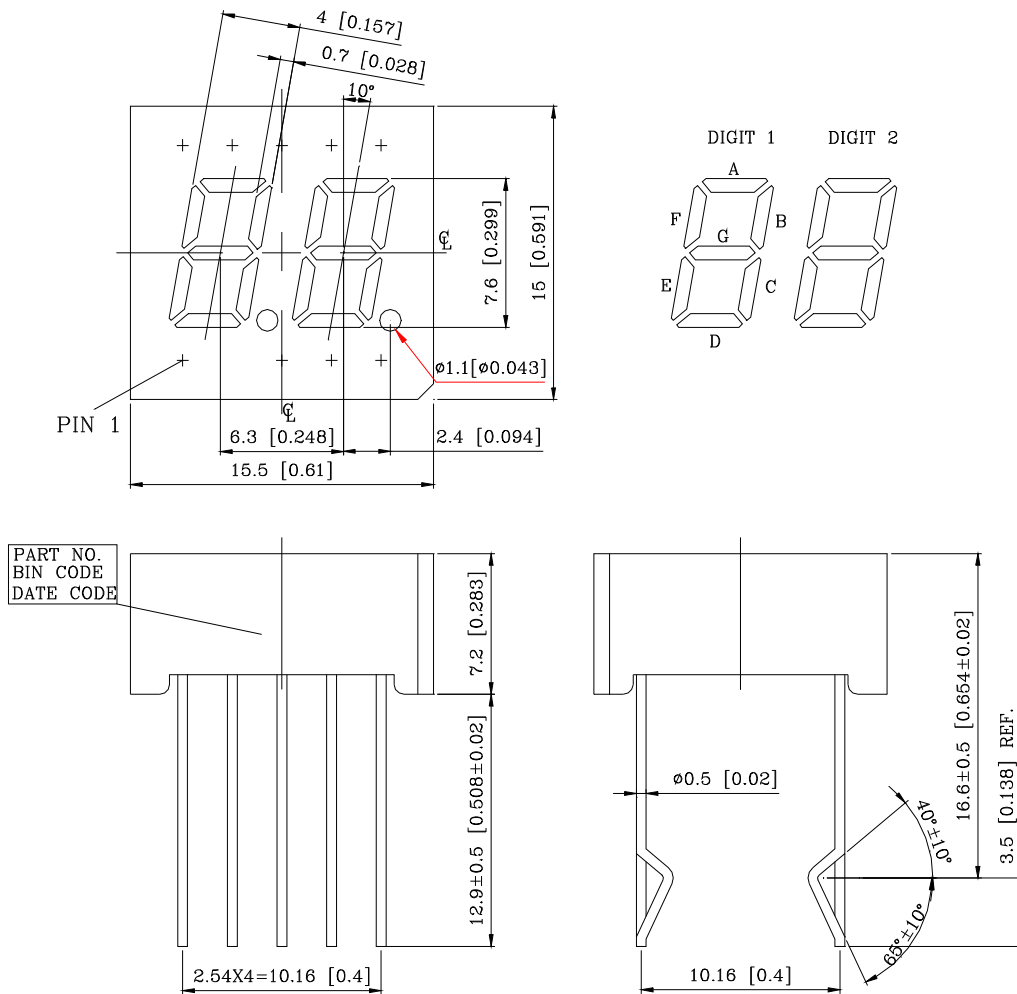
- 0.3 inch (7.6 mm) DIGIT HEIGHT
- CONTINUOUS UNIFORM SEGMENTS
- LOW POWER REQUIREMENT
- EXCELLENT CHARACTERS APPEARANCE
- HIGH BRIGHTNESS & HIGH CONTRAST
- WIDE VIEWING ANGLE
- SOLID STATE RELIABILITY
- CATEGORIZED FOR LUMINOUS INTENSITY.
- LEAD-FREE PACKAGE (ACCORDING TO ROHS)

#### 1.2 Device

Part No	Description
Green	Dual-plex Common Anode
LTD-323G-23	Rt. Hand Decimal

## LED DISPLAY LTD-323G-23

### 2. Package Dimensions

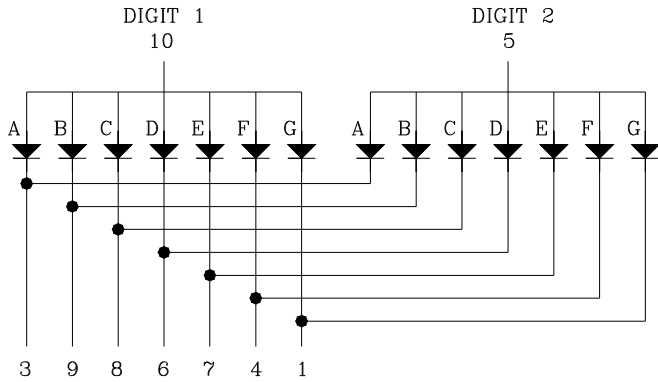


#### Notes :

1. All dimensions are in millimeters. Tolerances are  $\pm 0.25$  mm (0.01") unless otherwise noted
2. Pin tip's shift tolerance is  $\pm 0.4$  mm
3. Foreign material on segment  $\leq 10$ mil
4. Ink contamination (surface)  $\leq 20$ mil
5. Bubble in segment  $\leq 10$ mil
6. Bending  $\leq 1\%$  of reflector length
7. Recommend the best PCB hole: Diameter 1.0 mm

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**3. Internal Circuit Diagram**



**4. Pin Connection**

No	Connection
1	CATHODE G
2	NO PIN
3	CATHODE A
4	CATHODE F
5	COMMON ANODE DIGIT 2
6	CATHODE D
7	CATHODE E
8	CATHODE C
9	CATHODE B
10	COMMON ANODE DIGIT 1

## LED DISPLAY LTD-323G-23

### 5. Rating and Characteristics

#### 5.1. 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 )	100	mA
Continuous Forward Current Per Segment Derating Linear From 25°C Per Segment	25 0.33	mA mA/°C
Operating Temperature Range	-35°C to +85°C	
Storage Temperature Range	-35°C to +85°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	500	1600		μcd	IF=10mA
Peak Emission Wavelength	λp		565		nm	IF=20mA
Spectral Line Half-Width	Δλ		30		nm	IF=20mA
Dominant Wavelength	λd		569		nm	IF=20mA
Forward Voltage Per Chip	VF		2.05	2.6	V	IF=20mA
Reverse Current Per Segment <sup>(2)</sup>	IR			100	μA	VR=5V
Luminous Intensity Matching Ratio (Similar Light Area)	IV-m			2:1		IF=1mA

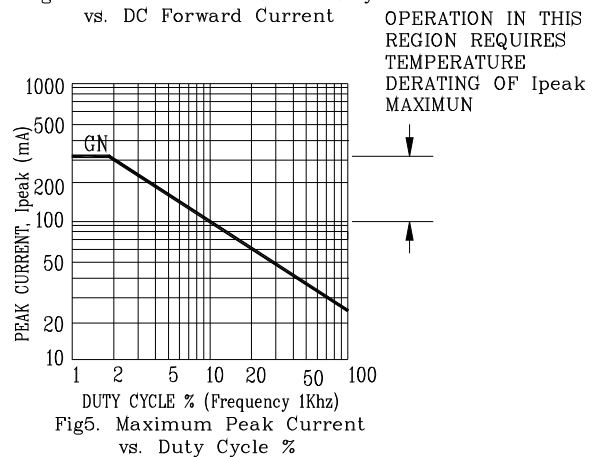
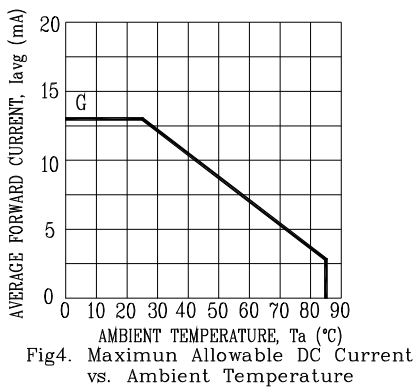
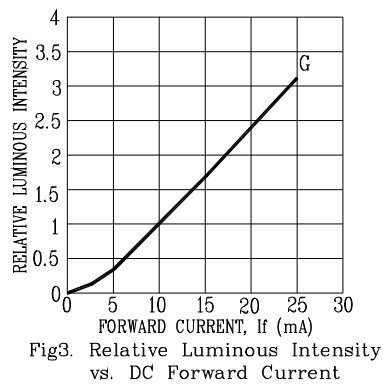
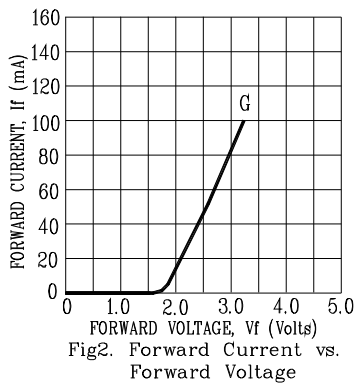
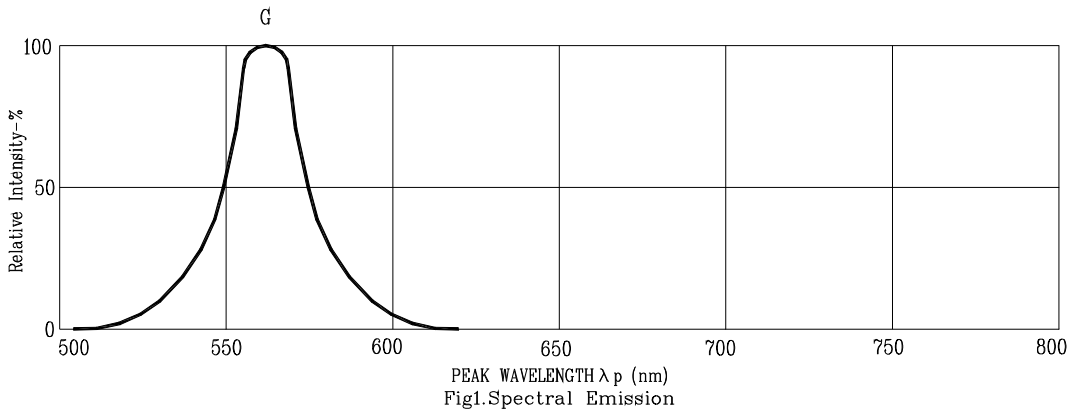
#### Notes :

- 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  $\leq 2.5\%$

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### 5.3. Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

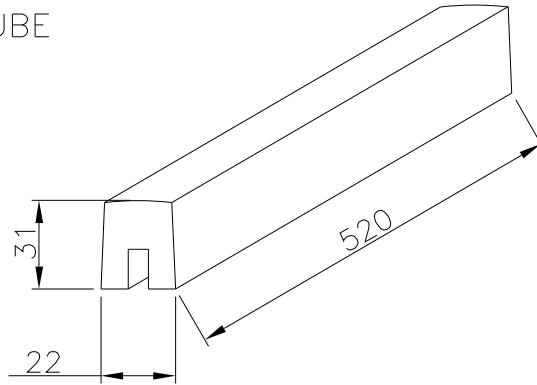


NOTE: G=GREEN

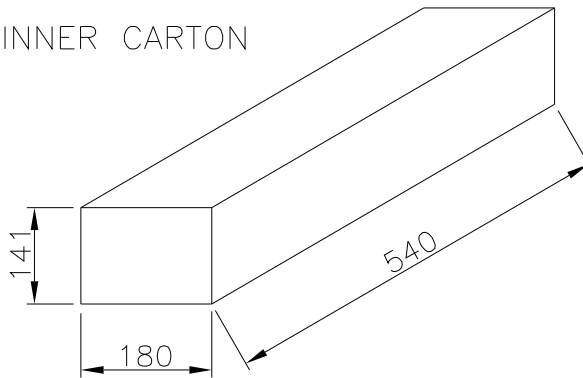
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**6. Packing spec.:**

32 PCS/PACKING TUBE



30 PACKING TUBE/INNER CARTON



4 INNER CARTON/OUTER CARTON

