



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**

LED DISPLAY

LTD-323G-23

<u>Rev</u>	<u>Description</u>	<u>By</u>	<u>Date</u>
01	Preliminary Spec.	Vicky Liao	05/11/2004
Above data for PD and Customer tracking only			
-	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

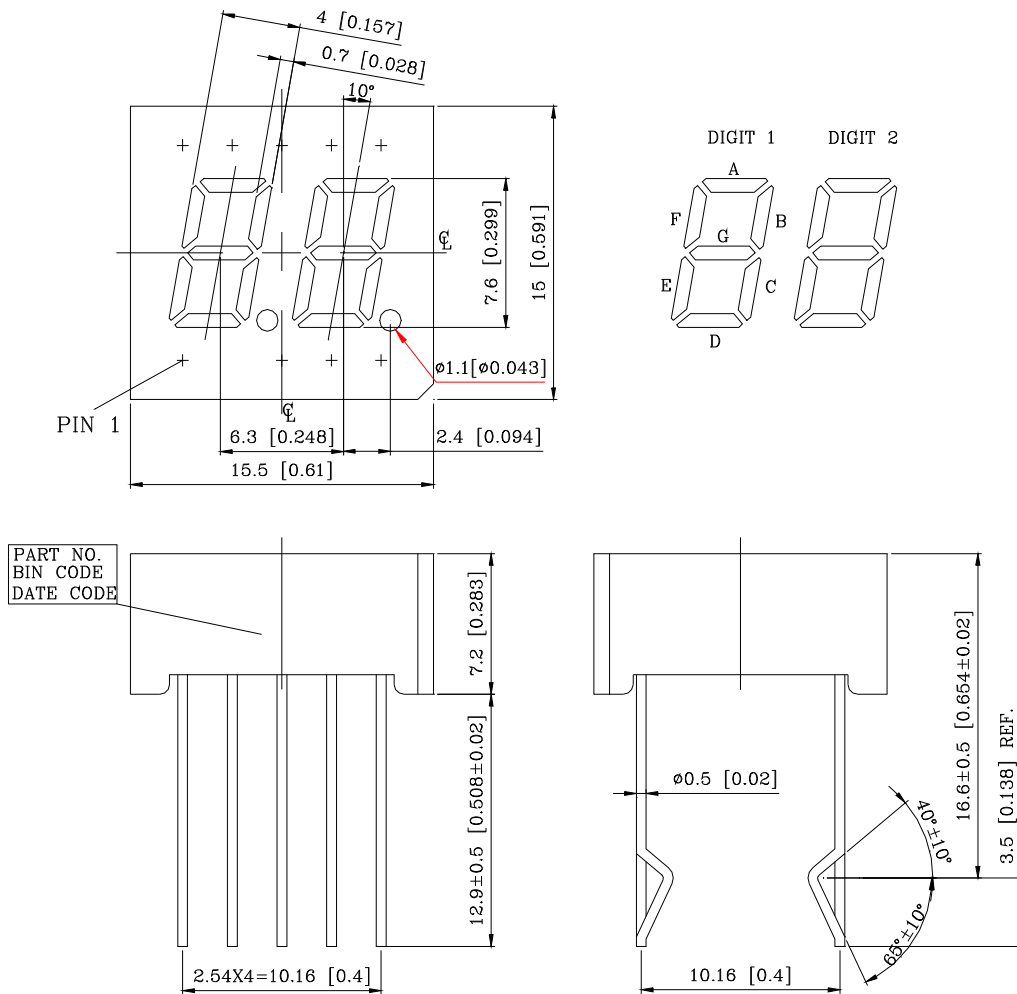
- 0.3 inch (7.6 mm) DIGIT HEIGHT
- CONTINUOUS UNIFORM SEGMENTS
- LOW POWER REQUIREMENT
- EXCELLENT CHARACTERS APPEARANCE
- HIGH BRIGHTNESS & HIGH CONTRAST
- WIDE VIEWING ANGLE
- SOLID STATE RELIABILITY
- CATEGORIZED FOR LUMINOUS INTENSITY.
- LEAD-FREE PACKAGE (ACCORDING TO ROHS)

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

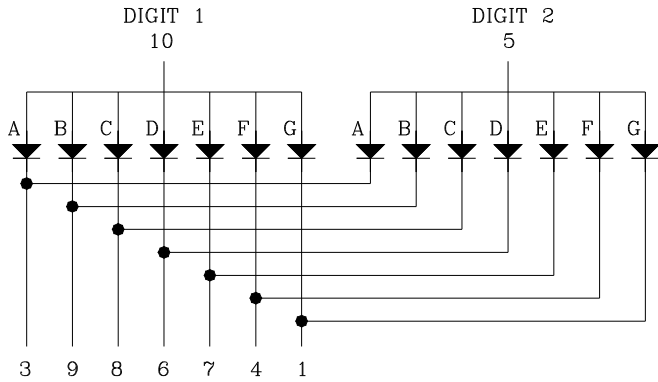


Notes :

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

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

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 ⁽²⁾	IR			100	μA	VR=5V
Luminous Intensity Matching Ratio (Similar Light Area)	IV-m			2:1		IF=1mA

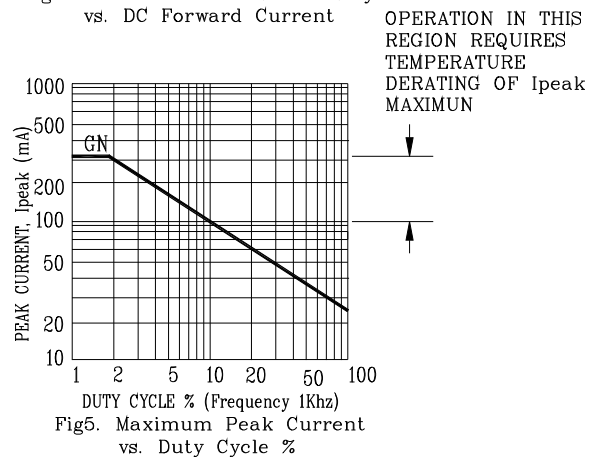
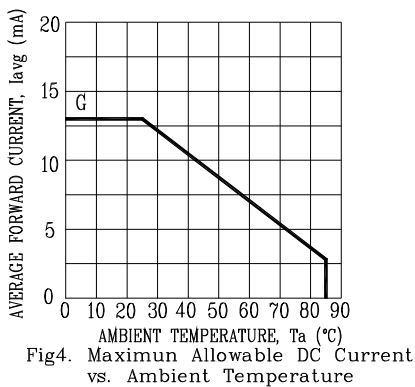
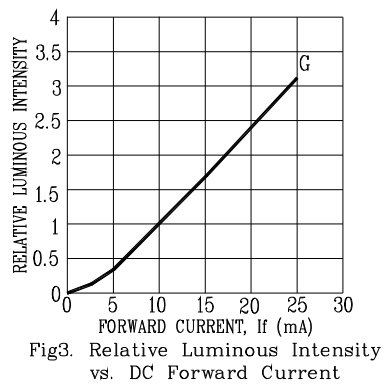
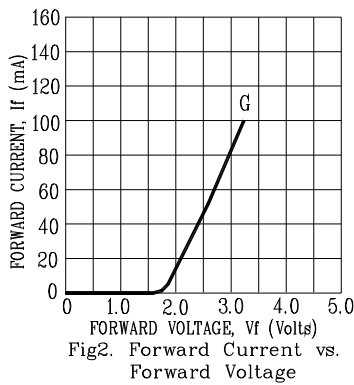
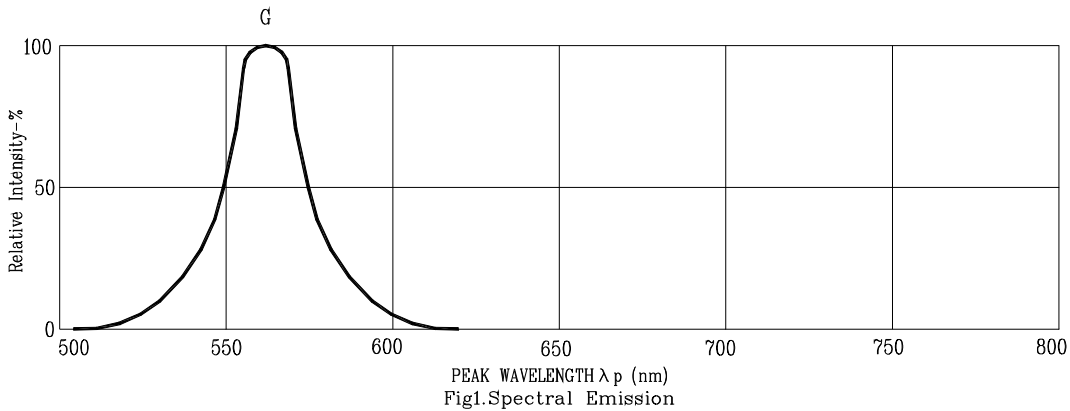
Notes :

- 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 $\leq 2.5\%$

LED DISPLAY LTD-323G-23

5.3. Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

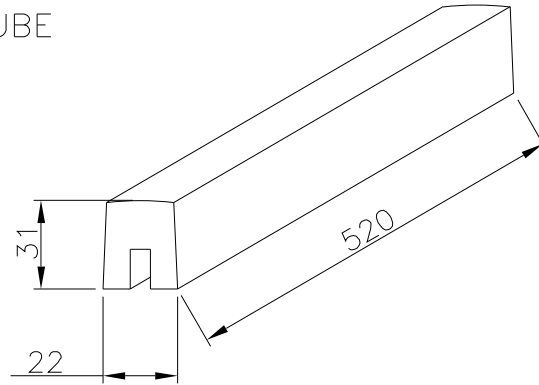


NOTE: G=GREEN

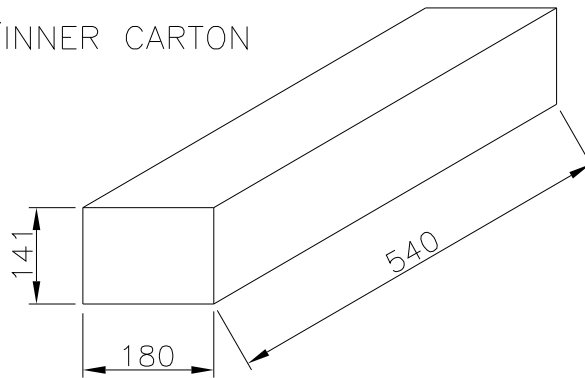
**LED DISPLAY
LTD-323G-23**

6. Packing spec.:

32 PCS/PACKING TUBE



30 PACKING TUBE/INNER CARTON



4 INNER CARTON/OUTER CARTON

