



Spec No.: DS30-2001-409 Effective Date: 11/17/2001

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

LITEON LITE-ON ELECTRONICS, INC.

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FEATURES

- *0.3 inch (7.62 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.

DESCRIPTION

The LTD-323JG is a 0.3 inch (7.62 mm) digit height display. This device utilizes AlInGaP Green LED chips, which are made from AlInGaP on a non-transparent GaAs substrate, and has a black face and white segments.

DEVICE

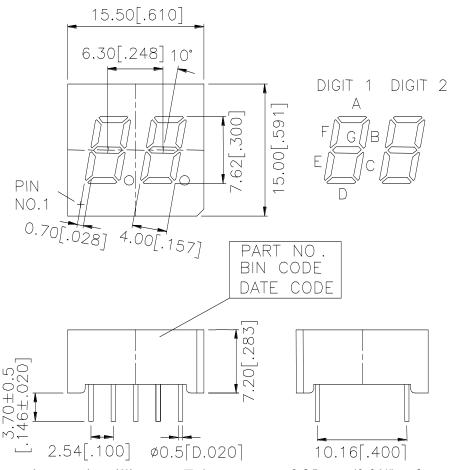
PART NO.	DESCRIPTION
AlInGaP Green	
LTD-323JG	Duplex Common Anode

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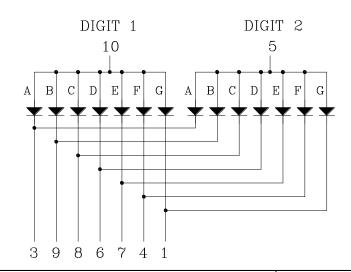
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PACKAGE DIMENSIONS



NOTES: All dimensions are in millimeters. Tolerances are ± 0.25 mm (0.01") unless otherwise noted.

INTERNAL CIRCUIT DIAGRAM



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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)				

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ABSOLUTE MAXIMUM RATING AT Ta=25°C

PARAMETER	MAXIMUM RATING	UNIT			
Power Dissipation Per Segment	70	mW			
Peak Forward Current Per Segment (1/10 Duty Cycle, 0.1ms Pulse Width)	60	mA			
Continuous Forward Current Per Segment	25	mA			
Derating Linear From 25°C Per Segment	0.33	mA/°C			
Reverse Voltage Per Segment	5	V			
Operating Temperature Range	-35°C to +85°C				
Storage Temperature Range	-35°C to +85°C				
Solder Temperature: max 260°C for max 3sec at 1.6mm below seating plane.					

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

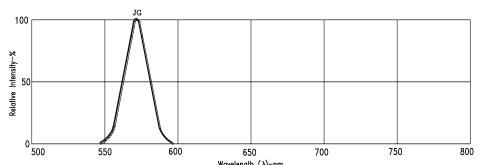
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	320	800		μcd	I _F =1mA
Peak Emission Wavelength	λр		571		nm	I _F =20mA
Spectral Line Half-Width	Δλ		15		nm	I _F =20mA
Dominant Wavelength	λd		572		nm	I _F =20mA
Forward Voltage Per Segment	VF		2.05	2.6	V	I _F =20mA
Reverse Current Per Segment	Ir			100	μΑ	V _R =5V
Luminous Intensity Matching Ratio	Iv-m			2:1		I _F =1mA

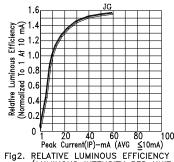
Note: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

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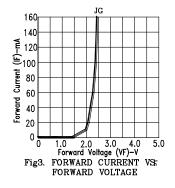
TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)





1 20 40 60 80 100 Peak Current(IP)—mA (AVG ≦10mA) Fig2. RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT



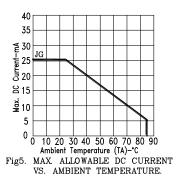


Fig4. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

1000 500 Current(IP)-mA 100 20 20 Peak 10 20 50

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

NOTE: JG=AlInGaP Green

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