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LED DISPLAY

LTD-5250JG-18J DATA SHEET

Rev	Description	Ву	
01	RDR Original Spec	Phanomkorn	
02	Change face color from gray to black	Phanomkorn	
-	NPPR Original Spec	Phanomkorn	

SPEC. NO.:	DS30-2007-0211
•	

DATE : <u>28/Dec /'07</u>

REV. NO.: _____

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FEATURES

- *0.52 inch (13.2 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-5250JG-18J is a 0.52 inch (13.2 mm) digit height dual digit seven-segment display. This device uses AlInGaP Green LED chips, which are made from AlInGaP on a non-transparent GaAs. The display has a black face and white segments.

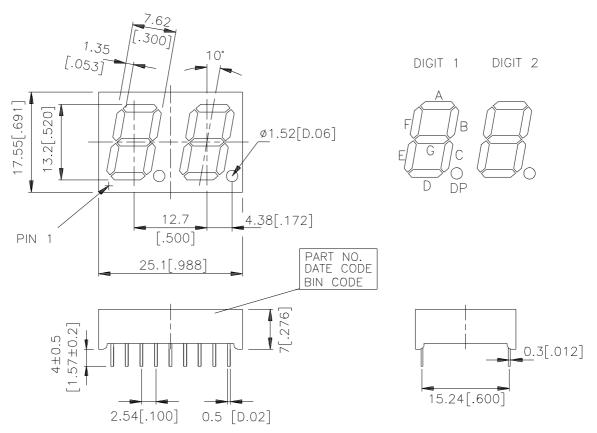
DEVICE

PART NO.	DESCRIPTION				
AlInGaP Green	Common Anode				
LTD-5250JG-18J	Rt. Hand Decimal				

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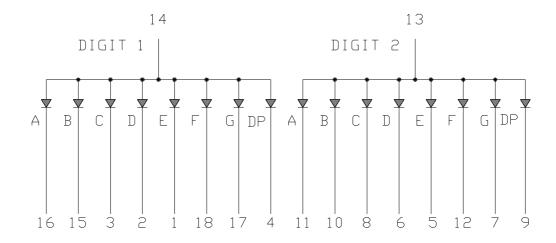
PACKAGE DIMENSIONS



NOTES: 1. All dimensions are in millimeters. Tolerances are \pm 0.25 mm unless otherwise note.

2. Pin tip's shift tolerance is \pm 0.4 mm.

INTERNAL CIRCUIT DIAGRAM



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PIN CONNECTION

No.	CONNECTION				
1	CATHODE E (DIGIT 1)				
2	CATHODE D (DIGIT 1)				
3	CATHODE C (DIGIT 1)				
4	CATHODE D.P. (DIGIT 1)				
5	CATHODE E (DIGIT 2)				
6	CATHODE D (DIGIT 2)				
7	CATHODE G (DIGIT 2)				
8	CATHODE C (DIGIT 2)				
9	CATHODE D.P. (DIGIT 2)				
10	CATHODE B (DIGIT 2)				
11	CATHODE A (DIGIT 2)				
12	CATHODE F (DIGIT 2)				
13	COMMON ANODE (DIGIT 2)				
14	COMMON ANODE (DIGIT 1)				
15	CATHODE B (DIGIT 1)				
16	CATHODE A (DIGIT 1)				
17	CATHODE G (DIGIT 1)				
18	CATHODE F (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 +105°C		
Storage Temperature Range	-35°C to +105°C		

Soldering Conditions: 1/16 inch below seating plane for 3 seconds at 260^oC 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	Iv	200	630		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 (Similar Light Area)	Iv-m			2:1		I _F =1mA

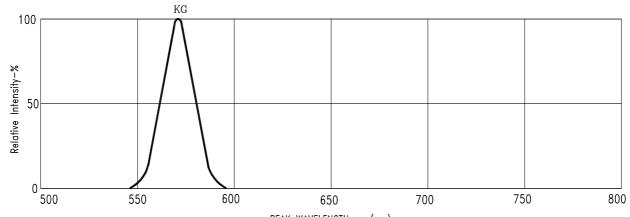
Note: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

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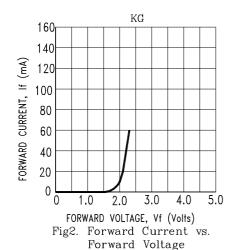
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TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)



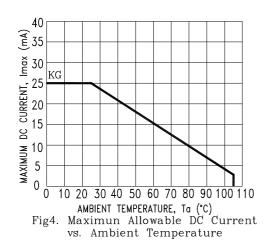
PEAK WAVELENGTH p (nm) Fig1.Spectral Emission



4 3.5 KG

WE 10 a a 1.0 a a 1.

Fig3. Relative Luminous Intensity vs. DC Forward Current



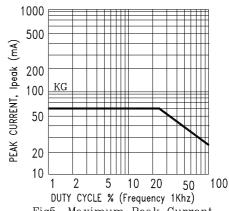


Fig5. Maximum Peak Current vs. Duty Cycle %

NOTE: KG=AlInGaP Green

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Mouser Electronics

Authorized Distributor

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Lite-On:

PN-LTD-5250JG-18J