LITEON

LITE-ON TECHNOLOGY CORPORATION

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FEATURES

- *0.56 inch (14.22 mm) DIGIT HEIGHT.
- *CONTINUOUS UNIFORM SEGMENTS.
- *LOW POWER REQUIREMENT.
- *EXCELLENT CHARACTERS APPEARANCE.
- *HIGH BRIGHTNESS & HIGH CONTRAST.
- *WIDE VIEWING ANGLE.
- *SOLID STATE RELIABILITY.

DESCRIPTION

The LTD-6840Y is a 0.56 inch (14.22 mm) digit height dual display. This device utilizes yellow LED chips, which are made from GaAsP on a transparent GaP substrate, and has a gray face and white segments.

DEVICE

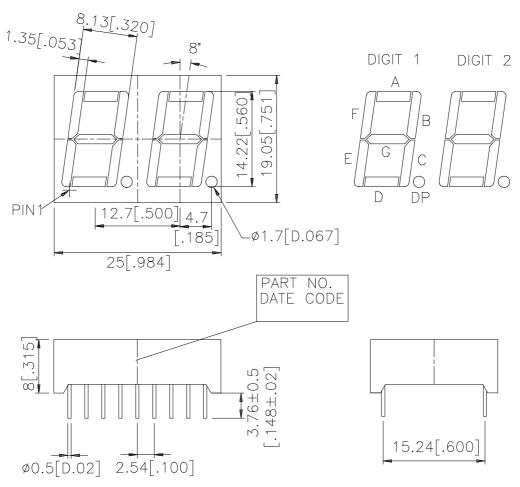
PART NO.	DESCRIPTION			
Yellow	Common Cathode			
LTD-6840Y	Rt. Hand Decimal			

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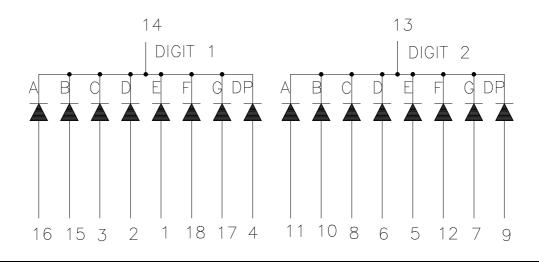
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PACKAGE DIMENSIONS



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	Anode E (Digit 1)			
2	Anode D (Digit 1)			
3	Anode C (Digit1)			
4	Anode D.P. (Digit 1)			
5	Anode E (Digit 2)			
6	Anode D (Digit 2)			
7	Anode G (Digit 2)			
8	Anode C (Digit 2)			
9	Anode D.P. (Digit 2)			
10	Anode B (Digit 2)			
11	Anode A (Digit 2)			
12	Anode F (Digit2)			
13	Common Cathode (Digit 2)			
14	Common Cathode (Digit 1)			
15	Anode B (Digit 1)			
16	Anode A (Digit1)			
17	Anode G (Digit 1)			
18	Anode F (Digit 1)			

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ABSOLUTE MAXIMUM RATING AT Ta=25°C

PARAMETER	MAXIMUM RATING	UNIT			
Power Dissipation Per Segment	60	mW			
Peak Forward Current Per Segment (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA			
Continuous Forward Current Per Segment	20	mA			
Derating Linear From 25°C Per Segment	0.27	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

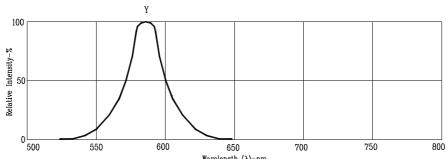
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	870	2400		μcd	I _F =10mA
Peak Emission Wavelength	λр		585		nm	I _F =20mA
Spectral Line Half-Width	Δλ		35		nm	I _F =20mA
Dominant Wavelength	λd		588		nm	I _F =20mA
Forward Voltage Per Segment	VF		2.1	2.6	V	I _F =20mA
Reverse Current Per Segment	Ir			100	μΑ	V _R =5V
Luminous Intensity Matching Ratio	Iv-m			2:1		I _F =10mA

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

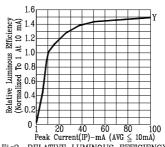
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TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

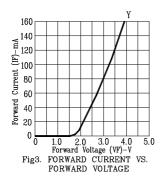
(25°C Ambient Temperature Unless Otherwise Noted)

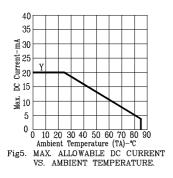


 $\label{eq:wavelength} \begin{tabular}{lll} Wavelength (λ)-nm. \\ Fig1. RELATIVE INTENSITY VS. WAVELENGTH \\ \end{tabular}$



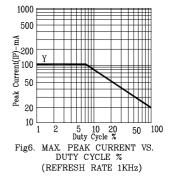
0 1 20 40 60 80 100 Peak Current(IP)-mA (AVG ≤ 10mA) RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT (REFRESH RATE 1KHz)





Relative Luminous Intensity (Normalized To 1 At 10 mA) 10 20 Forward Current (IF)-mA
Fig4. RELATIVE LUMINOUS INTENSITY

VS. FORWARD CURRENT



NOTE : Y=YELLOW

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