LITEON LITE-ON ELECTRONICS, INC.

Property of Lite-On Only

FEATURES

- *0.4 INCH (10.16 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

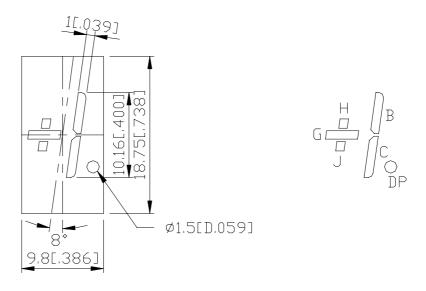
The LTS-4830AY is a 0.4 inch (10.16 mm) digit height LED display. This device utilizes yellow LED chips, which are made from GaAsP on GaP substrate, and has a gray face and white segments.

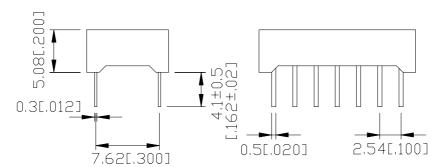
DEVICE

PART NO.	DESCRIPTION			
YELLOW	Common Cathode,			
LTS-4830AY	Rt. Hand Decimal			

PART NO.: LTS-4830AY PAGE: 1 of 5 Property of Lite-On Only

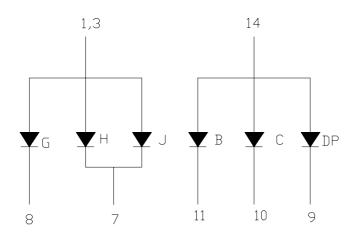
PACKAGE DIMENSIONS





NOTES: All dimensions are in millimeters. Tolerance is \pm 0.25-mm (0.01") unless otherwise noted.

INTERNAL CIRCUIT DIAGRAM



PART NO.: LTS-4830AY PAGE: 2 of 5



LITEON LITE-ON ELECTRONICS, INC.

Property of Lite-On Only

PIN CONNECTION

No.	CONNECTION
1	ANODE G,H&J
2	NO PIN
3	ANODE G,H&J
4	NO PIN
5	NO PIN
6	NO CONNECTION
7	CATHODE H&J
8	CATHODE G
9	CATHODE D.P.
10	CATHODE C
11	CATHODE B
12	NO PIN
13	NO PIN
14	ANODE B, C&D.P.

NOTE: PIN 1 & 3 ARE INTERNALLY CONNECTED.

PAGE: 3 of 5 PART NO.: LTS-4830AY



LITEON LITE-ON ELECTRONICS, INC.

Property of Lite-On Only

ABSOLUTE MAXIMUM RATING AT Ta=25°C

PARAMETER	MAXIMUM RATING	UNIT				
Power Dissipation Per Segment	60	mW				
Peak Forward Current Per Segment	00					
(1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA				
Continuous Forward Current Per Segment	20	mA				
Derating Linear From 25 ^o C Per Segment	0.27	mA/ ⁰ C				
Reverse Voltage Per Segment	5	V				
Operating Temperature Range	emperature Range -35°C to +85°C					
Storage Temperature Range	-35° C to $+85^{\circ}$ C					
Solder Temperature 1/16 inch Below Seating Plane for 3 Seconds at 260°C						

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

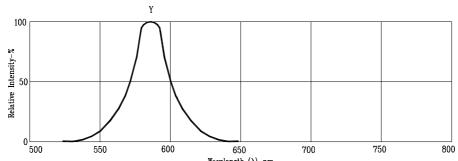
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	870	2200		μcd	I _F =10mA
Peak Emission Wavelength	λр		585		nm	I _F =20mA
Spectral Line Half-Width	Δλ		35		nm	I _F =20mA
Dominant Wavelength	λd		588		nm	I _F =20mA
Forward Voltage Per Segment or D.P.	VF		2.1	2.6	V	I _F =20mA
Reverse Current Per Segment or D.P.	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'clariage) eye-response curve.

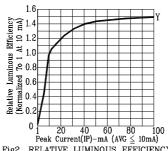
PART NO.: LTS-4830AY PAGE: 4 of 5

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

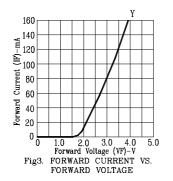
(25°C Ambient Temperature Unless Otherwise Noted)

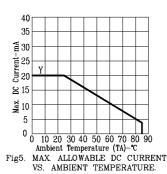


 $\label{eq:wavelength} \begin{tabular}{lll} Wavelength & (\lambda)-nm. \\ Fig1. & RELATIVE & INTENSITY & VS. & WAVELENGTH \\ \end{tabular}$



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) 9 C 1 G 2 C C C C 5 10 15 20 25 Forward Current (IF)-mA

Fig4. RELATIVE LUMINOUS INTENSITY
VS. FORWARD CURRENT

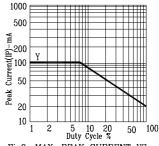


Fig6. MAX. PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE 1KHz)

NOTE : Y=YELLOW

PAGE: PART NO.: LTS-4830AY 5 of 5