

LED DISPLAY

LTD-5260Y

Rev	<u>Description</u>	<u>By</u>	<u>Date</u>				
01	Preliminary SPEC	Tina Chen	04/04/2000				
Above data for PD and Customer tracking only							
-	NPPR Received and Upload to system	Tina Chen	05/04/2000				
Α	- Correct hue range on page 5 - Update Operating/Storage Temperature Range from -35℃ to +85℃ become to -35℃ to +105℃	Phanomkorn	01/23/2014				
В	-Change unit of Average Luminous Intensity Per Segment from mcd to ucd	Phanomkorn	06/04/2014				



1. Description

The LTD-5260Y is a 0.52inch (13.2mm) digit height dual digit seven-segment display. The device utilizes yellow LED chips, which are made from GaAsP on a transparent GaP substrate, and has a gray face and white segments.

1.1 Features

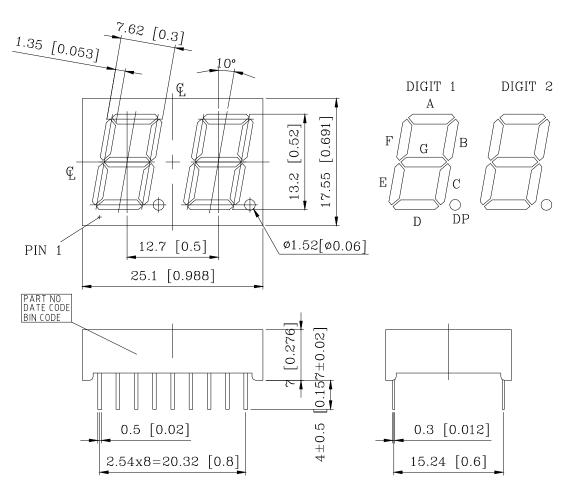
- 0.52INCH (13.2mm) DIGIT HEIGHT
- CONTINUOUS UNIFORM SEGMENTS
- LOW POWER REQUIREMENT
- EXCELLENT CHARACTERS APPEARANCE
- HIGH BRIGHTNESS & HIGH CONTRAST
- WIDE VIEWING ANGLE
- SOLID STATE RELIABILITY
- CATEGORIZED FOR LUMINOUS INTENSITY
- LEAD-FREE PACKAGE (ACCORDING TO ROHS)

1.2 Device

Part No	Description		
YELLOW	COMMON CATHODE		
LTD-5260Y	RT. HAND DECIMAL		



2. Package Dimensions

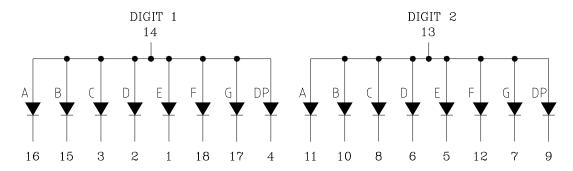


Notes:

- 1. All dimensions are in millimeters. Tolerances are ± 0.25 mm (0.01") unless otherwise noted
- 2. Pin tip's shift tolerance is $\pm~0.4~\text{mm}$
- 3. Foreign material on segment ≤ 10 mil
- 4. Bending $\leq 1\%$ of reflector length
- 5. Bubble in segment \leq 10mil
- 6. Ink contamination on surface ≤ 20 mil



3. Internal Circuit Diagram



4. Pin Connection

No	Connection
1	CATHODE E (DIGIT 1)
2	CATHODE D (DIGIT 1)
3	CATHODE C (DIGIT 1)
4	CATHODE DP (DIGIT 1)
5	CATHODE E (DIGIT 2)
6	CATHODE D (DIGIT 2)
7	CATHODE G (DIGIT 2)
8	CATHODE C (DIGIT 2)
9	CATHODE DP (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)



5. Rating and Characteristics

5.1. Absolute Maximum Rating at Ta=25℃

Maximum Rating	Unit		
60	mW		
80	mA		
20	mA		
0.22	mA/℃		
-35℃ to +105℃			
-35℃ to +105℃			
	60 80 20 0.22 -35℃ to +105℃		

Solder Condition: 1/16 inch below seating plane for 3 seconds at 260℃ or temperature of unit (during assembly) not over max. temperature rating above

5.2.Electrical / Optical Characteristics at Ta=25℃

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Test Condition
Average Luminous Intensity Per Segment	IV	800	2200		ucd	IF=10mA
Peak Emission Wavelength	λр		585		nm	IF=20mA
Spectral Line Half-Width	Δλ		35		nm	IF=20mA
Dominant Wavelength	λd		588		nm	IF=20mA
Forward Voltage Per Chip	VF		2.1	2.6	V	IF=20mA
Reverse Current Per Segment ^(*3)	IR			100	μΑ	VR=5V
Luminous Intensity Matching Ratio (Similar Light Area)	IV-m			2:1		IF=10mA

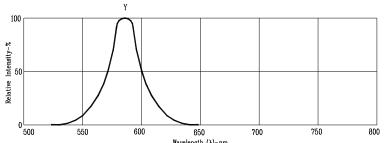
Notes:

- 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commission International De L'Eclariage) eye-response curve
- 2. Crosstalk specification ≤ 1%
- 3. Reverse voltage is only for IR test. It cannot continue to operate at this situation

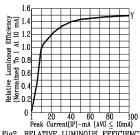


5.3. Typical Electrical / Optical Characteristics Curves

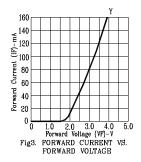
(25℃ Ambient Temperature Unless Otherwise Noted)

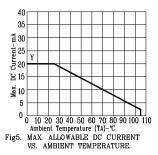


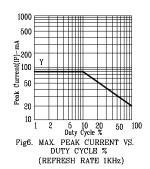
 $\label{eq:wavelength} \begin{tabular}{lll} Wavelength & $(\lambda)-nm. \\ Fig1. & RELATIVE & INTENSITY & VS. & WAVELENGTH \\ \end{tabular}$



0 1 20 40 60 80 100
Peak Current(IP)-mA (AVG ≤ 10mA)
Fig2. RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT (REFRESH RATE 1KHz)







NOTE : Y=YELLOW