

LED DISPLAY**LTP-757G**
DATA SHEET

Rev	Description	By
-	Original Spec	Tina Chen June 06,2000
A	Pb Free	Erin Cheng May 05,2005
B	Add Sub-Con TBK	Chunchunlee July 10,2010
C	- Correct "COL" to "ROW" on page 3 of 5 - Add cosmetic spec - Update Operating & Storage Temperature Rang from -35°C to +85°C become to -35°C to +105°C	Phanomkorn J. September 26,2012

Spec No.	DS-30-99-454
Date	September 26, 2012
Revision No.	C
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FEATURES

- * 0.7 inch (17.22 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)

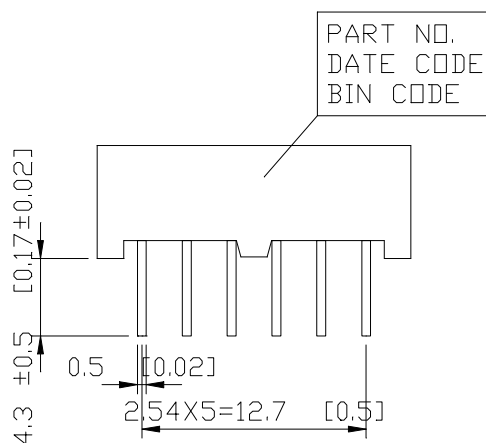
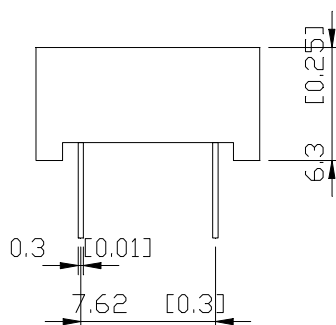
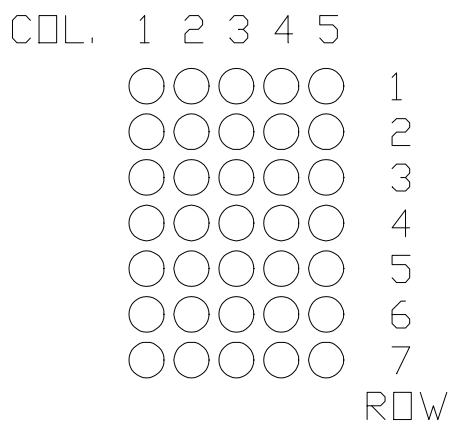
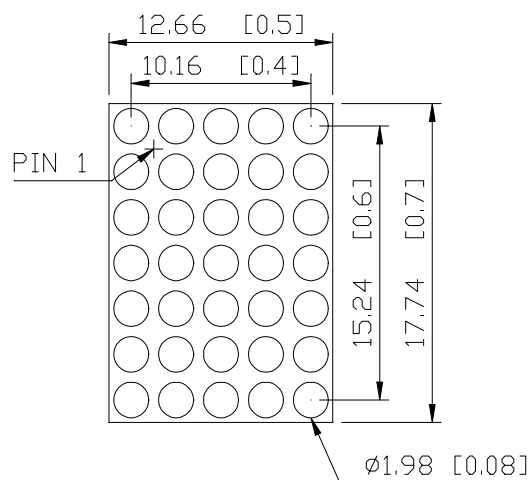
DESCRIPTION

The LTP-757G is a 0.7 inch (17.22 mm) matrix height 5 x 7 dot matrix display. This device uses GREEN LED chips (GaP epi on GaP substrate). The display has gray face and white dots.

DEVICE

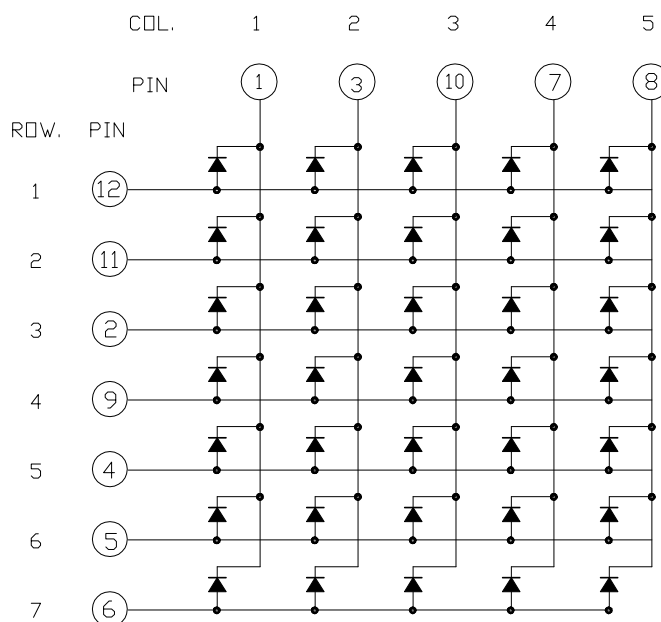
PART NO.	DESCRIPTION
GREEN	Cathode Column
LTP-757G	Anode Row

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 ± 0.4 mm.
3. Recommend the best PCB hole: $\phi 1.0$ mm
4. Foreign material on segment ≤ 10 mils
5. Ink contamination (surface) ≤ 20 mils
6. Bending $\leq 1/100$
7. Bubble in segment ≤ 10 mils

INTERNAL CIRCUIT DIAGRAM

PIN CONNECTION

No.	CONNECTION
1	CATHODE COLUMN 1
2	ANODE ROW 3
3	CATHODE COLUMN 2
4	ANODE ROW 5
5	ANODE ROW 6
6	ANODE ROW 7
7	CATHODE COLUMN 4
8	CATHODE COLUMN 5
9	ANODE ROW 4
10	CATHODE COLUMN 3
11	ANODE ROW 2
12	ANODE ROW 1

ABSOLUTE MAXIMUM RATING

PARAMETER	MAXIMUM RATING	UNIT
Average Power Dissipation Per dot	32	mW
Peak Forward Current Per dot (Frequency 1Khz, 10% duty cycle)	90*	mA
Average Forward Current Per dot	11	mA
Forward Current Derating from 25 ⁰ C	0.15	mA/ ⁰ C
Reverse Voltage Per dot	5	V
Operating Temperature Range	-35 ⁰ C to +105 ⁰ C	
Storage Temperature Range	-35 ⁰ C to +105 ⁰ C	
Soldering Conditions : 1/16 inch below seating plane for 3 seconds at 260 ⁰ C or of temperature unit (during assembly) not over max. temperature rating.		

* see figure 5 to establish pulsed condition

ELECTRICAL / OPTICAL CHARACTERISTICS AT T_A=25⁰C

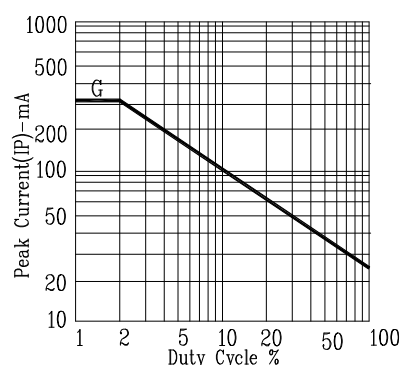
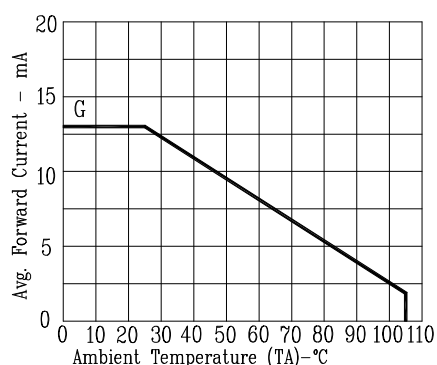
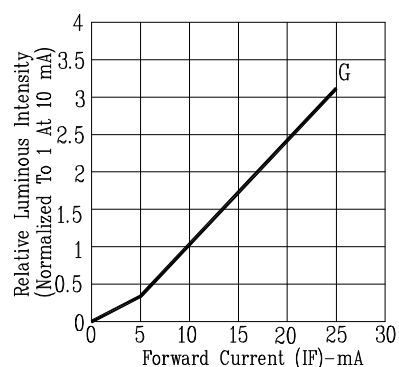
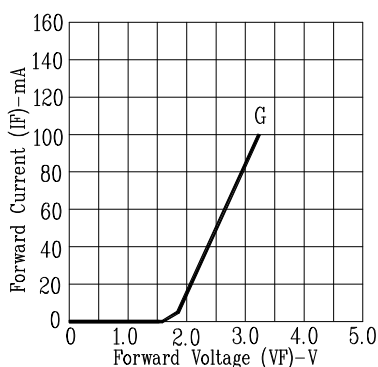
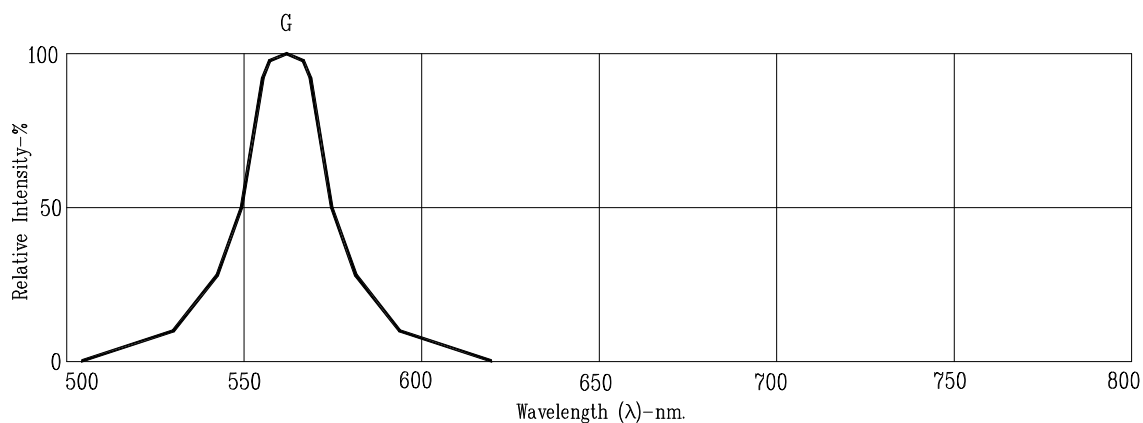
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I _v	630	2000		μcd	I _F =80mA , 1/16Duty
Peak Emission Wavelength	λ _p		565		nm	I _F =20mA
Spectral Line Half-Width	Δλ		30		nm	I _F =20mA
Dominant Wavelength	λ _d		569		nm	I _F =20mA
Forward Voltage Per dot	V _F		2.1	2.6	V	I _F =20mA
			3.0	3.7	V	I _F =80mA
Reverse Current Per dot	I _R			100	μA	V _R =5V
Luminous Intensity Matching Ratio (Similar Light Area)	I _{v-m}			2:1		I _F =10mA

NOTES:

- Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.
- Cross talk specification ≤ 2.5%
- Reverse voltage is only for IR test. It cannot continue to operate at this situation.

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)



NOTE: G=GREEN