FEATURES

* 1.8 INCH (46.7 mm) DIGIT HEIGH.
* LOW POWER REQUIREMENT.
* CONTINUOUS UNIFORM SEGMENTS.
* EXCELLENT CHARACTERS APPERANCE.
* WIDE VIEWING ANGLE.
* HIGH CONTRAST.
* HIGH BRIGHTNESS.
* FULL FEATURE SELECTABLE.
* FREQUENCY DISPLAY.
* DESIGNED FOR CLOCK INDICATION, TIMER FREQUENCY COUNTER,…,ECT.

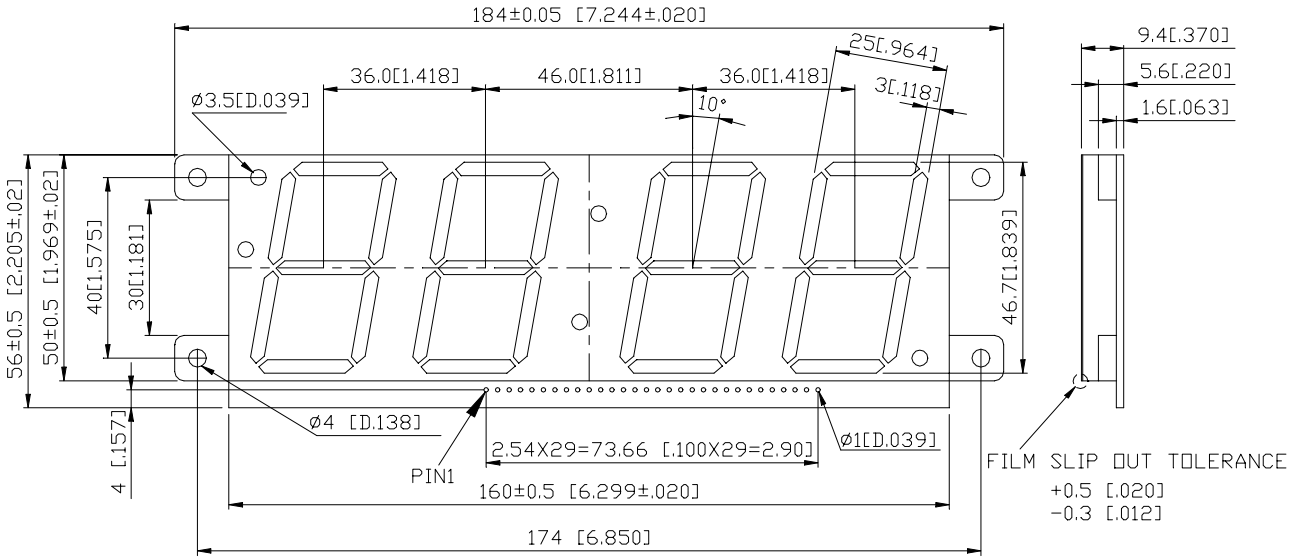
DESCRIPTION

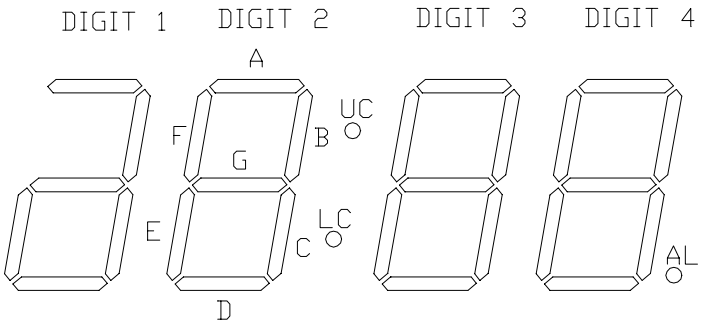
The LTC-18501A1G-4 is a 1.8 inch (46.7 mm) digit height clock display. This display utilizes green LED chips, which are made from GaP on a transparent GaP substrate, and a green face film on it.

DEVICE

PART NO.	DESCRIPTION
GREEN	Common Cathode
LTC-18501A1G-4	

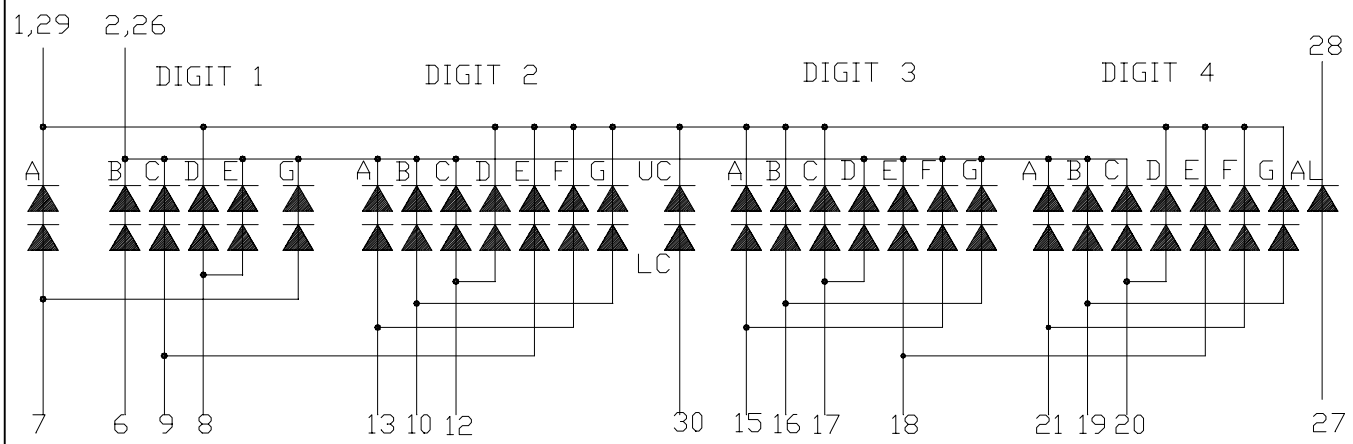
PACKAGE DIMENSIONS





NOTES: All dimensions are in millimeters. Tolerance is ± 0.25-mm (0.01“) unless otherwise noted.

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

NO	CONNECTION	NO	CONNECTION
1	COMMON CATHODE 1	16	DIGIT 3 ANODE B, DIGIT 3 ANODE G
2	COMMON CATHODE 2	17	DIGIT 3 ANODE C, DIGIT 3 ANODE D
3	NO CONNECTION	18	DIGIT 3 ANODE E, DIGIT 4 ANODE E
4	NO CONNECTION	19	DIGIT 4 ANODE B, DIGIT 4 ANODE G
5	NO CONNECTION	20	DIGIT 4 ANODE C, DIGIT 4 ANODE D
6	DIGIT 1 ANODE B	21	DIGIT 4 ANODE A, DIGIT 4 ANODE F
7	DIGIT 1 ANODE A, DIGIT 1 ANODE G	22	NO CONNECTION
8	DIGIT 1 ANODE D, DIGIT 1 ANODE E	23	NO CONNECTION
9	DIGIT 2 ANODE E, DIGIT 1 ANODE C	24	NO CONNECTION
10	DIGIT 2 ANODE B, DIGIT 2 ANODE G	25	NO CONNECTION
11	NO USE	26	COMMON CATHODE 2
12	DIGIT 2 ANODE C, DIGIT 2 ANODE D	27	ANODE AL
13	DIGIT 2 ANODE A, DIGIT 2 ANODE F	28	CATHODE AL
14	NO USE	29	COMMON CATHODE 1
15	DIGIT 3 ANODE A, DIGIT 3 ANODE F	30	ANODE UC, ANODE LC

ABSOLUTE MAXIMUM RATING AT T_A=25°C

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation Per Segment	120(75)	mW
Peak Forward Current Per Segment (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Continuous Forward Current Per Segment	25	mA
Forward Voltage, Per Segment	0.33	mA/°C
Reverse Voltage Per Segment	10(5)	V
Operating Temperature Range	-25°C to +65°C	
Storage Temperature Range	-25°C to +65°C	
Solder Temperature: 3.5mm Below PCB.back side for 3sec. at 260°C		

ELECTRICAL / OPTICAL CHARACTERISTICS AT T_A=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I_V	500	1200		μcd	I_F=10mA
Peak Emission Wavelength	λp		565		nm	I_F=20mA
Spectral Line Half-Width	Δλ		30		nm	I_F=20mA
Dominant Wavelength	λd		569		nm	I_F=20mA
Forward Voltage Per Segment	V_F		4.2 (2.1)	5.2 (2.6)	V	I_F=20mA
Reverse Current Per Segment	I_R			100	μA	V_R=10V
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'Eclariage) eye-response curve.

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

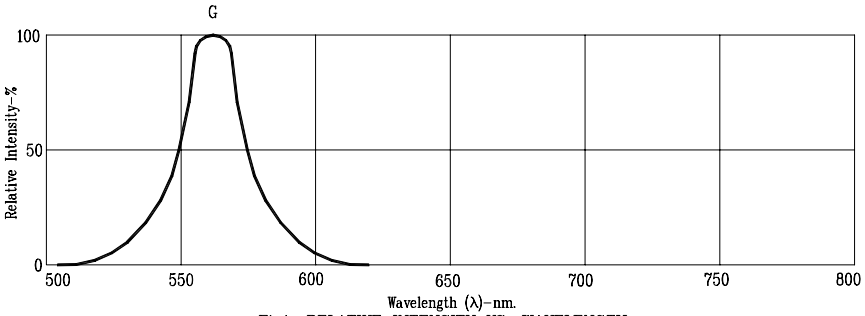


Fig1. RELATIVE INTENSITY VS. WAVELENGTH

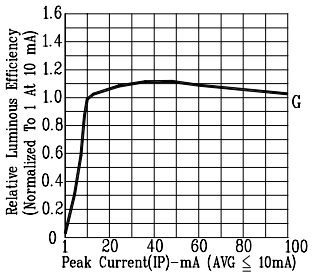


Fig2. RELATIVE LUMINOUS EFFICIENCY (LUMINOUS INTENSITY PER UNIT CURRENT) VS. PEAK CURRENT (REFRESH RATE 1KHz)

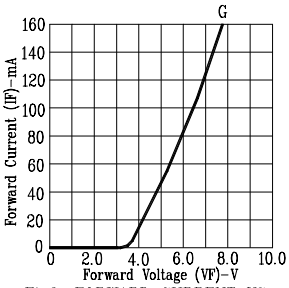


Fig3. FORWARD CURRENT VS. FORWARD VOLTAGE

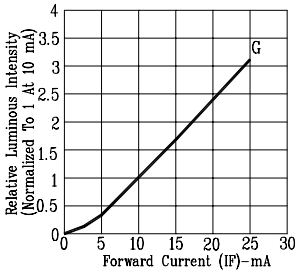


Fig4. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

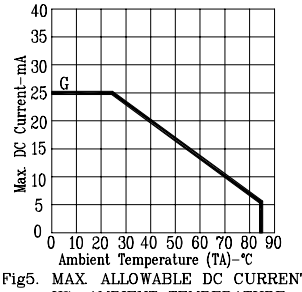


Fig5. MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE.

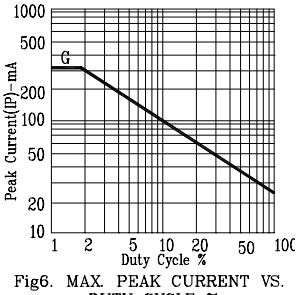


Fig6. MAX. PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE 1KHz)

NOTE: G=GREEN