

# LITEON LITE-ON TECHNOLOGY CORPORATION

Property of Lite-On Only

### **FEATURES**

- \*0.24 inch (6 mm) DIGIT HEIGHT
- \*CONTINUOUS UNIFORM SEGMENTS
- **\*LOW POWER REQUIREMENT**
- \*EXCELLENT CHARACTERS APPEARANCE
- \*HIGH BRIGHTNESS & HIGH CONTRAST
- \*WIDE VIEWING ANGLE
- **\* SOLID STATE RELIABILITY**

#### DESCRIPTION

The LTG-0274M is a 0.24 inch (6 mm) digit height 6 digit seven-segment with several icons graphic display. The device is multi-color applicable display. This device uses GREEN LED chips (GaP epi on GaP substrate) and RED ORANGE LED chips (GaAsP epi on GaP substrate). The display has a black face and white segments.

#### **DEVICE**

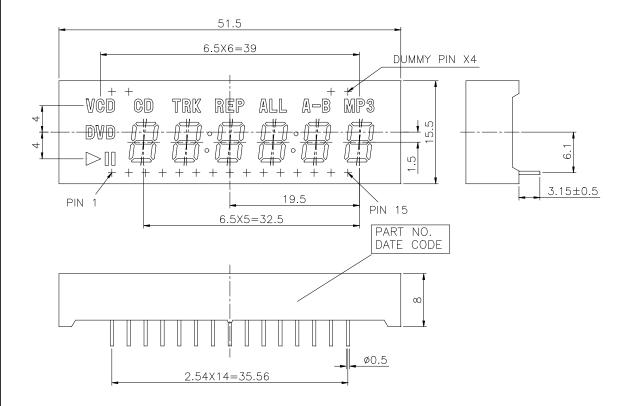
PART NO.	DESCRIPTION			
GREEN & RED ORANGE	M 16: 1 C A 1			
LTG-0274M	Multiplex Common Anode			

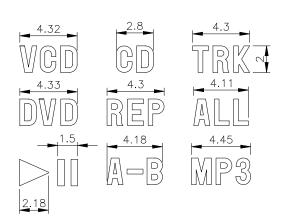
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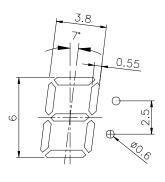
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### PACKAGE DIMENSIONS







JAPAN PATENT:3075028 TAIWAN PATENT:089211101 KOREA PATENT:0209198 CHINA PATENT:440339

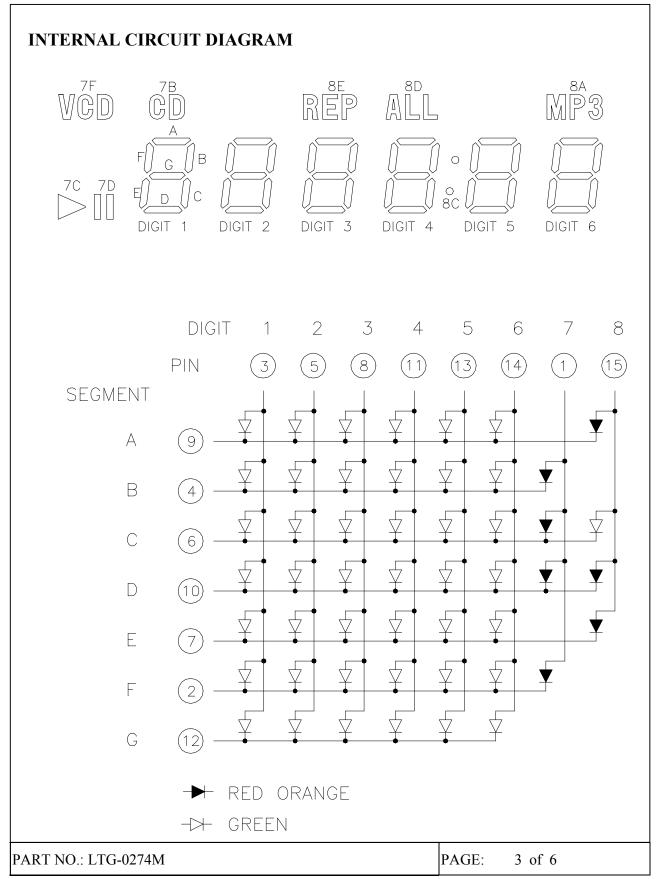
NOTES: All dimensions are in millimeters. Tolerances are  $\pm$  0.25 mm unless otherwise noted.

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### PIN CONNECTION

NO	CONNECTION					
1	COMMON ANODE 7B~7F					
2	CATHODE F					
3	COMMON ANODE (DIGIT 1)					
4	CATHODE B					
5	COMMON ANODE (DIGIT 2)					
6	CATHODE C					
7	CATHODE E					
8	COMMON ANODE (DIGIT 3)					
9	CATHODE A					
10	CATHODE D					
11	COMMON ANODE (DIGIT 4)					
12	CATHODE G					
13	COMMON ANODE (DIGIT 5)					
14	COMMON ANODE (DIGIT 6)					
15	COMMON ANODE 8A~8F					

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# **LITEON** LITE-ON TECHNOLOGY CORPORATION

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### ABSOLUTE MAXIMUM RATING

PARAMETER	GREEN	RED ORANGE	UNIT				
Power Dissipation Per Chip	75	75	mW				
Peak Forward Current Per Chip ( Frequency 1Khz, 10% duty cycle)	100*	100*	mA				
Continuous Forward Current Per Chip Derating Linear From 25°C Per Chip	25 0.33	25 0.33	mA mA/°C				
Reverse Voltage Per Chip	5	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							

<sup>\*</sup> see figure 5 to establish pulsed condition

### ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

### **GREEN**

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity Per Segment	Iv	500	1600		μcd	$I_F = 10 \text{mA}$
Peak Emission Wavelength	λр		565		nm	$I_F = 20 \text{mA}$
Spectral Line Half-Width	Δλ		30		nm	$I_F = 20 \text{mA}$
Dominant Wavelength	λd		569		nm	$I_F = 20 \text{mA}$
Forward Voltage Per Chip	VF		2.1	2.6	V	$I_F = 10 \text{mA}$
Reverse Current Per Chip	Ir			100	μΑ	$V_R = 5V$
Luminous Intensity Matching Ratio	Iv-m			2:1		$I_F = 10 \text{mA}$

### **RED ORANGE**

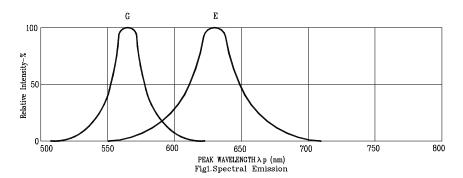
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Sterance	Iv	500	1600		μcd	$I_F = 10 \text{mA}$
Peak Emission Wavelength	λр		630		nm	$I_F = 20 \text{mA}$
Spectral Line Half-Width	Δλ		40		nm	$I_F = 20 \text{mA}$
Dominant Wavelength	λd		621		nm	$I_F = 20 \text{mA}$
Forward Voltage Per Chip	VF		2.0	2.6	V	$I_F = 10 \text{mA}$
Reverse Current Per Chip	Ir			100	μA	$V_R = 5V$
Luminous Intensity Matching Ratio	Iv-m			2:1		$I_F = 10 \text{mA}$

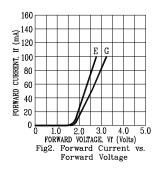
Note: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

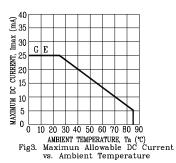
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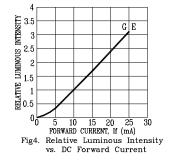
### TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

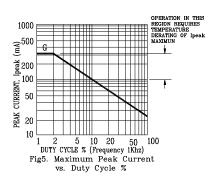
(25°C Ambient Temperature Unless Otherwise Noted)

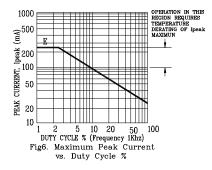












NOTE: E=RED ORANGE G=GREEN

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