

**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

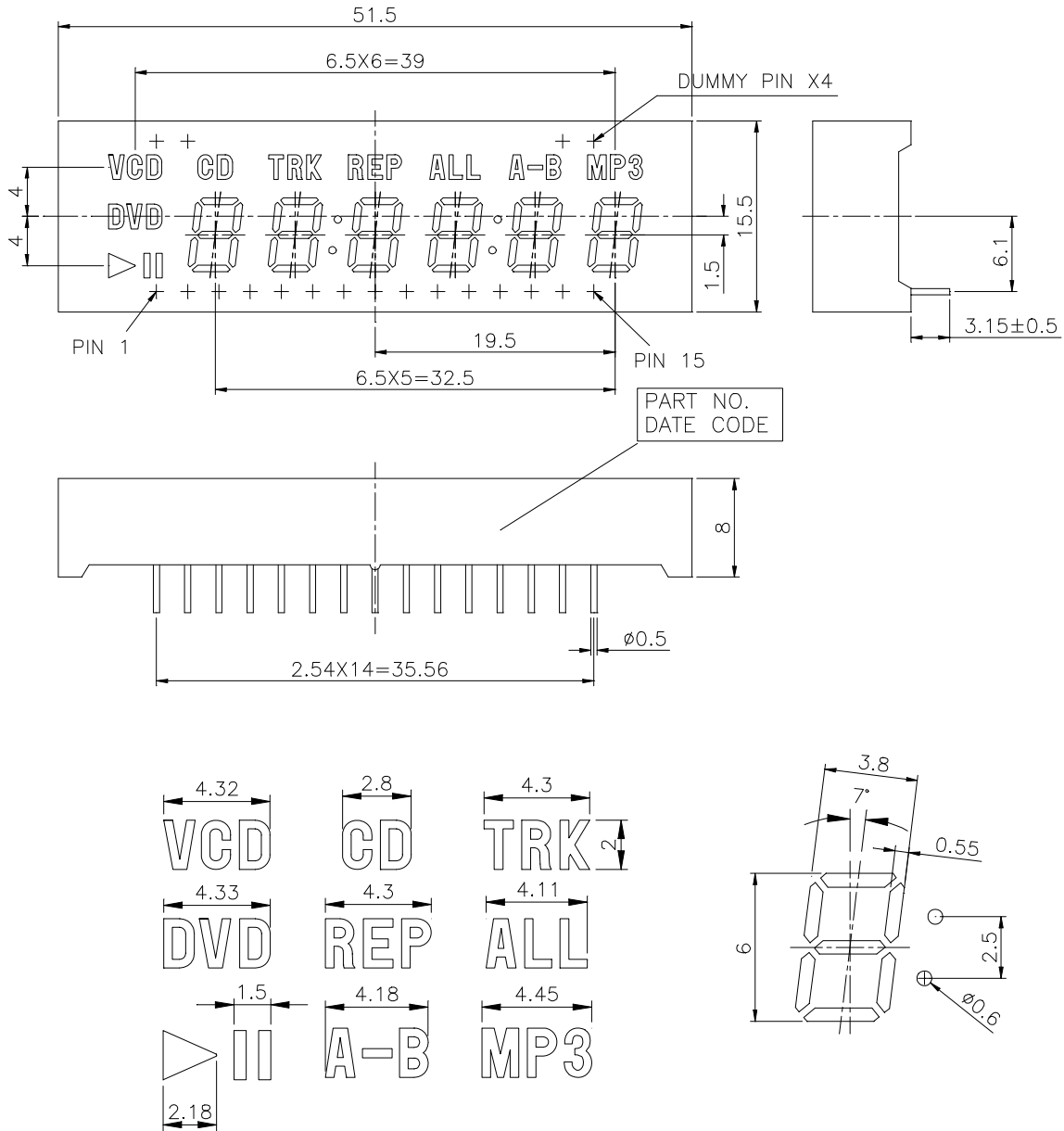
**DESCRIPTION**

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**

<b>PART NO.</b>	<b>DESCRIPTION</b>
GREEN & RED ORANGE	Multiplex Common Anode
LTG-0274M	

## PACKAGE DIMENSIONS



JAPAN PATENT:3075028

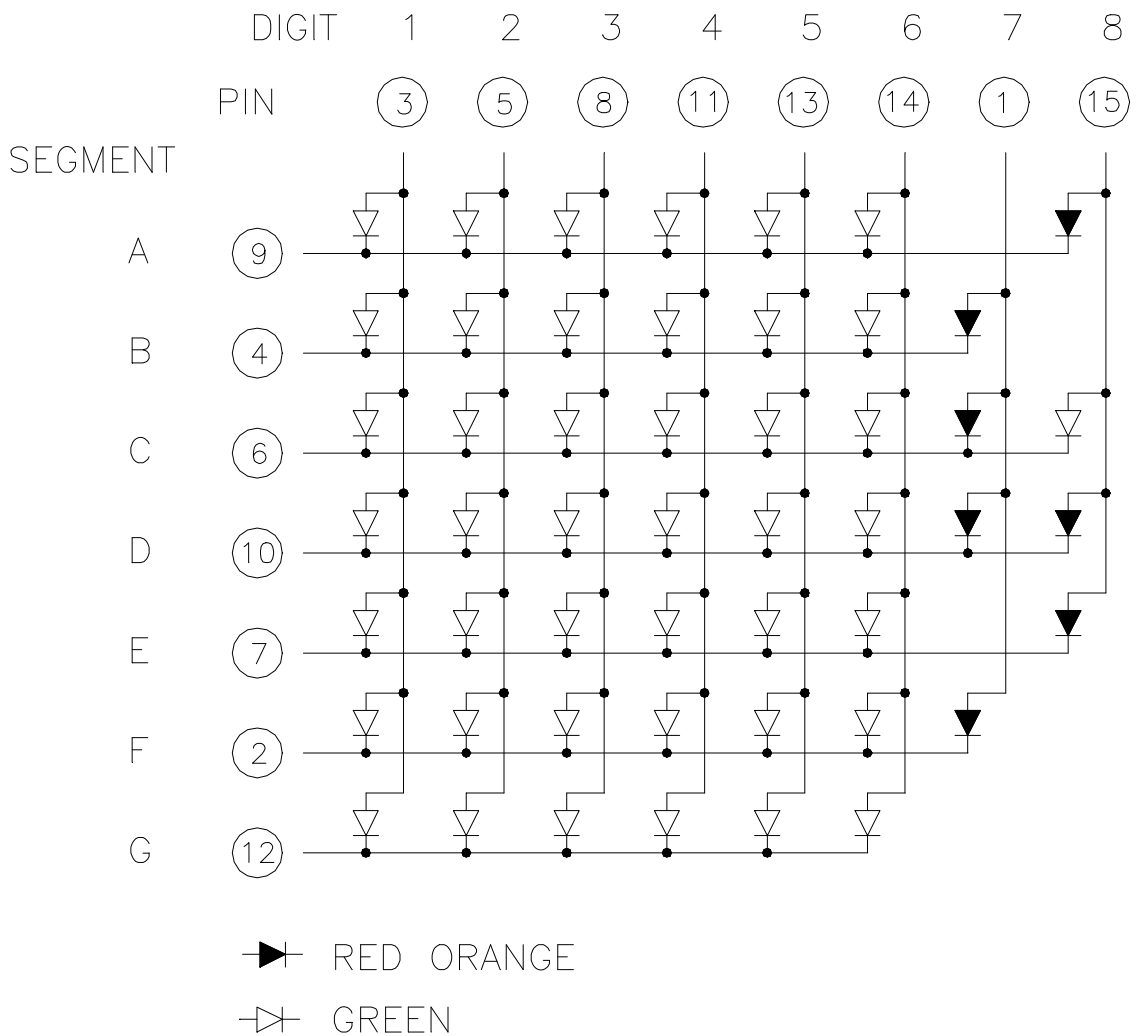
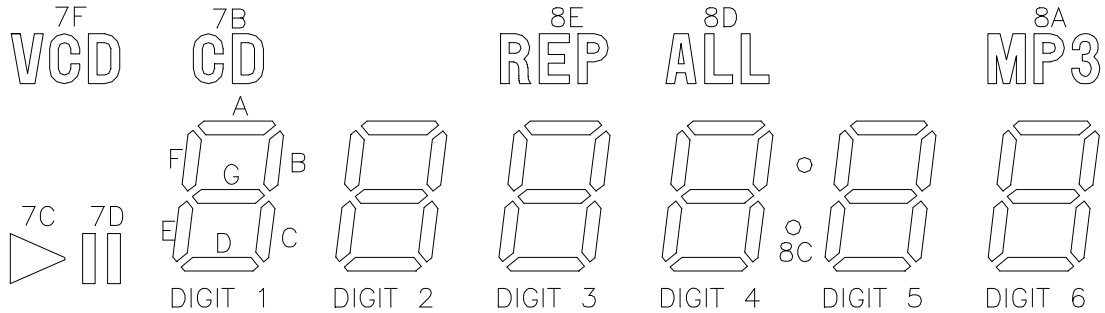
TAIWAN PATENT:089211101

KOREA PATENT:0209198

CHINA PATENT:440339

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

### INTERNAL CIRCUIT DIAGRAM



**PIN CONNECTION**

<b>NO</b>	<b>CONNECTION</b>
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

### 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	25	25	mA
Derating Linear From 25°C Per Chip	0.33	0.33	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			

\* 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	I <sub>v</sub>	500	1600		μcd	I <sub>F</sub> = 10mA
Peak Emission Wavelength	λ <sub>p</sub>		565		nm	I <sub>F</sub> = 20mA
Spectral Line Half-Width	Δλ		30		nm	I <sub>F</sub> = 20mA
Dominant Wavelength	λ <sub>d</sub>		569		nm	I <sub>F</sub> = 20mA
Forward Voltage Per Chip	V <sub>F</sub>		2.1	2.6	V	I <sub>F</sub> = 10mA
Reverse Current Per Chip	I <sub>R</sub>			100	μA	V <sub>R</sub> = 5V
Luminous Intensity Matching Ratio	I <sub>v</sub> -m			2:1		I <sub>F</sub> = 10mA

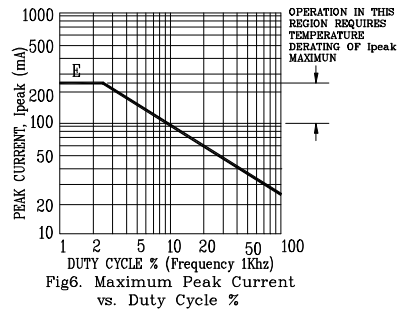
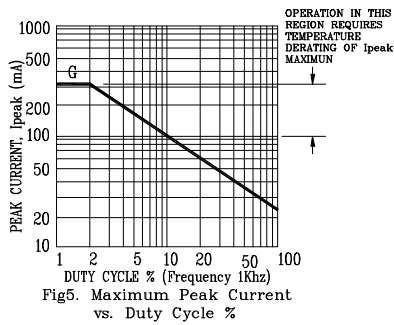
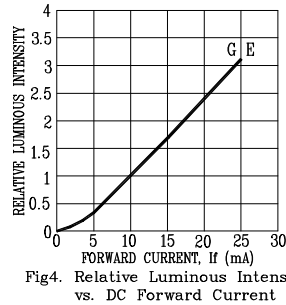
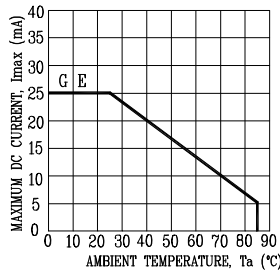
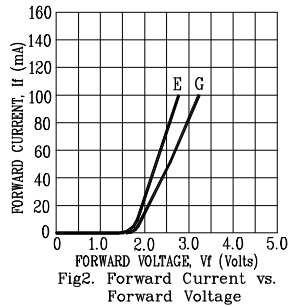
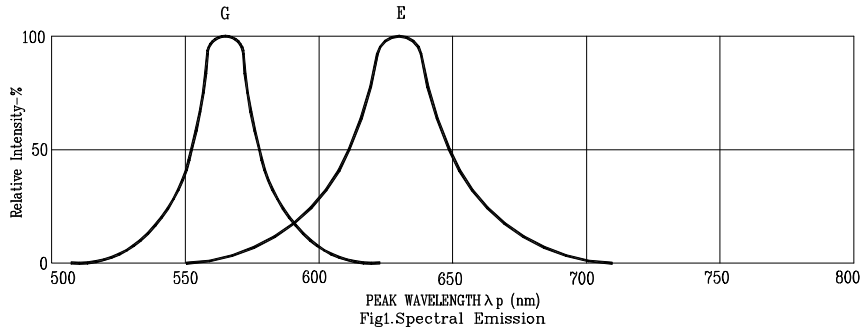
#### RED ORANGE

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Sterance	I <sub>v</sub>	500	1600		μcd	I <sub>F</sub> = 10mA
Peak Emission Wavelength	λ <sub>p</sub>		630		nm	I <sub>F</sub> = 20mA
Spectral Line Half-Width	Δλ		40		nm	I <sub>F</sub> = 20mA
Dominant Wavelength	λ <sub>d</sub>		621		nm	I <sub>F</sub> = 20mA
Forward Voltage Per Chip	V <sub>F</sub>		2.0	2.6	V	I <sub>F</sub> = 10mA
Reverse Current Per Chip	I <sub>R</sub>			100	μA	V <sub>R</sub> = 5V
Luminous Intensity Matching Ratio	I <sub>v</sub> -m			2:1		I <sub>F</sub> = 10mA

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

**TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES**

(25°C Ambient Temperature Unless Otherwise Noted)



NOTE: E=RED ORANGE G=GREEN