



LED Display Product Data Sheet LTG-0422G-S2

Spec No.: DS30-2004-126

Effective Date: 06/12/2004

Revision: A

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

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

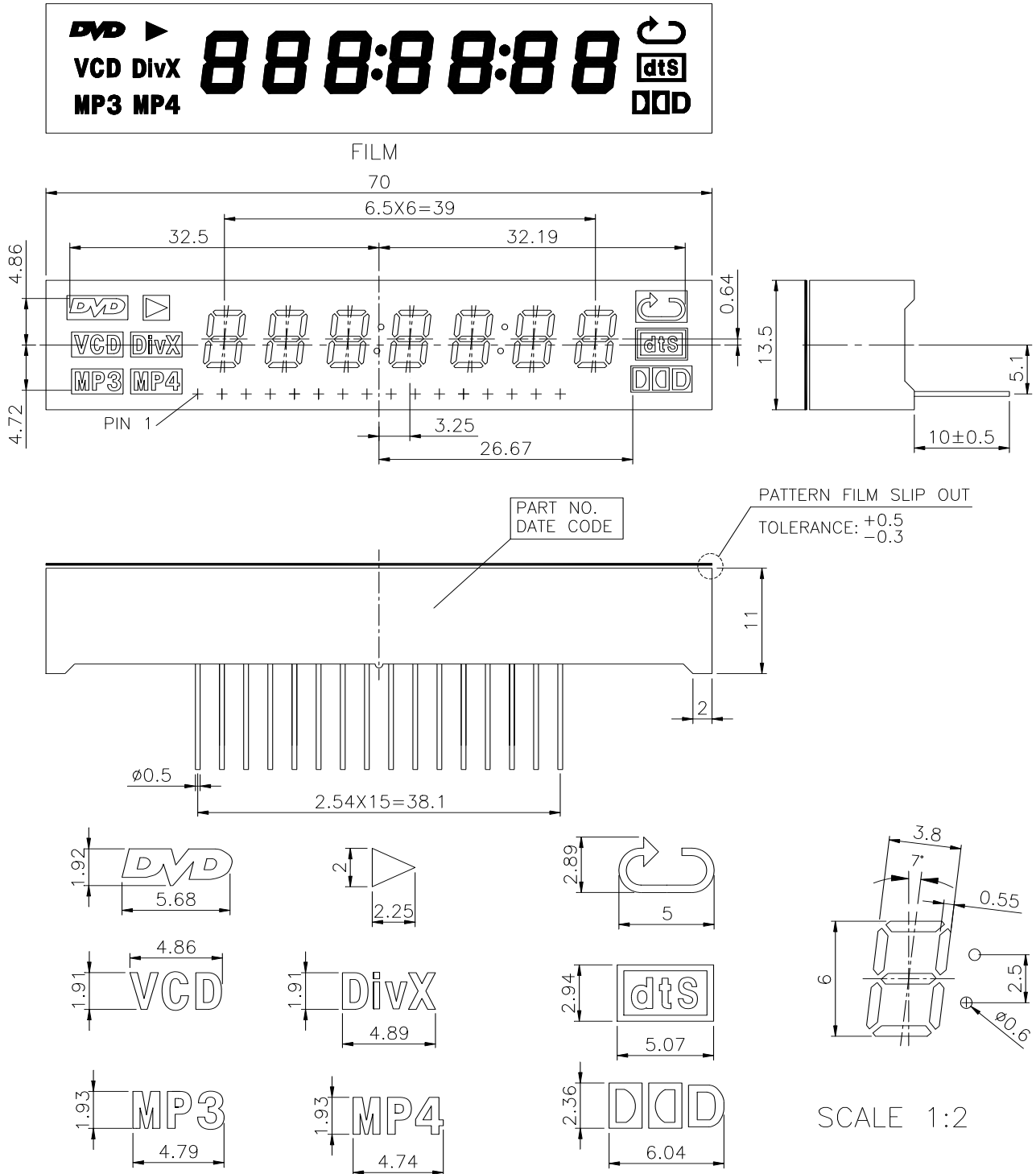
DESCRIPTION

The LTG-0422G-S2 is a 0.24 inch (6 mm) digit height 6 digit seven-segment with several icons display. This device is multi-color applicable display. It uses GREEN LED chips (GaP epi on GaP substrate). The display is covered with a black pattern film, and packaged with white epoxy.

DEVICE

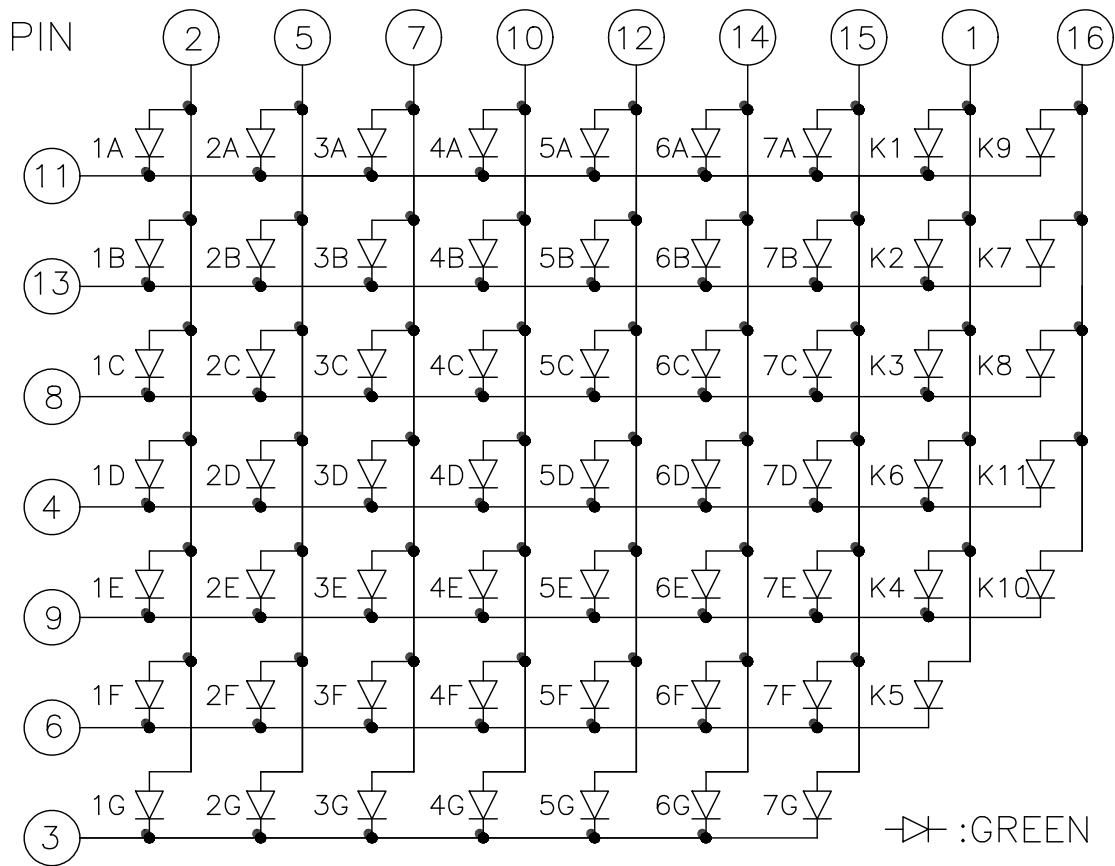
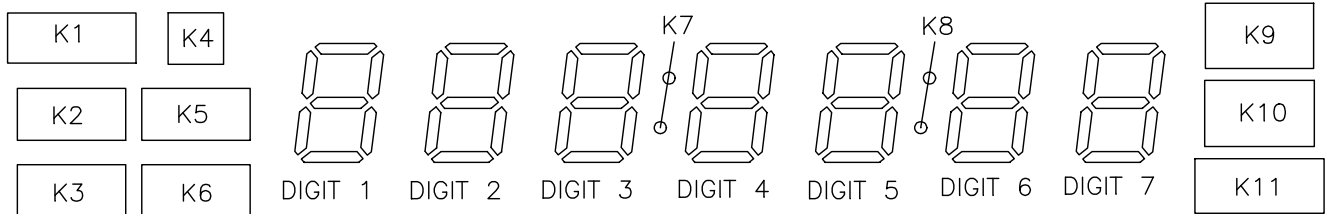
| PART NO. | DESCRIPTION |
|-----------------|------------------------|
| GREEN | Multiplex Common Anode |
| LTG-0422G-S2 | |

PACKAGE DIMENSIONS



NOTES: All dimensions are in millimeters. Tolerances are ± 0.25 mm unless otherwise noted.

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

| NO | CONNECTION |
|-----------|-------------------------------------|
| 1 | COMMON ANODE K1~K6 |
| 2 | COMMON ANODE DIGIT 1 |
| 3 | CATHODE 1G,2G,3G,4G,5G,6G,7G |
| 4 | CATHODE 1D,2D,3D,4D,5D,6D,7D,K6,K11 |
| 5 | COMMON ANODE DIGIT 2 |
| 6 | CATHODE 1F,2F,3F,4F,5F,6F,7F,K5 |
| 7 | COMMON ANODE DIGIT 3 |
| 8 | CATHODE 1C,2C,3C,4C,5C,6C,7C,K3,K8 |
| 9 | CATHODE 1E,2E,3E,4E,5E,6E,7E,K4,K10 |
| 10 | COMMON ANODE DIGIT 4 |
| 11 | CATHODE 1A,2A,3A,4A,5A,6A,7A,K1,K9 |
| 12 | COMMON ANODE DIGIT 5 |
| 13 | CATHODE 1B,2B,3B,4B,5B,6B,7B,K2,K7 |
| 14 | COMMON ANODE DIGIT 6 |
| 15 | COMMON ANODE DIGIT 7 |
| 16 | COMMON ANODE K7~K11 |

ABSOLUTE MAXIMUM RATING

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

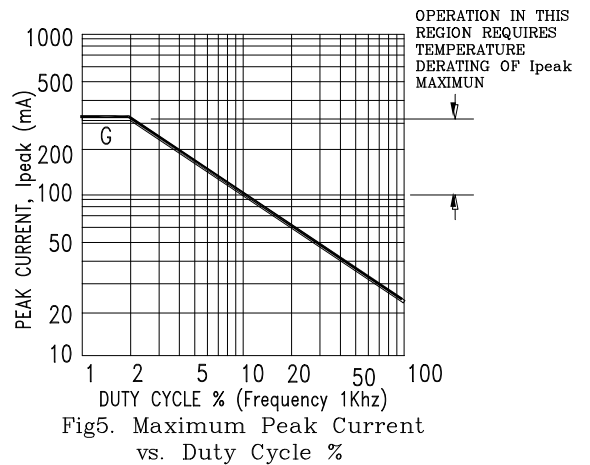
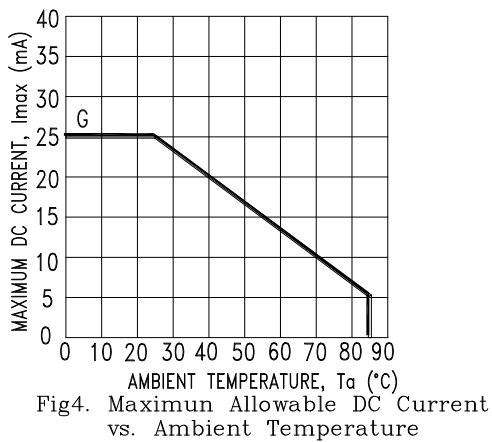
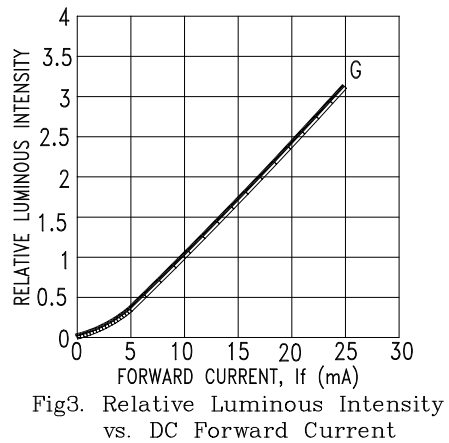
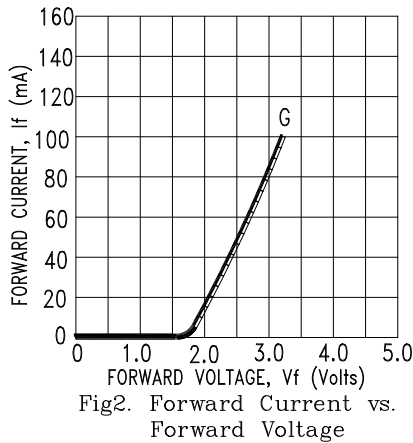
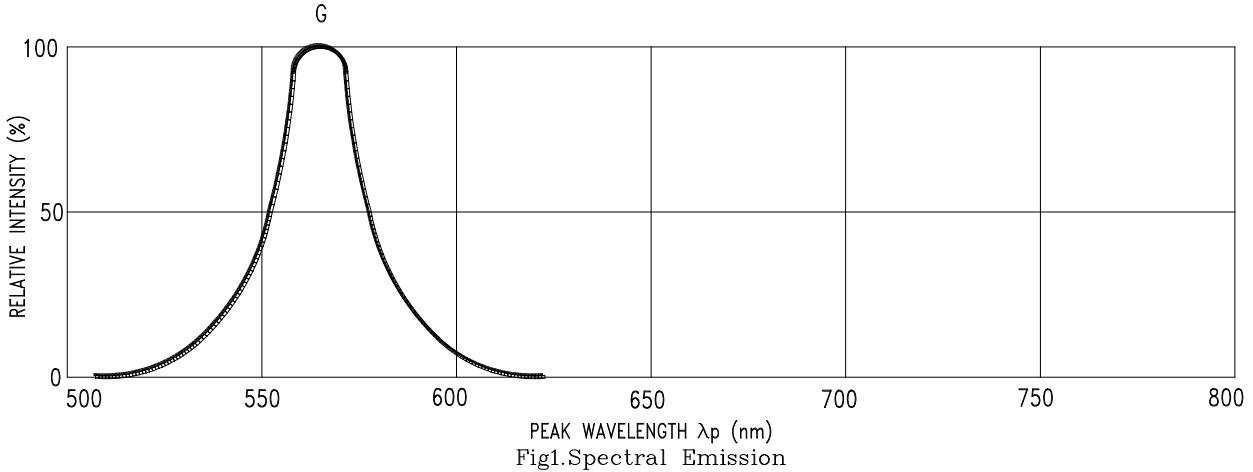
ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

| PARAMETER | SYMBOL | MIN. | TYP. | MAX. | UNIT | TEST CONDITION |
|--|-------------------|------|------|------|------|-----------------------|
| Average Luminous Intensity Per Segment | I _v | 200 | 650 | | μcd | I _F = 10mA |
| 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 Chip | V _F | | 2.1 | 2.6 | V | I _F = 10mA |
| Reverse Current Per Chip | I _R | | | 100 | μA | V _R = 5V |
| Luminous Intensity Matching Ratio | I _v -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'Eclairage) eye-response curve.

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)



NOTE: G=GREEN.