



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : CDDD-406-049 REV: 1

0.4" Dual Digit Displays

PART NO. : ELD-406GWB/P11 ECN :            Page: 1/5

■ Features :

- Industrial standard size.
- Low power consumption.
- Categorized for luminous intensity.

■ Applications:

- Audio equipment
- Instrument panels
- Digital read out display

■ Descriptions :

- The ELD-406 series is a large 10.16mm (0.4")high seven segment display designed for viewing distances up to 7 meters.
- These displays provide excellent reliability in bright ambient light.
- These devices are made with white segments and black surface.

| PART NO.       | Chip     |               |
|----------------|----------|---------------|
|                | Material | Emitted Color |
| ELD-406GWB/P11 | GaP      | Green         |

OFFICE : NO. 25,Lane 76,Sec.3, Chung Yang Rd., Tucheng 236, Taipei, Taiwan, R.O.C.

TEL : 886-2-2267-2000,2267-9936

FAX : 886-2-2267-6244,22676189,22676306

<http://www.everlight.com>

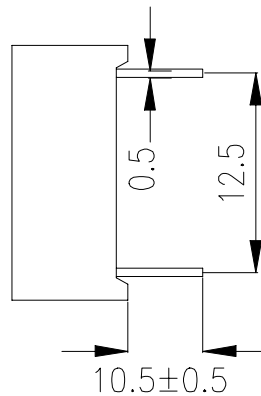
A0111036



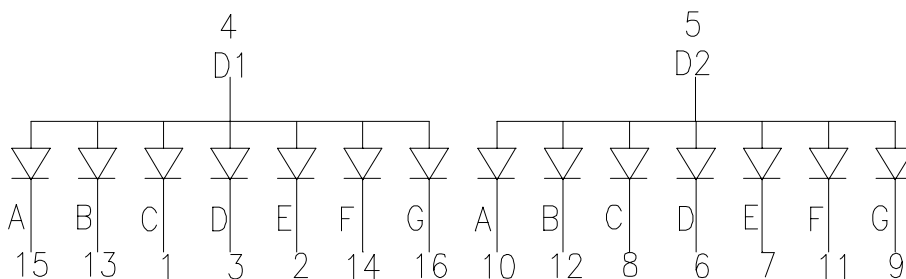
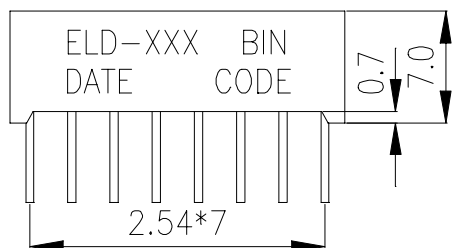
REV: 1

PART NO. : ELD-406GWB/P11

ECN : Page: 2/5



|    |         |       |    |
|----|---------|-------|----|
| 1  | CATHODE | 1C    |    |
| 2  | CATHODE | 1E    |    |
| 3  | CATHODE | 1D    |    |
| 4  | COMMON  | ANODE | D1 |
| 5  | COMMON  | ANODE | D2 |
| 6  | CATHODE | 2D    |    |
| 7  | CATHODE | 2E    |    |
| 8  | CATHODE | 2C    |    |
| 9  | CATHODE | 2G    |    |
| 10 | CATHODE | 2A    |    |
| 11 | CATHODE | 2F    |    |
| 12 | CATHODE | 2B    |    |
| 13 | CATHODE | 1B    |    |
| 14 | CATHODE | 1F    |    |
| 15 | CATHODE | 1A    |    |
| 16 | CATHODE | 1G    |    |



1.All dimensions are in millimeters , tolerance is 0.25mm unless otherwise noted.  
2.Above specification may be changed without notice.  
Supplier will reserve authority on material change for above specification.



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : CDDD-406-049 REV: 1

0.4" Dual Digit Displays

PART NO. : ELD-406GWB/P11 ECN : Page: 3/5

■ Absolute maximum ratings at Ta = 25°C :

| Parameter                              | Symbol   | Rating      | Unit |
|----------------------------------------|----------|-------------|------|
| Reverse Voltage                        | VR       | 5           | V    |
| Forward Current                        | IF       | 30          | mA   |
| Operating Temperature                  | Topr     | -40 to +85  | °C   |
| Storage Temperature                    | Tstg     | -40 to +100 | °C   |
| Soldering Temperature                  | Tsol     | 260 ± 5     | °C   |
| Power Dissipation                      | Pd       | 100         | mW   |
| Peak Forward Current(Duty 1/10 @ 1KHZ) | IF(Peak) | 160         | mA   |

■ Electronic optical characteristics :

| Parameter                    |                   | Symbol | Min. | Typ. | Max. | Unit | Condition |
|------------------------------|-------------------|--------|------|------|------|------|-----------|
| Luminous Intensity           | Per segment       | Iv     | 1.4  | 2.3  | ---- | mcd  | IF=10mA   |
|                              | Per decimal point |        | ---- | ---- | ---- |      |           |
| Peak Wavelength              |                   | λ p    | ---- | 565  | ---- | nm   | IF=20mA   |
| Dominant Wavelength          |                   | λ d    | ---- | 570  | ---- | nm   | IF=20mA   |
| Spectrum Radiation Bandwidth |                   | △ λ    | ---- | 30   | ---- | nm   | IF=20mA   |
| Forward Voltage              |                   | VF     | 1.7  | 2.1  | 2.4  | V    | IF=20mA   |
| Reverse Current              |                   | IR     | ---- | ---- | 10   | μ A  | VR=5V     |



# EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : CDDD-406-049

REV: 1

0.4" Dual Digit Displays

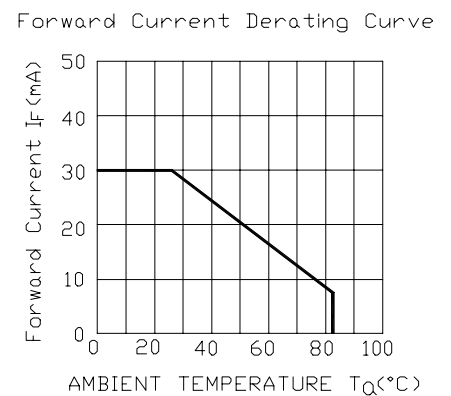
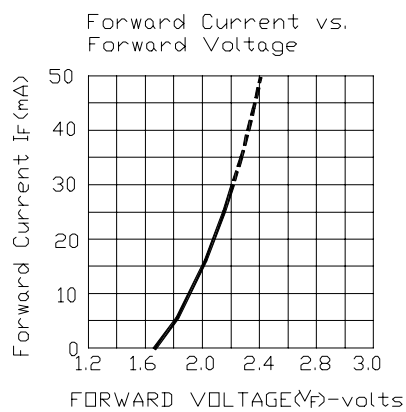
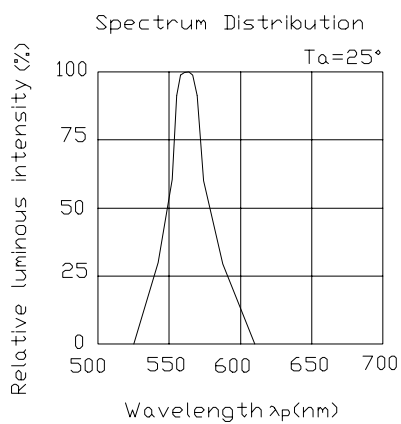
PART NO. : ELD-406GWB/P11

ECN :

Page: 4/5

## Typical Electro-Optical Characteristic Curves:

GHIP Material:Gap  
Emitted Color:Yellow Green





## 0.4" Dual Digit Displays

PART NO.: ELD-406GWB/P11      ECN:      Page: 5/5

■ Reliability test items and conditions:

| NO | Item                             | Test Conditions                               | Test Hours/Cycle | Sample Size | Ac/Re |
|----|----------------------------------|-----------------------------------------------|------------------|-------------|-------|
| 1  | Solder Heat                      | TEMP : 260°C ± 5 °C                           | 5 SEC            | 76 PCS      | 0/1   |
| 2  | Temperature Cycle                | H : +85°C 30min<br>∫ 5 min<br>L : -55°C 30min | 50 CYCLE         | 76 PCS      | 0/1   |
| 3  | Thermal Shock                    | H : +100°C 5min<br>∫ 10 sec<br>L : -10°C 5min | 50 CYCLE         | 76 PCS      | 0/1   |
| 4  | High Temperature Storage         | TEMP : 100°C                                  | 1000 HRS         | 76 PCS      | 0/1   |
| 5  | Low Temperature Storage          | TEMP : -55°C                                  | 1000 HRS         | 76 PCS      | 0/1   |
| 6  | DC Operating Life                | IF = 10 mA                                    | 1000 HRS         | 76 PCS      | 0/1   |
| 7  | High Temperature / High Humidity | 85°C/85% RH                                   | 1000 HRS         | 76 PCS      | 0/1   |