



## 0.56" Tripple Digit Displays

MODEL NO : ELT-511EWA ECN :          Page: 1/5

### ■ Features :

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

### ■ Applications:

- Audio equipment
- Instrument panels
- Digital readout display

### ■ Description :

- The ELT-511 series is a large 14.22mm (0.56")high seven segment display design for viewing distances up to 7 meters.
- These displays provide excellent reliability in bright ambient light.
- These device is made with white segments and gray surface.

| PART NO    | CHIP      |               | C.C. or C.A. |
|------------|-----------|---------------|--------------|
|            | Material  | Emitted Color |              |
| ELT-511EWA | GaAsP/GaP | Orange        | C.C.         |

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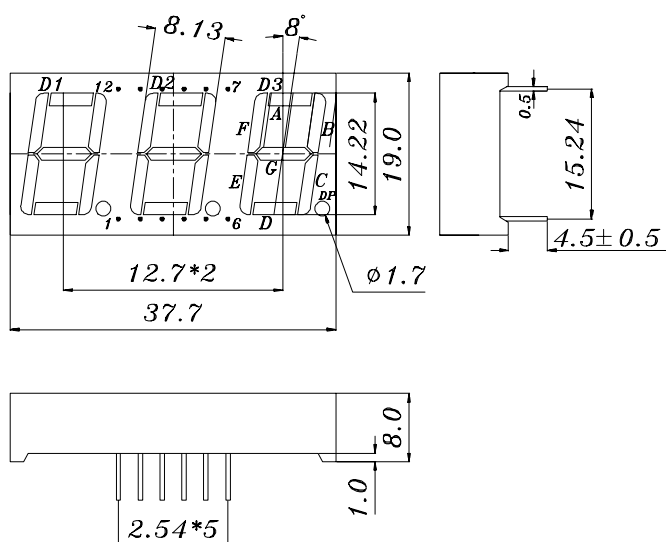
<http://www.everlight.com>



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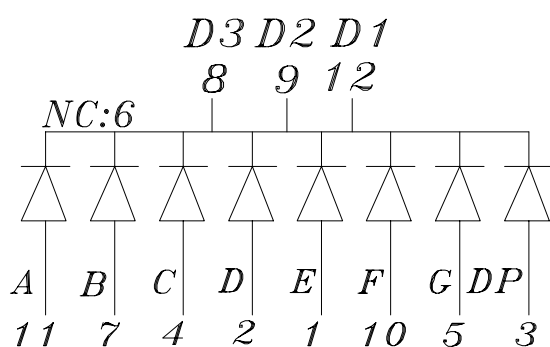
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### Package Dimensions:



### COMMON CATHODE

- 1 ANODE E
- 2 ANODE D
- 3 ANODE DP
- 4 ANODE C
- 5 ANODE G
- 6 NO CONNECT
- 7 ANODE B
- 8 COMMON CATHODE D3
- 9 COMMON CATHODE D2
- 10 ANODE F
- 11 ANODE A
- 12 COMMON CATHODE D1



### Notes:

- 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 : DDT-511-008 REV: 1.2

0.56" Tripple Digit Displays

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## ■ 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<br>1/10 @ 1KHZ) | If(Peak) | 160         | mA   |

## ■ Electronic optical characteristics :

| Parameter                       |                      | Symbol           | MIN. | TYP. | MAX. | Unit    | Condition |
|---------------------------------|----------------------|------------------|------|------|------|---------|-----------|
| Luminous<br>Intensity           | Per segment          | Iv               | 1.4  | 2.3  | ---- | mcd     | If=10mA   |
|                                 | Per decimal<br>point |                  | 0.45 | 1.05 | ---- | mcd     | If=10mA   |
|                                 |                      |                  |      |      |      |         |           |
| Peak Wavelength                 |                      | $\lambda_p$      | ---- | 635  | ---- | nm      | If=20mA   |
| Dominant Wavelength             |                      | $\lambda_d$      | ---- | 625  | ---- | nm      | If=20mA   |
| Spectrum Radiation<br>Bandwidth |                      | $\Delta \lambda$ | ---- | 45   | ---- | nm      | If=20mA   |
| Forward Voltage                 |                      | Vf               | 1.7  | 2.0  | 2.4  | V       | If=20mA   |
| Reverse Current                 |                      | Ir               | ---- | ---- | 10   | $\mu A$ | Vr=5V     |



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■ Reliability test item and condition:

| 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   |



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■ Typical Electro-Optical Characteristic Curves:

