



# EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DDB-101-003 REV: 1.2

12.8\*6.3mm Light Bars

MODEL NO : ELB-1010GD 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 ELB-1010 series is 12.8\*6.3mm light bar display. Design for viewing distances up to 7 meters.
- There are separate anodes and cathodes for each light segment and choice of five colors is offered.
- These device are available with green offering a wide possibility in design.

| PART NO    | CHIP     |               | C.C. or C.A. |
|------------|----------|---------------|--------------|
|            | Material | Emitted Color |              |
| ELB-1010GD | 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

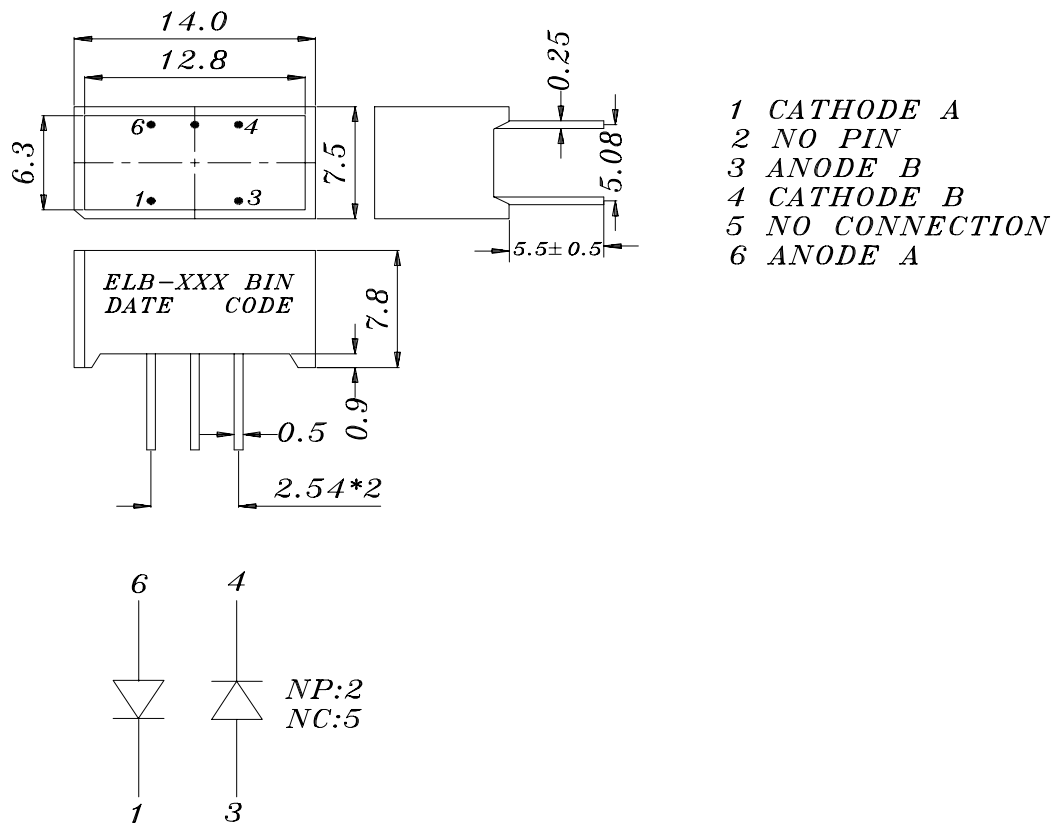
<http://www.everlight.com>



12.8\*6.3mm Light Bars

MODEL NO : ELB-1010GD ECN :                      Page: 2/5

■ Package Dimensions:



■ 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 : DDB-101-003 REV: 1.2

12.8\*6.3mm Light Bars

MODEL NO : ELB-1010GD ECN :                      Page: 3/5

## ■ Absolute maximum ratings at Ta = 25℃ :

| Parameter                                 | Symbol   | Rating      | Unit |
|-------------------------------------------|----------|-------------|------|
| Reverse Voltage                           | Vr       | 5           | V    |
| Forward Current                           | If       | 30          | mA   |
| Operating Temperature                     | Topr     | -40 to +85  | ℃    |
| Storage Temperature                       | TsTg     | -40 to +100 | ℃    |
| Soldering Temperature                     | Tsol     | 260 ± 5     | ℃    |
| Power Dissipation                         | Pd       | 100         | mW   |
| Peak Forward Current(Duty 1/10<br>@ 1KHZ) | If(Peak) | 160         | mA   |

## ■ Electronic optical characteristics :

| Parameter                       | Symbol | MIN. | TYP. | MAX. | Unit | Condition |
|---------------------------------|--------|------|------|------|------|-----------|
| Luminous Intensity              | Iv     | 2.0  | 4.0  | ---- | mcd  | If=10mA   |
| Peak Wavelength                 | λ p    | ---- | 565  | ---- | nm   | If=20mA   |
| Dominant Wavelength             | λ d    | ---- | 570  | ---- | nm   | If=20mA   |
| Spectrum Radiation<br>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 : DDB-101-003 REV: 1.2

12.8\*6.3mm Light Bars

MODEL NO : ELB-1010GD ECN :                      Page: 4/5

## ■ 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   |



12.8\*6.3mm Light Bars

MODEL NO: ELB-1010GD ECN :          Page: 5/5

## ■ Typical Electro-Optical Characteristic Curves:

G

