



# 玄豐電子有限公司

CYCLONE LIGHT ELECTRONICS CO., LTD.

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## 規格承認書

### APPROVED SHEET

Part No:CL-L0158QXXXXX

客戶名稱 / CUSTOMER NAME :

產品型號 / PRODUCT NUMBER :

客戶料號 / CUSTOMER P/N :



|  |   |
|--|---|
| <b>CUSTOMER<br/>ENGINEERING DEPARTMENT</b> | <b>CYCLONE LIGHT<br/>ELECTRONICS CO., LTD.<br/>ENGINEERING DEPARTMENT</b> |
| <hr/><br>(Authorized Signature)            | <hr/>   |

## 1. Package Size: 1.0mm\*5.0mm\*8.0mm H Rectangular LED Lamp

## 2. Color and Luminous Intensity:

| Part No.       | Emitted Color | Resin Color | Luminous Intensity (mcd) |      | Test Current |
|----------------|---------------|-------------|--------------------------|------|--------------|
|                |               |             | MIN.                     | TYP. |              |
| CL-L0158QCRFD  | Red           | DIFFUSED    | 50                       | 100  | 20mA         |
| CL- L0158QAMBD | Amber         | DIFFUSED    | 50                       | 100  |              |
| CL-L0158QYGF   | Yellow Green  | DIFFUSED    | 10                       | 20   |              |
| CL- L0158QCYFD | Yellow        | DIFFUSED    | 50                       | 100  |              |
| CL -L0158QTGD  | Ultra Green   | DIFFUSED    | 1300                     | 1500 |              |
| CL- L0158QTBD  | Blue          | DIFFUSED    | 250                      | 450  |              |
| CL-L0158QBWD   | White         | DIFFUSED    | 400                      | 800  |              |

※1 Luminous intensity : 1chips

## 3. Absolute Maximum Ratings:

| Item                               | Symbol    | Absolute Maximum Ratings |     |     |     |    |    |    | Unit |
|------------------------------------|-----------|--------------------------|-----|-----|-----|----|----|----|------|
|                                    |           | CRF                      | AMB | YGF | CYF | TG | TB | BW |      |
| Power Dissipation                  | $P_d$     | 70                       | 70  | 70  | 70  | 70 | 70 | 70 | mW   |
| Forward Current                    | $I_F$     | 30                       | 30  | 30  | 30  | 30 | 30 | 30 | mA   |
| Pulse Forward Current <sup>※</sup> | $I_{FRM}$ | 60                       | 60  | 60  | 60  | 60 | 60 | 60 | mA   |
| Reverse Voltage                    | $V_R$     | 5                        | 5   | 5   | 5   | 5  | 5  | 5  | V    |
| Operating Temperature              | $T_{opr}$ | - 40 ~ + 85              |     |     |     |    |    |    | °C   |
| Storage Temperature                | $T_{stg}$ | - 40 ~ + 85              |     |     |     |    |    |    | °C   |

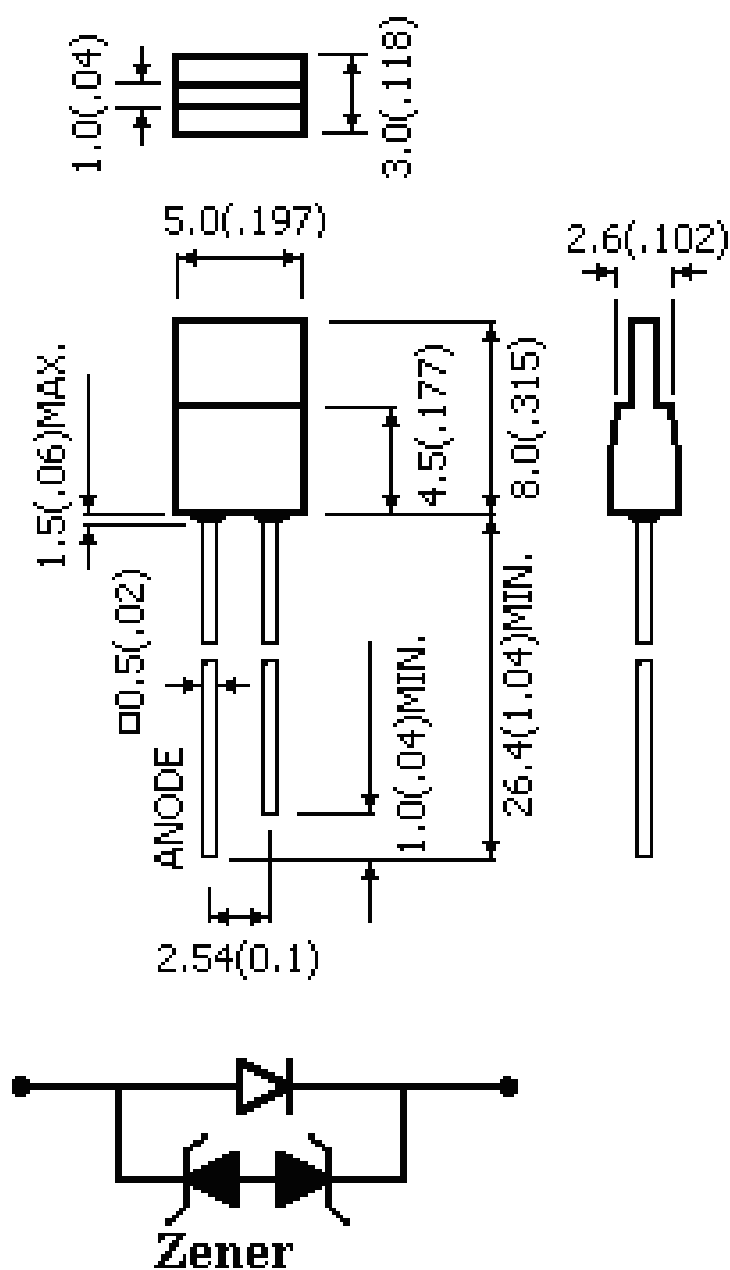
※2 Power Dissipation : 1chips

※3  $I_{FRM}$  Measurement condition : Pulse Width ≤ 2ms, Duty ≤ 1/5

## 4. Electro-Optical Characteristics

| Item                | Conditions | Symbol      | Characteristics |     |     |     |     |     |     | Unit  |    |
|---------------------|------------|-------------|-----------------|-----|-----|-----|-----|-----|-----|-------|----|
|                     |            |             |                 | CRF | AMB | YGF | CYF | TG  | TB  |       | BW |
| Forward Voltage     | IF=20mA    | $V_F$       | TYP.            | 1.8 | 1.8 | 1.8 | 1.8 | 2.8 | 2.8 | 2.8   | V  |
|                     |            |             | MAX.            | 2.3 | 2.5 | 2.5 | 2.5 | 3.5 | 3.5 | 3.5   |    |
| Dominant Wavelength | IF=20mA    | $\lambda_d$ | TYP.            | 625 | 605 | 570 | 590 | 525 | 460 | 8000k | nm |

## PACKAGE DIMENSIONS



### Notes :

1. Dimensions are in millimeters.
2. Tolerance is  $\pm 0.25$ mm without noted.

## Precautions For Use LED

### 1. Over-current-proof

Customer must apply resistors for protection; otherwise slight voltage shift will cause big current change (Burn out will happen).

### 2. Storage

2.1 Do not open moisture proof bag before the products are ready to use.

2.2 Before opening the package: The LEDs should be kept at 30°C or less and 90%RH or less.

2.3 After opening the package: The LED's floor life is 168 Hrs under 30°C or less and 60% RH or less. If unused

LEDs remain, it should be stored in moisture proof packages.

2.4 If the moisture absorbent material (silica gel) has faded away or the LEDs have exceeded the storage time, baking treatment should be performed using the following conditions.

Baking treatment: 60±5°C for 24 hours.

### 3. Soldering Condition

Pb-free solder temperature profile

