



**EXCEED PERSEVERANCE ELECTRONIC INDUSTRY CO., LTD.**

**深圳市超毅光电子有限公司**

## 18 $\phi$ Light Bar Display.

### Part Number:

RL-L1800GWW

RL- L1800YWW

RL-L1801OWW

RL-L1802SWW

RL- L1802RWW

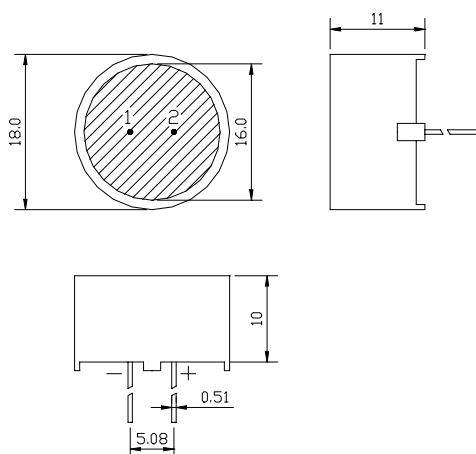
### Features

- 1.LOW POWER CONSUMPTION.
- 2.RELIABLE AND RUGGED.
- 3.EXCELLENT UNIFORMITY OF LIGHT OUTPUT.
- 4.SUITABLE FOR LEVEL INDICATOR.
- 5.I.C COMPATIBLE.
- 6.LONG LIFE-SOLIDSTATE RELIABILITY.

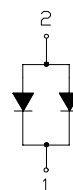
### Notes:

- 1.All dimensions are in millimeters (inches)
- 2.Tolerance is  $\pm 0.25(0.01'' )$  unless otherwise niter
- 3.Lead spacing is measured where the lead emerge package
- 4.Speciflcations are subject to change without notice

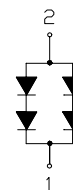
### Package Dimensions & Internal Circuit Diagram.



RL-L1800



RL-L1801



RL-L1802



### Selection Guide

| Part NO.     | Chip      |               |                    | Vf (V) |     |             | Lens Color    | C.C<br>Or<br>CA |
|--------------|-----------|---------------|--------------------|--------|-----|-------------|---------------|-----------------|
|              | Material  | Emitted Color | $\Delta p$<br>(nm) | Typ.   | Max | At<br>IF=mA |               |                 |
| RL- L1800GWW | GaP       | Yellow Green  | 570                | 450    | 680 | 20          | White Diffuse | C.C.            |
| RL- L1800YWW | GaAsP/GaP | Yellow        | 585                | 220    | 320 | 20          | White Diffuse | C.C             |
| RL- L1801OWW | GaAsP/GaP | Orange Red    | 630                | 370    | 550 | 20          | White Diffuse | C.A.            |
| RL- L1802SWW | GaAlAs    | Super Red     | 660                | 620    | 930 | 20          | White Diffuse | C.A.            |
| RL- L1802RWW | GaP/GaP   | Bight Red     | 700                | 45     | 70  | 20          | White Diffuse | C.A.            |

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**Electrical/Optical characteristics at TA=25°C.**

| Symbol                 | Parameter             | Device                                                          | Type.                           | Max.                            | Units | Test Conditions |
|------------------------|-----------------------|-----------------------------------------------------------------|---------------------------------|---------------------------------|-------|-----------------|
| $\lambda_{peak}$       | Peak Wavelength       | Yellow Green<br>Yellow<br>Orange Red<br>Super Red<br>Bright Red | 570<br>585<br>630<br>660<br>700 |                                 | nm    | IF-20mA         |
| $\lambda_D$            | Dominate Wavelength   | Yellow Green<br>Yellow<br>Orange Red<br>Super Red<br>Bright Red | 560<br>580<br>610<br>640<br>690 |                                 | nm    | IF-20mA         |
| $\Delta \lambda_{1/2}$ | Spectral Line Halfwit | Yellow Green<br>Yellow<br>Orange Red<br>Super Red<br>Bright Red | 30<br>35<br>45<br>20<br>45      |                                 | nm    | IF-20mA         |
| C                      | Capacitance           | Yellow Green<br>Yellow<br>Orange Red<br>Super Red<br>Bright Red | 15<br>20<br>15<br>45<br>40      |                                 | pF    | VF=0V; f=1MHZ   |
| VF                     | Forward Voltage       | Yellow Green<br>Yellow<br>Orange Red<br>Super Red<br>Bright Red | 2.1<br>2.0<br>2.0<br>1.7<br>2.1 | 2.8<br>2.8<br>2.8<br>2.8<br>2.8 | V     | IF-20mA         |
| IR                     | Reverse Current       | All                                                             |                                 | 10                              | uA    | VR=5V           |

**Absolute Maximum Ratings at TA=25°C.**

| Parameter            | Yellow Green | Yellow | Orange Red | Super Red | Bright Red | Units |
|----------------------|--------------|--------|------------|-----------|------------|-------|
| Power dissipation    | 100          | 85     | 100        | 110       | 45         | mW    |
| DC Forward Current   | 25           | 25     | 25         | 25        | 25         | mA    |
| Peak Forward Current | 160          | 160    | 160        | 200       | 50         | mA    |
| Reverse Voltage      | 5            | 5      | 5          | 5         | 5          | V     |

**NOTES:**

1. Operating temperature: 40°C. TO 80°C.
2. Lead soldering: 260°C for 5 seconds.