

## LED LAMP CLUSTER

BL-CR15AR3G4

### Features:

- ·Shape: Round
- ·Diameter: 15mm
- ·High visibility
- ·Emitting Color: red, green
- ·No of Built-in 5mm LED Lamps :
- ·Ultra Red - 3pcs, ultra green – 4pcs
- ·Waterproof Package With Hood Suitable
- ·For Outdoor and Indoor Information Boards
- ·Rohs Compliance



### ■ Selection Guide

| Part No.     | Description   |
|--------------|---|
| BL-CR15AR3G4 | 15mm Round Lamp cluster<br>3 red ,4 green, round packed |

### ■ Description:

·Color Code & Chip characteristics: (Test Condition: IF=20mA)

| Part No.             | Built-in Lamp Package        | Built-in Lamp Part No. BL-L | Chip                    |                          | Lens Appearance | Electro-optical Data(At 20mA) |      |          | Viewing Angle 2θ1/2 (deg) |
|----------------------|------------------------------|-----------------------------|-------------------------|--------------------------|-----------------|-------------------------------|------|----------|---------------------------|
|                      |                              |                             | Material/Emitted Color  | Peak Wave Length λp (nm) |                 | Vf (V)                        |      | Iv (mcd) |                           |
|                      |                              |                             |                         |                          |                 | Typ                           | Max  | Typ      |                           |
| <b>BL-CR15 AR3G4</b> | 4x5x7mm<br>1.0"<br>Lead Oval | 563UET                      | AlGaInP/<br>Ultra Red   | 630                      | Water clear     | 2.10                          | 2.50 | 800      | X-X<br>45<br>Y-Y<br>25    |
|                      |                              | 563UGT                      | AlGaInP/<br>Ultra Green | 574                      | Water clear     | 2.20                          | 2.50 | 700      |                           |
|                      |                              |                             |                         |                          |                 |                               |      |          |                           |

Notes:

1. θ1/2 Is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

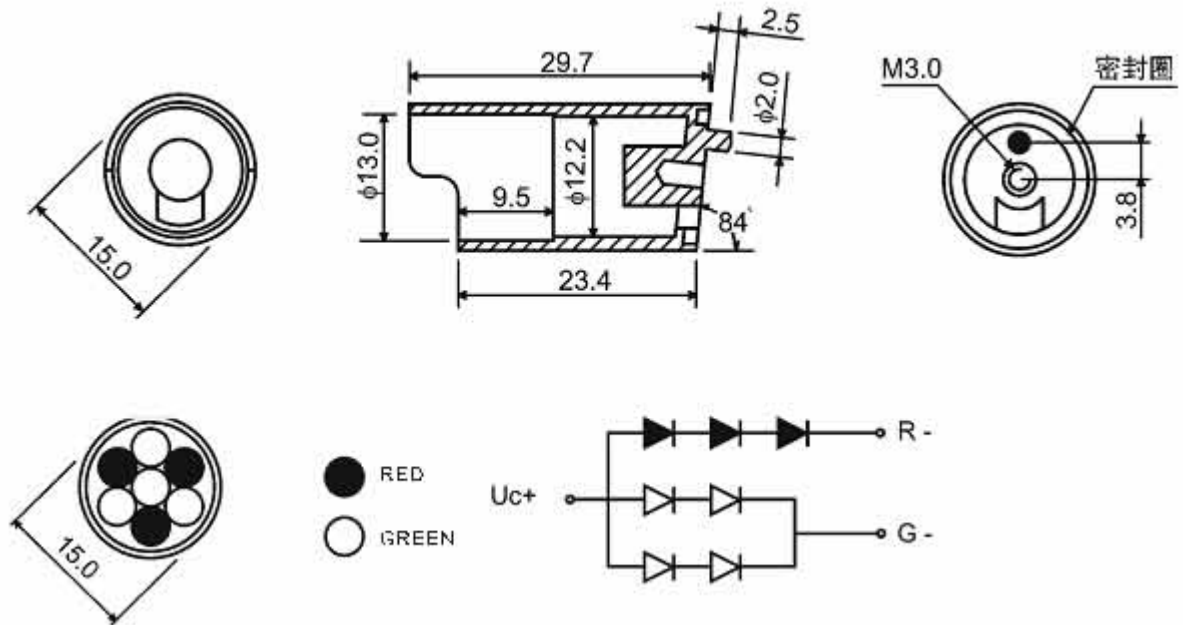
### Absolute Maximum Rating (Each Lamp, Ta=25°C Derate above 25°C)

| Parameter   | UE  | UG  | Unit |
|---|---|-----|------|
| Forward Current I <sub>F</sub>                            | 30  | 30  | mA   |
| Power Dissipation P <sub>d</sub>                          | 78  | 78  | mW   |
| Reverse Voltage V <sub>R</sub>                            | 5   | 5   | V    |
| Peak Forward Current I <sub>PF</sub><br>(Duty 1/10 @1KHZ) | 100   | 100 | mA   |
| Operation Temperature T <sub>OPR</sub>                    | -30 to +80  |     | °C   |
| Storage Temperature T <sub>STG</sub>                      | -40 to +85  |     | °C   |
| Lead Soldering Temperature<br>T <sub>SOL</sub>            | Max.260±5°C for 3 sec Max.<br>(1.6mm from the base of the epoxy bulb) |     | °C   |

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■ Package configuration & Internal circuit diagram:



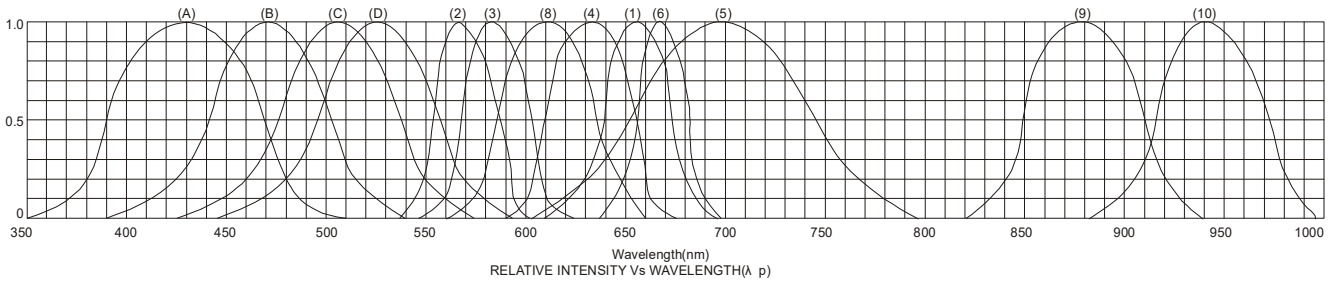
Notes:

- All dimensions are in millimeters (inches)
- Tolerance is  $\pm 0.25(0.01)$  unless otherwise noted.
- Specifications are subject to change without notice.

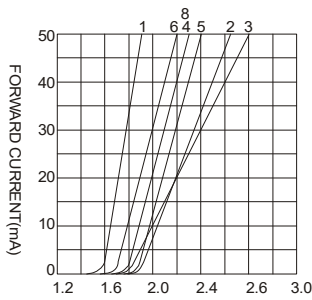
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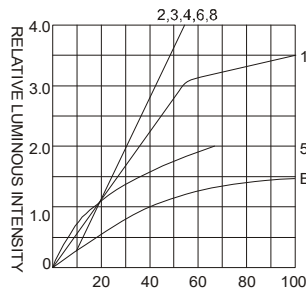
## Typical electrical-optical characteristics curves:



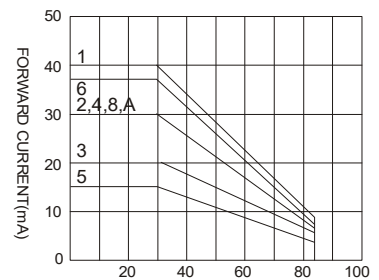
- |   |                                      |
|---|--------------------------------------|
| (1) - GaAsP/GaAs 655nm/Red                | (9) - GaAlAs 880nm                   |
| (2) - GaP 570nm/Yellow Green              | (10) - GaAs/GaAs & GaAlAs/GaAs 940nm |
| (3) - GaAsP/GaP 585nm/Yellow              | (A) - GaN/SiC 430nm/Blue             |
| (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red | (B) - InGaN/SiC 470nm/Blue           |
| (5) - GaP 700nm/Bright Red                | (C) - InGaN/SiC 505nm/Ultra Green    |
| (6) - GaAlAs/GaAs 660nm/Super Red         | (D) - InGaAl/SiC 525nm/Ultra Green   |
| (8) - GaAsP/GaP 610nm/Super Red           |                                      |



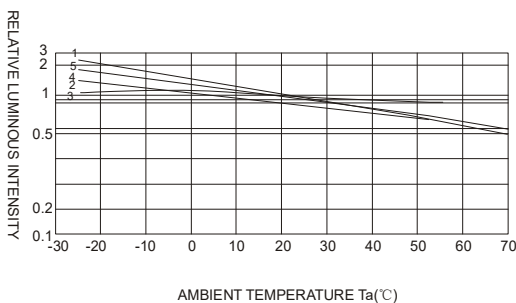
FORWARD VOLTAGE (Vf)  
FORWARD CURRENT VS.  
FORWARD VOLTAGE



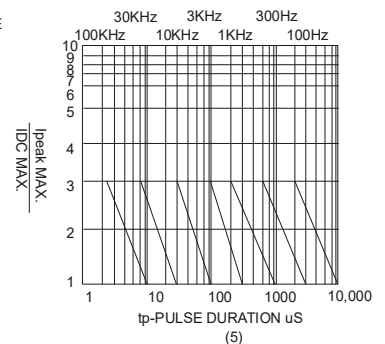
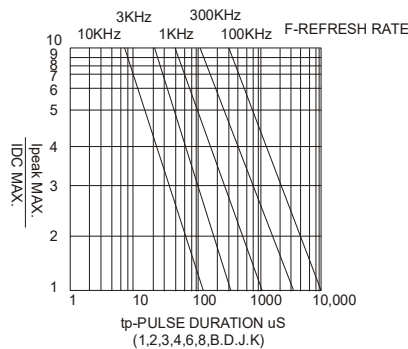
FORWARD CURRENT (mA)  
RELATIVE LUMINOUS  
INTENSITY VS. FORWARD  
CURRENT



AMBIENT TEMPERATURE Ta(°C)  
FORWARD CURRENT VS. AMBIENT  
TEMPERATURE



AMBIENT TEMPERATURE Ta(°C)



NOTE: 25°C free air temperature unless otherwise specified

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■ **Packing and weighting**

