

## LED LAMP CLUSTER

BL-CR19AR3G4

### Features:

- Ø ·Shape: Round
- Ø ·Diameter: 19mm
- Ø ·High visibility
- Ø ·Emitting Color: Ultra Yellow
- Ø ·No of Built-in 5mm LED Lamps :
- Ø ·Ultra orange - 3pcs,green – 4pcs
- Ø ·Waterproof Package With Hood Suitable
- Ø ·For Outdoor and Indoor Information Boards
- Ø ·Rohs Compliance



### Selection Guide

| Part No.     | Description   |
|--------------|---|
| BL-CR19AR3G4 | 19mm square Lamp cluster<br>3 red ,4 green, square 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 2;θ/2 (deg) |
|---------------|------------------------|-----------------------------|------------------------|--------------------------|-----------------|-------------------------------|------|----------|---------------------------|
|               |                        |                             | Material/Emitted Color | Peak Wave Length λp (nm) |                 | Vf (V)                        |      | Iv (mcd) |                           |
|               |                        |                             |                        |                          |                 | Typ                           | Max  |          |                           |
| BL-CR19A R3G4 | 4x5x7mm 1.0" Lead Oval | 563UET                      | AlGaInP/ Ultra Orange  | 630                      | Red Tran.       | 2.10                          | 2.50 | 750      | X-X<br>45<br>Y-Y<br>25    |
|               |                        | 563UGT                      | AiGaInP Ultra Blue     | 574                      | Green Tran.     | 2.20                          | 2.50 | 500      |                           |

Notes:

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

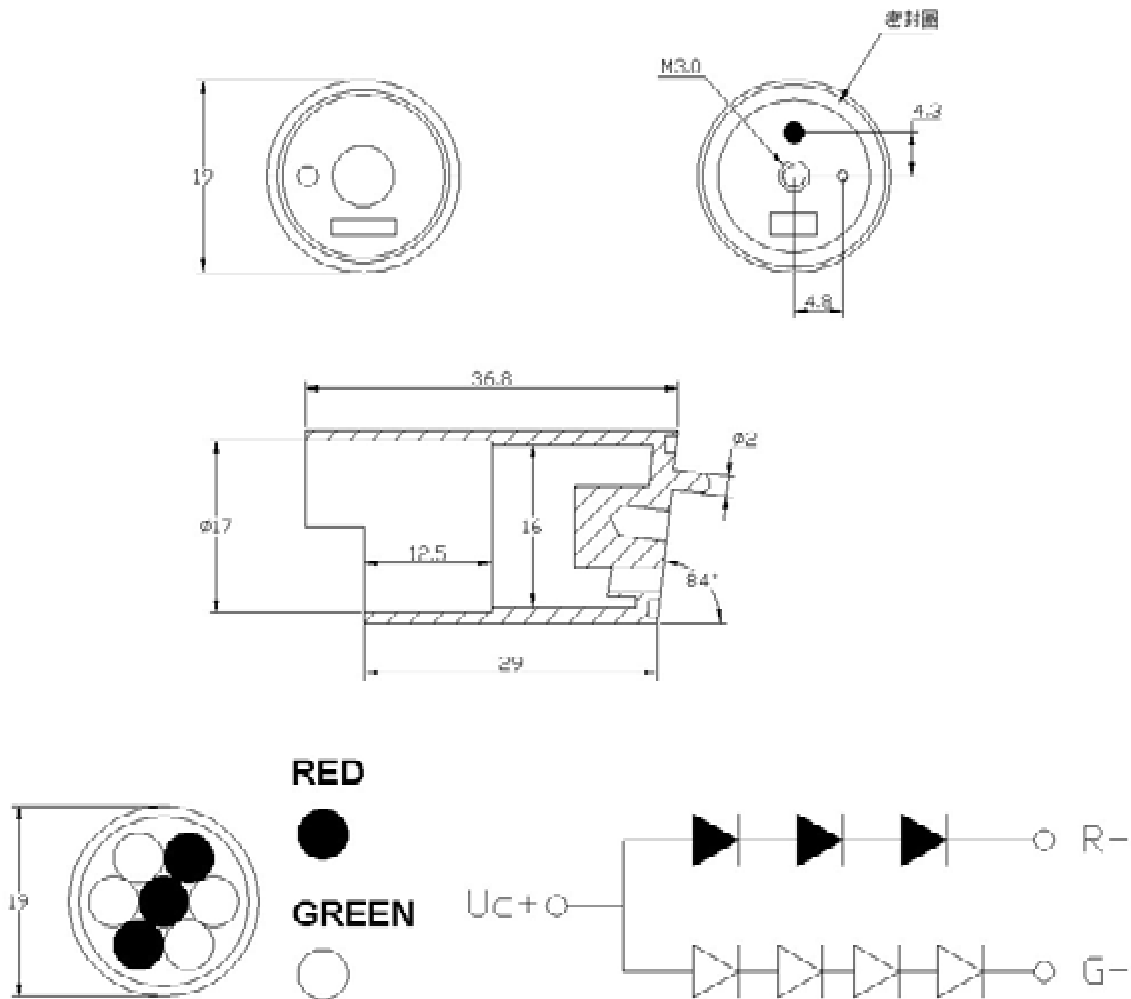
### Absolute Maximum Rating (Each Lamp, Ta=25°C Derate above 25°C)

| Characteristic             | Symbol | Ultra Orang   | Ultra Green | Unit |
|----------------------------|--------|---|-------------|------|
| Spectral Line Half width   | Δλ     | 17  | 30          | nm   |
| Pulse Forward Current      | IFp    | 150   | 150         | mA   |
| DC Forward Current         | IF     | 30  | 30          | mA   |
| Reverse Voltage            | VR     | 5   | 5           | V    |
| Power Dissipature          | PD     | 65  | 75          | mW   |
| Operating Temperature      | Topr   | -40°C-80°C  |             |      |
| Storage Temperature        | Tstg   | -40°C-85°C  |             |      |
| Lead Soldering Temperature |        | Max.260±5°C for 3 sec Max.<br>(1.6mm from the base of the epoxy bulb) |             |      |

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**Package configuration & Internal circuit diagram:**



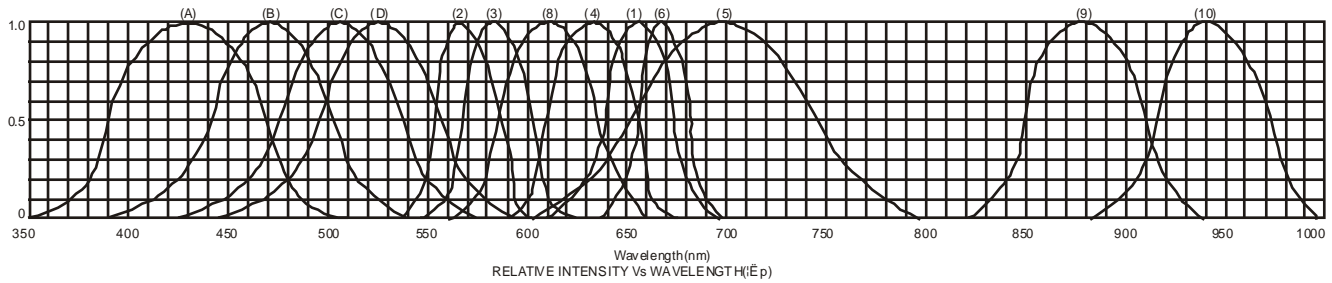
**Notes:**

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

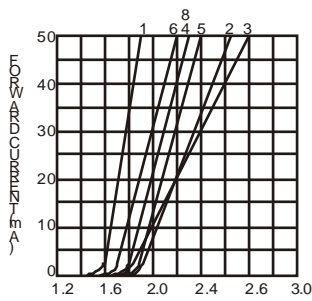
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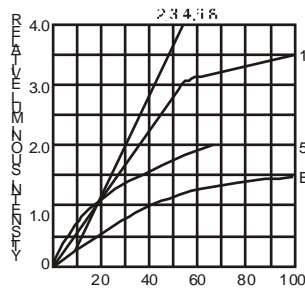
## Typical electrical-optical characteristics curves:



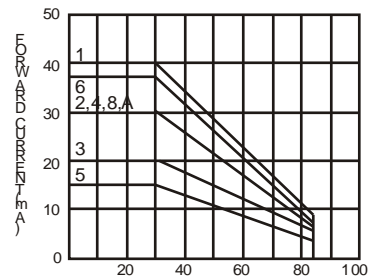
- (1) - GaAsP/GaAs 655nm/Red
- (2) - GaP 570nm/Yellow Green
- (3) - GaAsP/GaP 585nm/Yellow
- (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red
- (5) - GaP 700nm/Bright Red
- (6) - GaAlAs/GaAs 660nm/Super Red
- (8) - GaAsP/GaP 610nm/Super Red
- (9) - GaAlAs 880nm
- (10) - GaAs/GaAs & GaAlAs/GaAs 940nm
- (A) -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



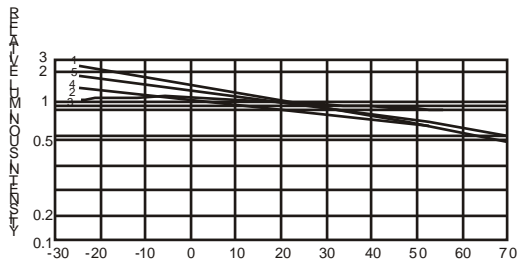
FORWARD CURRENT (mA)  
FORWARD VOLTAGE (Vf)  
FORWARD CURRENT VS.  
FORWARD VOLTAGE



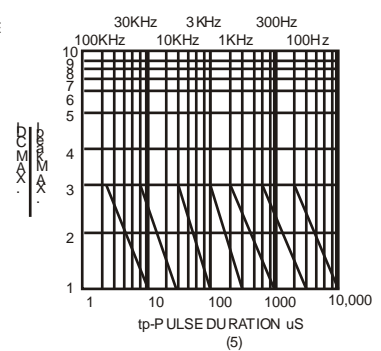
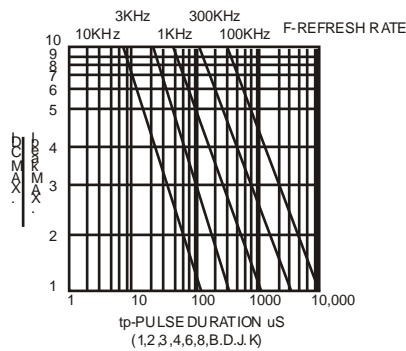
FORWARD CURRENT (mA)  
RELATIVE LUMINOUS  
INTENSITY VS. FORWARD  
CURRENT



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



AMBIENT TEMPERATURE Ta(°C)



NOTE: 25 free air temperature unless otherwise specified

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**Packing and weighting**

