

# PRODUCT SPECIFICATION



**Part No. : SRC-13Y42GB-590GK**  
**Ceramic LED**

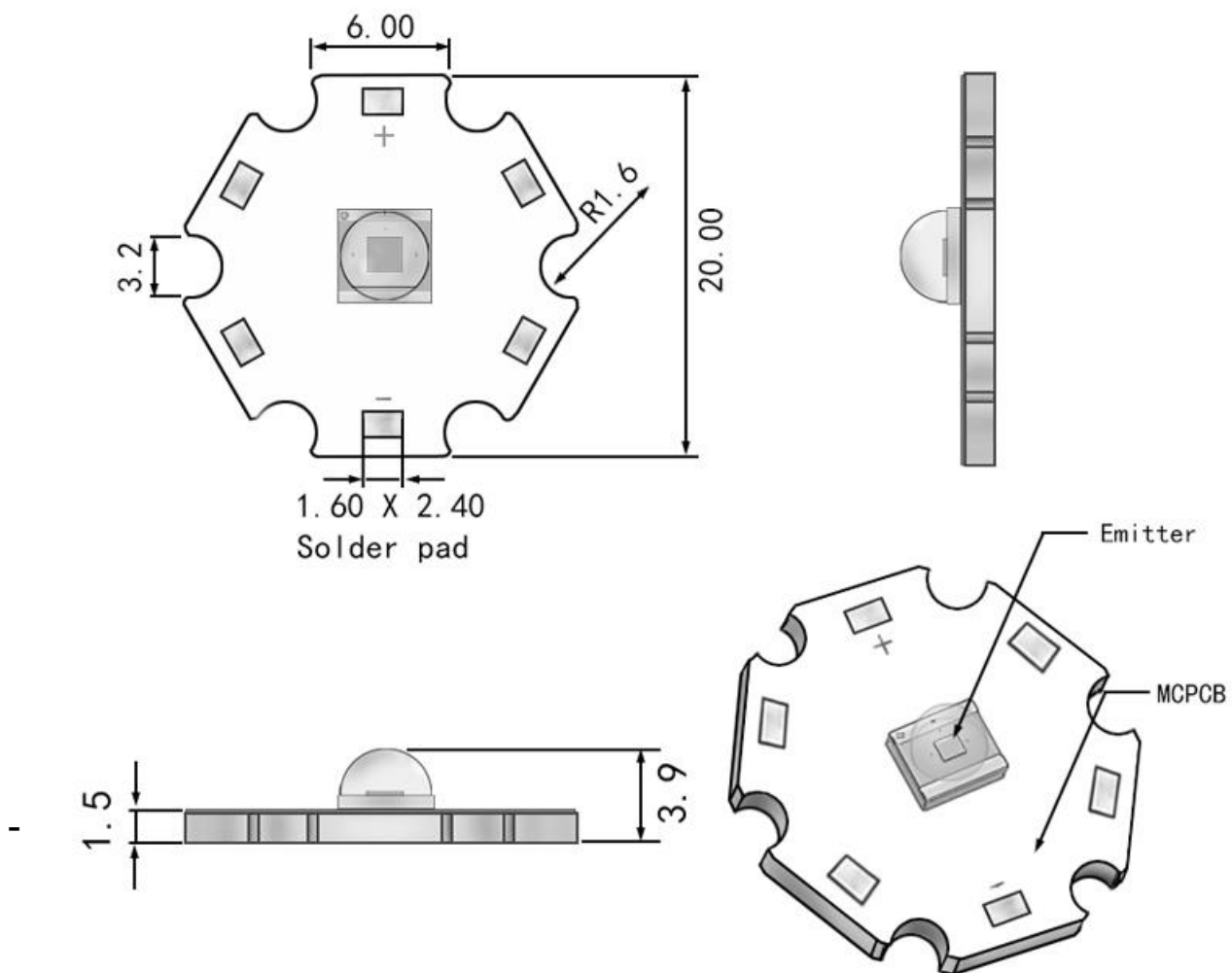
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## 1. Product Features

- High-Luminosity Amber LED
- Clear Silicone Dome Lens
- Viewing Angle: 120 °
- Die Material: AlGaInP
- Low Voltage DC Operated
- Board Material: Aluminum

## 2. Mechanical Dimensions



### Notes:

1. Dimensions in millimeters (mm)
2. Dimension Tolerance:  $\pm 0.1$  mm

### 3. Absolute Maximum Rating @ Ta = 25 °C

| Parameter                                                    | Symbol | Maximum Rating | Unit |
|--------------------------------------------------------------|--------|----------------|------|
| Continuous Forward Current                                   | IF     | 700            | mA   |
| Peak Forward Current<br>(1/10 Duty Cycle, 0.1ms Pulse Width) | IFp    | 1000           | mA   |
| Reverse Voltage                                              | VR     | 5              | V    |
| Power Dissipation                                            | PD     | 3000           | mW   |
| Electrostatic Discharge                                      | ESD    | 1000           | V    |
| Operating Temperature Range                                  | TOPR   | -25°C to +60°C |      |
| Storage Temperature Range                                    | TSTG   | -35°C to +80°C |      |
| Lead Soldering Temperature                                   | TSOL   | 260°C          |      |

### 4. Optical Character @ Ta = 25 °C

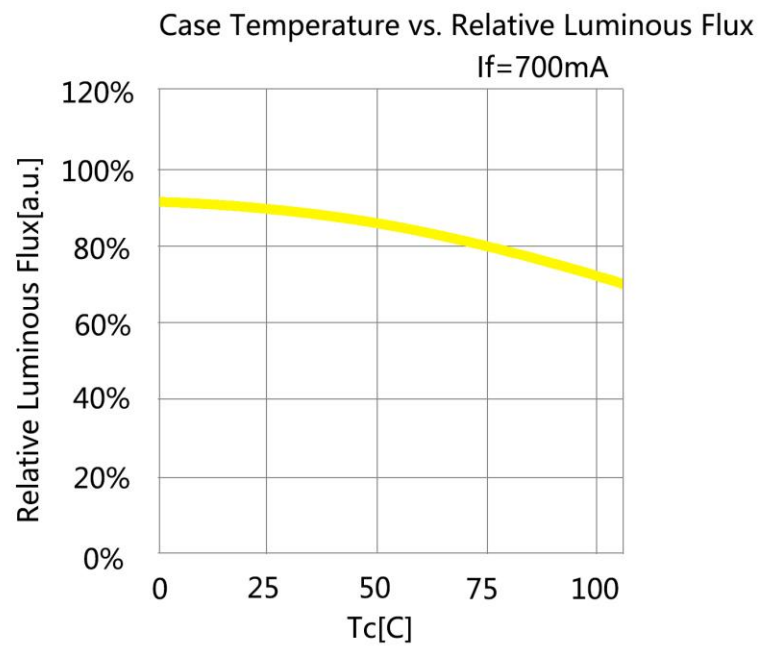
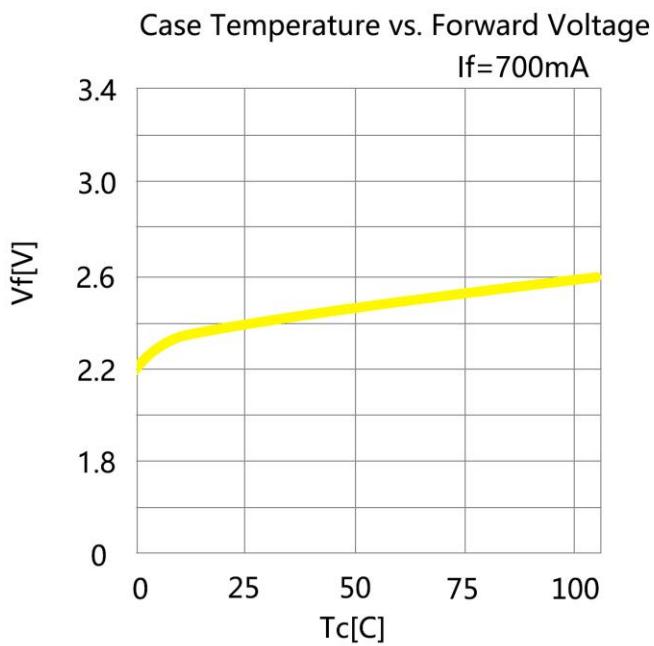
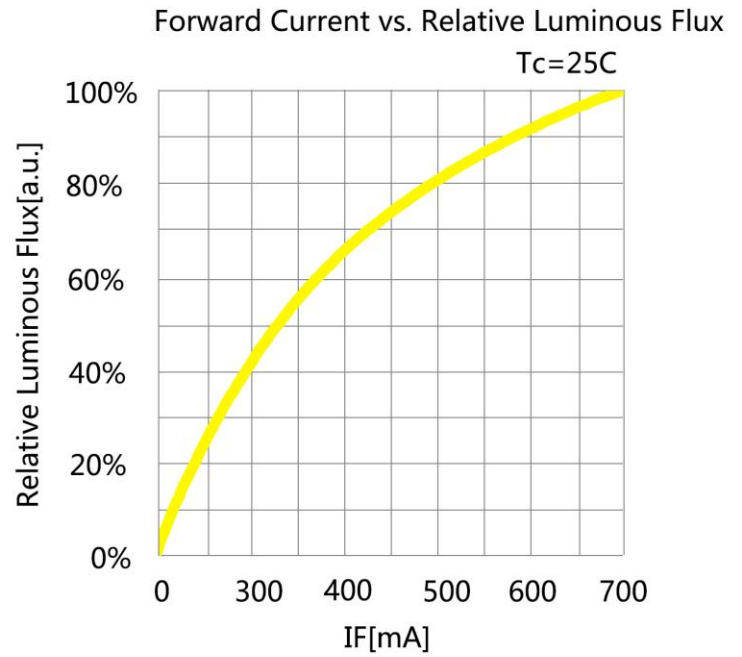
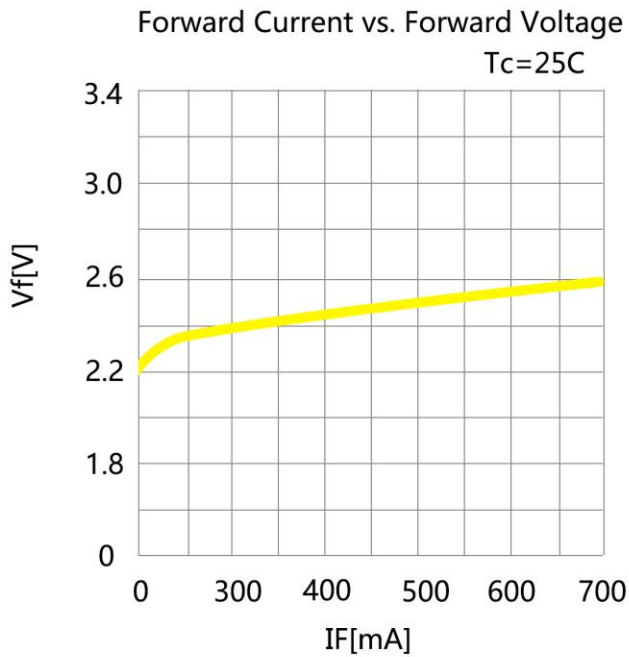
| Parameter                 | Symbol  | Color | Min. | Typ.  | Max. | Unit | Test Condition |
|---------------------------|---------|-------|------|-------|------|------|----------------|
| Forward Voltage           | VF      | Y     | 2.2  | 2.4   | 2.6  | V    | IF=700mA       |
| Luminous Flux             | Φ       | Y     | 90   | 100   | 110  | lm   | IF=700mA       |
| Wavelength                | Wld     | Y     | 590  | 592.5 | 595  | nm   | IF=700mA       |
| Reverse Current           | IR      |       | 0    |       | 10   | μA   | VR=5V          |
| Viewing Angle             | 2θ1/2   |       |      | 120   |      | deg  | IF=700mA       |
| Recommend Forward Current | IF(rec) | Y     |      |       | 700  | mA   |                |

#### Notes:

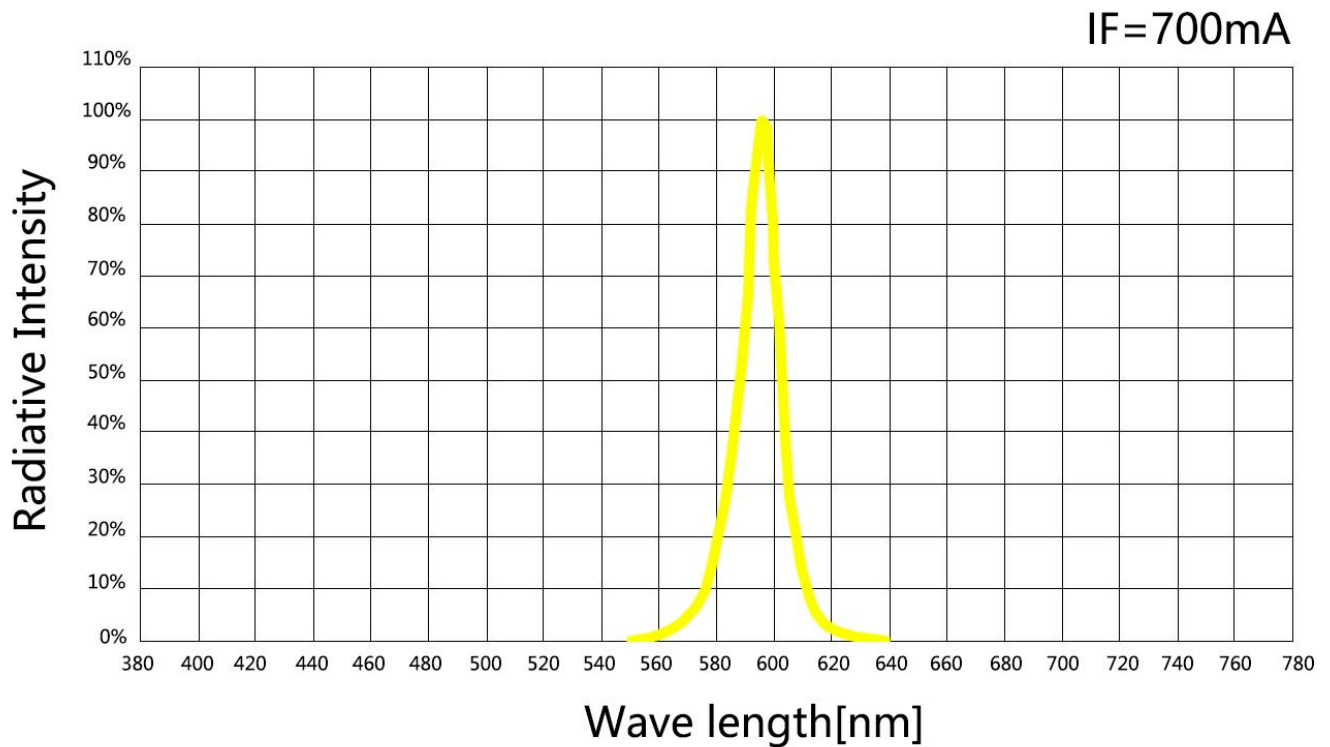
Forward Voltage Tolerance:  $\pm 0.1$  V

## 5. Optical Character Curves

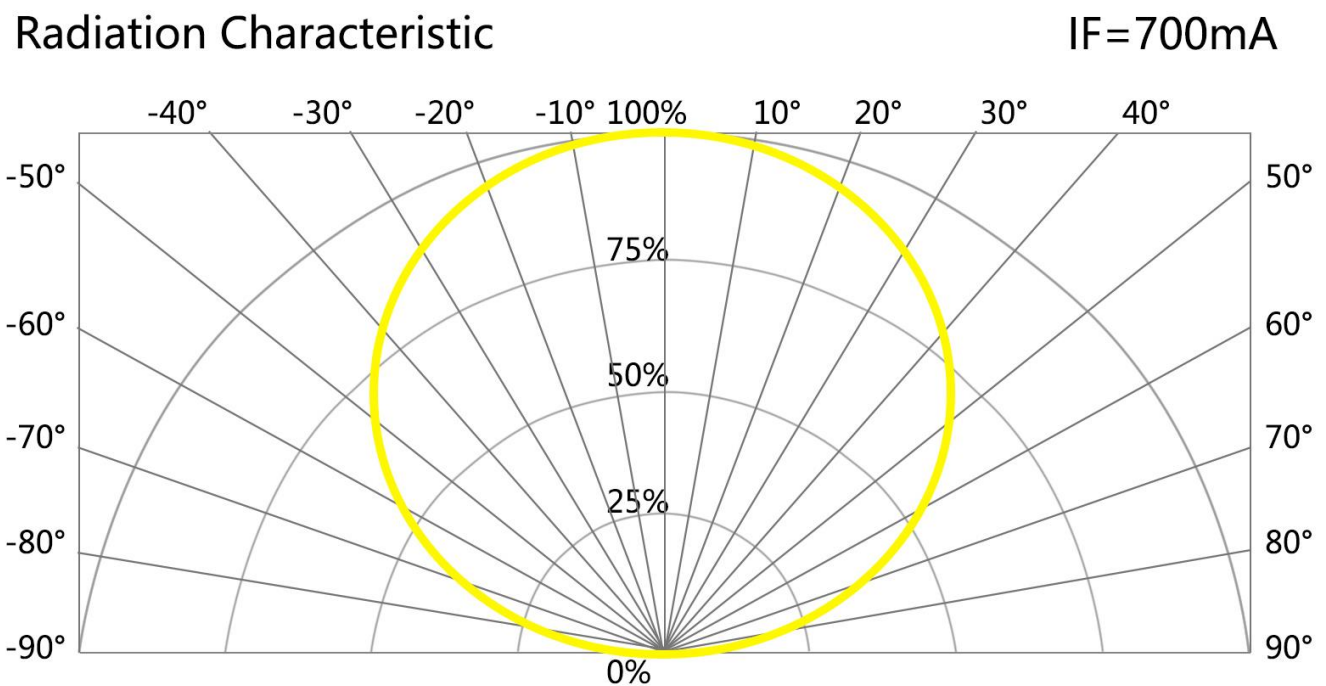
(Unless otherwise specified, all values are measured at 25 °C ambient temperature)



## 6. Spectrum Curves



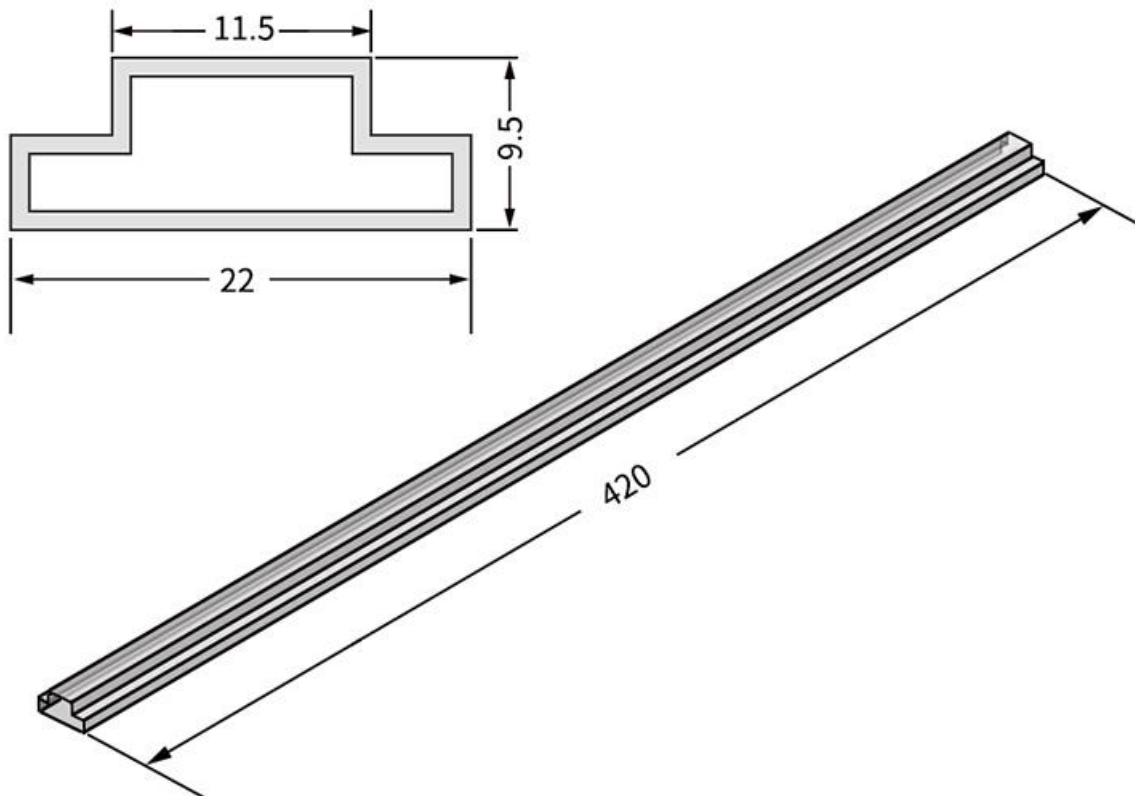
## 7. Viewing Angle Curves



## 8. Storage & Packaging

### Storage & Handling Instructions for Unpacked LED Beads:

1. Immediate Use: Unpacked LED beads are recommended to be soldered within one day.
2. Short-Term Storage (Within 1 week): If not used immediately, re-vacuum seal and store in an environment with a temperature of 20-35 °C and 30-60% relative humidity. If re-vacuum sealing is not possible, store the LED beads in a moisture-proof box, maintaining  $25 \pm 3$  °C and 50-60% humidity.



### Notes:

1. Quantity: 20pcs/tube
2. Dimensions in millimeters (mm)
3. Dimension Tolerance:  $\pm 0.2$  mm