**Model No.: YSL-R547P4C-E3**

**Applications:**
- Decorations
- Inceticidal Lights
- Bill Inspector
- Medical Appliance

**Absolute Maximum Ratings: (Ta=25 ℃)**

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>Symbol</th>
<th>Absolute Maximum Rating</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward Current</td>
<td>$I_F$</td>
<td>20</td>
<td>mA</td>
</tr>
<tr>
<td>Peak Forward Current</td>
<td>$I_{FP}$</td>
<td>30</td>
<td>mA</td>
</tr>
<tr>
<td>Suggestion Using Current</td>
<td>$I_{Su}$</td>
<td>16-18</td>
<td>mA</td>
</tr>
<tr>
<td>Reverse Voltage (V_r=5V)</td>
<td>$I_R$</td>
<td>10</td>
<td>uA</td>
</tr>
<tr>
<td>Power Dissipation</td>
<td>$P_D$</td>
<td>105</td>
<td>mW</td>
</tr>
<tr>
<td>Operation Temperature</td>
<td>$T_{OPR}$</td>
<td>.40 ~ 85</td>
<td>℃</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>$T_{STG}$</td>
<td>.40 ~ 100</td>
<td>℃</td>
</tr>
<tr>
<td>Lead Soldering Temperature</td>
<td>$T_{SOL}$</td>
<td>Max. 260℃ for 3 Sec. Max. (3mm from the base of the epoxy bulb)</td>
<td></td>
</tr>
</tbody>
</table>

**Absolute Maximum Ratings: (Ta=25 ℃)**

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>Symbol</th>
<th>Test condition</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward Voltage</td>
<td>$V_F$</td>
<td>$I_r=20mA$</td>
<td>3.0</td>
<td>----</td>
<td>3.6</td>
<td>V</td>
</tr>
<tr>
<td>Wavelength (nm) or TC(k)</td>
<td>$\Delta \lambda$</td>
<td>$I_r=20mA$</td>
<td>395</td>
<td>----</td>
<td>400</td>
<td>nm</td>
</tr>
<tr>
<td>*Luminous intensity</td>
<td>$I_v$</td>
<td>$I_r=20mA$</td>
<td>100</td>
<td>----</td>
<td>180</td>
<td>mcd</td>
</tr>
<tr>
<td>50% Viewing Angle</td>
<td>$2 \theta 1/2$</td>
<td>$I_r=20mA$</td>
<td>----</td>
<td>45</td>
<td>----</td>
<td>deg</td>
</tr>
</tbody>
</table>
### Light Degradation in mcd: \((I_F=20mA)\)

<table>
<thead>
<tr>
<th>Colors</th>
<th>Hours</th>
<th>216 Hrs</th>
<th>360 Hrs</th>
<th>792 Hrs</th>
<th>1104 Hrs</th>
<th>1992 Hrs</th>
<th>2328 Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td></td>
<td>1.52%</td>
<td>-1.22%</td>
<td>-3.10%</td>
<td>-4.68%</td>
<td>-5.72%</td>
<td>-8.27%</td>
</tr>
<tr>
<td>Yellow</td>
<td></td>
<td>-1.71%</td>
<td>-2.97%</td>
<td>-5.93%</td>
<td>-8.13%</td>
<td>-8.90%</td>
<td>-11.10%</td>
</tr>
<tr>
<td>Blue</td>
<td></td>
<td>3.13%</td>
<td>-0.33%</td>
<td>-3.84%</td>
<td>-8.23%</td>
<td>-21.32%</td>
<td>-24.92%</td>
</tr>
<tr>
<td>Green</td>
<td></td>
<td>-8.02%</td>
<td>-9.78%</td>
<td>-14.25%</td>
<td>-17.37%</td>
<td>-20.79%</td>
<td>-22.30%</td>
</tr>
<tr>
<td>Cool White</td>
<td>48 Hrs</td>
<td>10.56%</td>
<td>6.72%</td>
<td>-2.29%</td>
<td>-7.68%</td>
<td>-17.32%</td>
<td>-22.48%</td>
</tr>
<tr>
<td>Pure White</td>
<td>168 Hrs</td>
<td>13.66%</td>
<td>8.22%</td>
<td>-1.45%</td>
<td>-8.50%</td>
<td>-19.52%</td>
<td>-25.26%</td>
</tr>
<tr>
<td>Warm White</td>
<td>336 Hrs</td>
<td>3.02%</td>
<td>-4.38%</td>
<td>-15.18%</td>
<td>-21.15%</td>
<td>-27.19%</td>
<td>-29.97%</td>
</tr>
<tr>
<td></td>
<td>360 Hrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>720 Hrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1008 Hrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Mechanical Dimensions:

- All dimensions are in mm, tolerance is ±0.2mm unless otherwise noted.
- An epoxy meniscus may extend about 1.5mm down the leads.
- Burr around bottom of epoxy may be 0.5mm Maximum

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**Unit: mm**
Packing Information:

1. Anti-static bag
   - 200 - 500pcs per bag
   - With 1 little bag of drier inside
   - Unit: mm

Middle Box
   - 30 - 40 bags per box
   - 15-20K pcs per box
   - 0.45Kg/K

Anti-static Tube Packaging Information:

- 60 pcs per tube.
- 25 Tubes per layer.
- 35 Layers per carton
- 875 Tubes per carton.
- 52.5K pcs maximum in one carton
- 20-23Kg per carton
1. **Company Code**, short for Young Sun
2. **Code for LED series.**
3. **Code for LED Type.**
   - R: Round
   - B: Bullet
   - C: Columnar
   - O: Oval
   - H: Helmet
   - Q: Square
   - V: Concave
   - P: Pagoda
   - S: Strawhat
   - D: Special
4. **Code for LED Lens Type.**
5. **Code for Lead Frame of LED**
6. **Code for Lead Frame Code of LED**
7. **Code for Wavelength Color**
8. **Code for Lens color**
   - C: Water Clear
   - W: White Diffused
   - D: Color Diffused
   - T: Color Transparent
9. **Code for Viewing Angle**
   - A: 1-10
   - B: 10-20
   - C: 20-30
   - D: 30-40
   - E: 40-60
   - F: 60-90
   - G: 90-120
   - H: >120
10. **Luminous Intensity Grade:**
    - 1: 1-50mcd
    - 2: 50-100mcd
    - 3: 100-200mcd
    - 4: 200-300mcd
    - 5: 300-500mcd
    - 6: 500-800mcd
    - 7: 800-1000mcd
    - 8: 1000-1500mcd
    - 9: 1500-2000mcd
    - 10: 2000-3000mcd
    - 11: 3000-5000mcd
    - 12: 5000-8000mcd
    - 13: 8000-10000mcd
    - 14: 10000-13000mcd
    - 15: 13000-15000mcd
    - 16: 15000-20000mcd
    - 17: >20000mcd

**Warrantees:**

- In order to make the LEDs lifespan longer, please set the input Current below 20mA.
- Electrical & Optical Characteristics consistency of same items all shipments.

**Notes:**

- Please use LEDs based on our datasheet.
- LED is sensitive to statics, be sure your equipments are anti-static when you use our LEDs.
- Pay more attention to your heat dissipation system when you use it, the better heat dissipation, the longer LED lifespan.