3.5x2.8mm SURFACE MOUNT LED LAMP

Part Number: KA-3528YCT  Yellow

Features
- Single color.
- Suitable for all SMT assembly and solder process.
- Available on tape and reel.
- Ideal for backlighting.
- Package: 1500pcs/reel.
- RoHS compliant.

Description
The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

Package Dimensions

Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(0.01") unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.
Selection Guide

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Dice</th>
<th>Lens Type</th>
<th>Iv (mcd) [2] @ 20mA</th>
<th>Viewing Angle [1]</th>
</tr>
</thead>
<tbody>
<tr>
<td>KA-3528YCT</td>
<td>Yellow (GaAsP/GaP)</td>
<td>WATER CLEAR</td>
<td>4</td>
<td>20</td>
</tr>
</tbody>
</table>

Notes:
1. $\theta_{1/2}$ is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
2. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Device</th>
<th>Typ.</th>
<th>Max.</th>
<th>Units</th>
<th>Test Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\lambda_{\text{peak}}$</td>
<td>Peak Wavelength</td>
<td>Yellow</td>
<td>590</td>
<td>nm</td>
<td>I$_F$=20mA</td>
<td></td>
</tr>
<tr>
<td>$\lambda_{D}$ [1]</td>
<td>Dominant Wavelength</td>
<td>Yellow</td>
<td>588</td>
<td>nm</td>
<td>I$_F$=20mA</td>
<td></td>
</tr>
<tr>
<td>$\Delta\lambda_{1/2}$</td>
<td>Spectral Line Half-width</td>
<td>Yellow</td>
<td>35</td>
<td>nm</td>
<td>I$_F$=20mA</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Capacitance</td>
<td>Yellow</td>
<td>20</td>
<td>pF</td>
<td>V$_F$=0V;f=1MHz</td>
<td></td>
</tr>
<tr>
<td>$V_F$ [2]</td>
<td>Forward Voltage</td>
<td>Yellow</td>
<td>2.1</td>
<td>2.5</td>
<td>V</td>
<td>I$_F$=20mA</td>
</tr>
<tr>
<td>$I_R$</td>
<td>Reverse Voltage</td>
<td>Yellow</td>
<td>10</td>
<td>uA</td>
<td>V$_F$=5V</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power dissipation</td>
<td>mW</td>
</tr>
<tr>
<td>DC Forward Current</td>
<td>mA</td>
</tr>
<tr>
<td>Peak Forward Current [1]</td>
<td>mA</td>
</tr>
<tr>
<td>Reverse Voltage</td>
<td>V</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40°C To +85°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40°C To +85°C</td>
</tr>
</tbody>
</table>

Note:
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
KA-3528YCT

Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile for Lead-free SMT Process.

- The recommended reflow temperature is 245°C (+/-3°C). The maximum soldering temperature should be limited to 260°C.
- Don't expose the product to high temperature longer than 30s.
- Number of reflow process shall be 2 times or less.

Recommended Soldering Pattern
(Units: mm; Tolerance: ± 0.1)

Reel Dimension

Tape Dimensions
(Units: mm)
PACKING & LABEL SPECIFICATIONS

KA-3528YCT

USER DIRECTION OF FEED

LABEL

1,500PCS / REEL

LABEL

1 REEL / BAG

OUTSIDE LABEL

Kingbright

30K / 56# BOX

OUTSIDE LABEL

Kingbright

15K / 55# BOX

Kingbright

P/N: KA-3528xxx

QTY: 1,500 pcs

Q.C.

S/N: XXXX

CODE: XXX

LOT NO:

RoHS Compliant