TYPICAL APPLICATIONS:
- Auto Flash For Cameras
- Photomusical I.C.
- photoelectric Control
- Industrial control
- Optical Control Lamp
- Photoswitch
- Room Light Control
- Electronic Toys

DESCRIPTION:
CdS Photoconductive Cells is a resistor which made of semi-conductor material, and the conductance change with luminance variation. The CdS Photoconductive cells can be manufactured with different figures and illuminated area based on this characteristic. CdS Photoconductive cells is widely used in many industries, such as toys, lamps, camera, etc.

ELECTRO-OPTICAL CHARACTERICITS:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Characteristics</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Resistance(at 10lux)</td>
<td>18-50</td>
<td>KΩ</td>
</tr>
<tr>
<td>Dark Resistance(at 0 lux/Min)</td>
<td>2.0</td>
<td>MΩ</td>
</tr>
<tr>
<td>Gamma Value(at 100-10lux)</td>
<td>0.7</td>
<td>Υ^100/10</td>
</tr>
<tr>
<td>Power Dissipation(at 25℃)</td>
<td>50</td>
<td>MW</td>
</tr>
<tr>
<td>Max Voltage(at 25℃)</td>
<td>100</td>
<td>VDC</td>
</tr>
<tr>
<td>Spectral Response peak(at 25℃)</td>
<td>540</td>
<td>nm</td>
</tr>
<tr>
<td>Ambient Temperature Range</td>
<td>-30~+70</td>
<td>℃</td>
</tr>
<tr>
<td>Response time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase</td>
<td>30</td>
<td>ms</td>
</tr>
<tr>
<td>Decrease</td>
<td>30</td>
<td>ms</td>
</tr>
</tbody>
</table>

※ Light resistance : Measured at 10lux (standard Light source) at a color temperature of 2856K, color temperature and 2h pre-illumination at 400-600 lux prior to testing.
※ Dark resistance: measured 10 seconds after pulsed 10 lux.
※ Gamma Characteristic: between 10lux and 100lux and given by $T = \frac{\log R(100)}{\log(100)}$. 
※ Pmax: Max. power dissipation at ambient temperature of 25℃.
※ Vmax: Max. voltage in darkness that may be applied to the cell continuously.
### Component Information:

<table>
<thead>
<tr>
<th>Component Name</th>
<th>ROHS</th>
<th>Notice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resin Coating</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>CdS</td>
<td>NO</td>
<td>Composition than 100 PPM</td>
</tr>
<tr>
<td>Electrode</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Ceramic Substrate</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Lead Terminal</td>
<td>YES</td>
<td></td>
</tr>
</tbody>
</table>

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### SCHEMATIC DRAWING:

- **CdS Photoconductive cells**
- **3mm CdS photosensitive resistor**
- **Product Model:** KLS6-3537

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### OUTLINE:

(Unit: mm)

- Resin Coating: 3.3±0.2
- CdS: 3.0±0.1
- Electrode: 0.4
- Ceramic Substrate: 2.5
- Lead Terminal: 2.0±0.1

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All specifications & dimensions are subject to change. Please call your nearest KLS sales representative for update information.
CdS Photoconductive cells

3mm CdS photosensitive resistor

Product Model: KLS6-3537

- SPECTRAL RESPONSE:

- ILLUMINANCE Vs. PHOTO RESISTANCE

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TEST CONDITIONS

| Light Resistance | Dark Resistance | Light resistance: A light source (2856k) at 10Lux  
Dark resistance: data @ 10sec, after cutting off 10Lux light  
r = Lg (R_{10}/R_{100}) | Workable |
|------------------|----------------|---------------------------------------------------|----------|
| Tempture Change   | Testing        | High temperatu::: 70°C ±5°C  
Time: 30M  
Incident light: dark placing  
Testing time: 24hr  
Low temperatu::: -30°C ±5°C  
Time: 30min  
Incident light: above dark placing as a recycle, testing time: 24hr | Workable |
| Constant Tempture | Testing        | Temperature: 40°C ±5°C  
Moisture: 90-95%  
Incident light: dark placing  
Testing time: 48hr | Workable |
| Lead High Tempture | Testing       | At the root of lead 90 degree curving, 5mm above the root, loading 100g charge  
Welding temperatu::: 260°C  
Heating time: Max. 3.5, distance between welding and base: 5mm | Workable |

PACKING AND PRECAUTION:

CdS Photoconductive cells
3mm CdS photosensitive resistor
Product Model: KLS6-3537

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CdS Photoconductive cells

3mm CdS photosensitive resistor

Product Model: KLS6-3537

- This product is packed with the environmental protection material, 200pcs per small package, 2000pcs per big package.
- Avoid high temperature and humidity for storing.
- Soldering should be completed in the shortest possible time.
- It is recommended that the soldering should keep 4mm away from ceramic substrate.

<table>
<thead>
<tr>
<th>IMAGE NO.</th>
<th>NAME</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image-01</td>
<td>Bag</td>
<td>200Pcs /bag</td>
</tr>
<tr>
<td>Image-02</td>
<td>Box</td>
<td>10Bag/Box = 2000Pcs</td>
</tr>
<tr>
<td>Image-03</td>
<td>Carton</td>
<td>20000PCS = 10 Box = 100 Bag = 1 Carton</td>
</tr>
</tbody>
</table>

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