CdS Photoconductive cells

3mm CdS photosensitive resist

FEATURE:

- Epoxy encapsulated
- Quick Response
- Small Size
- High Sensitivity
- Reliable Performance
- Good Characteristic of Spectrum

TYPICAL APPLICATIONS:

- Auto Flash For Cameras
- photoelectric Control
- Optical Control Lamp
- Room Light Control
- Photomusical I.C.
- Industrial control
- Photoswitch
- 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 CHARACTERICTICS :

Parameter		Characterictics	Unit
Light Resistance(at 10lux)		18-50	KΩ
Dark Resistance(at 0 lux/Min)		2.0	MΩ
Gamma Value(at 100-10lux)		0.7	γ_{10}^{100}
Power Dissipation(at 25℃)		50	MW
Max Voltage(at 25℃)		100	VDC
Spectral Response peak(at 25℃)		540	nm
Ambient Temperature Range		-30～+70	℃
Response time	Increase	30	ms
	Decrease	30	ms

※ Light resistance : Measured at 10lux(standard Light source)at a color temperature of 2856K. color temperature)and 2h pre-illumination at 400-600 lux priorto testing .

※ Dark resistance: measured 10 senconds after pulsed 10 lux.

※ Gamma Characteristic:between 10lux and 100lux and given by $T = \frac{\text{Log}(R10/R100)}{\text{Log}(100/10)} = \text{Log}(R10/R100)$

※ Pmax: Max.power dissipation at ambient temperature of 25℃.

※ Vmax:Max.voltage in darkness that may be applied to the cell continuously .

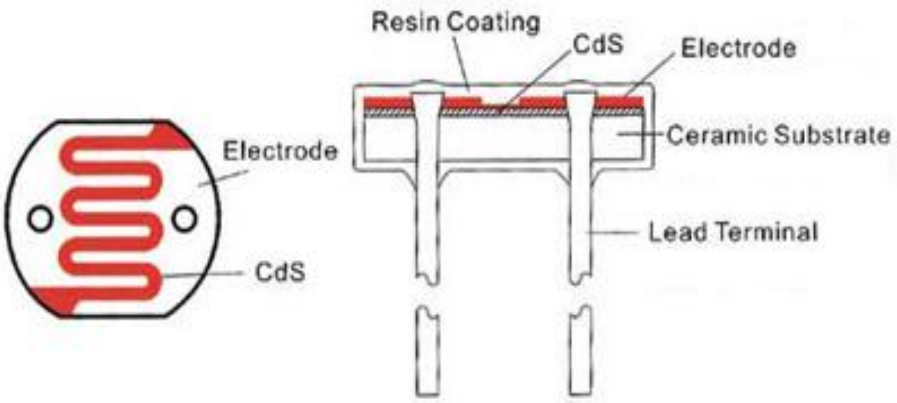
CdS Photoconductive cells

3mm CdS photosensitive resist

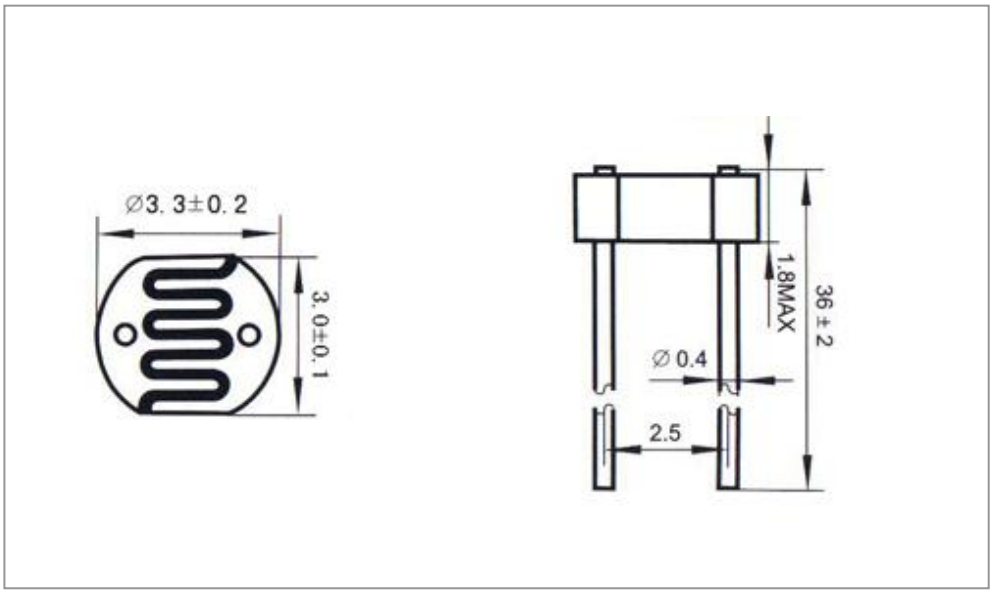
Component Information :

Component Name	ROSH	Notice
Resin Coating	YES	--
CdS	NO	Composition than 100 PPM
Electrode	YES	--
Ceramic Substrate	YES	--
Lead Terminal	YES	--

SCHEMATIC DRAWING :



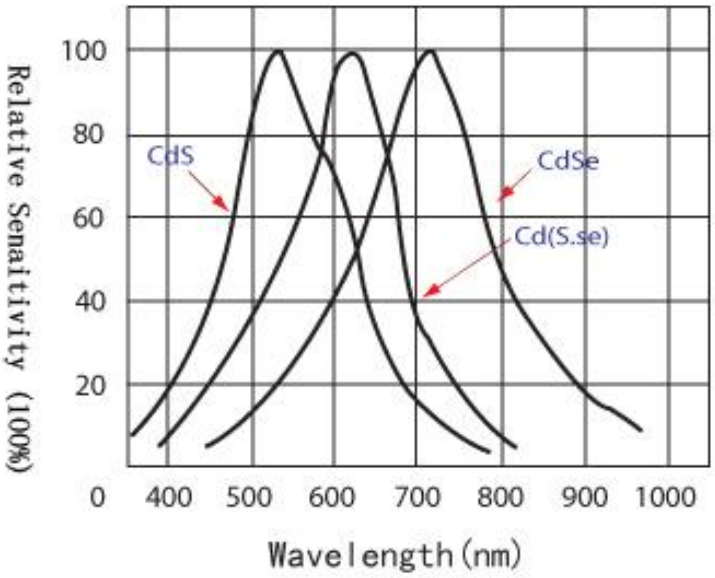
OUTLINE:(Unit: mm)



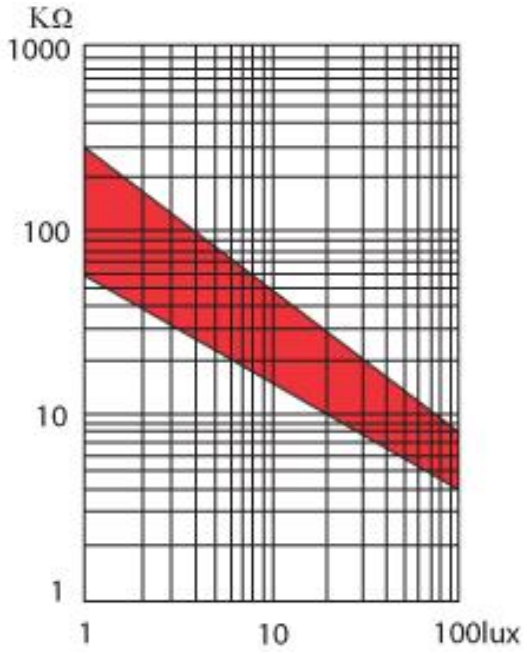
CdS Photoconductive cells

3mm CdS photosensitive resist

- **SPECTRAL RESPONSE** :



- **ILLUNINANCE Vs. PHOTO RESISTANCE**



CdS Photoconductive cells

3mm CdS photosensitive resist

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（R10/R100）**	**Workable**
Tempture Change Testing	**Hight tempture:：70℃±5℃ Time:30M Incideng light:dark placing Testing time:24hr Low tempture::-30℃±5℃ Time:30min Incident light:above dark placing as a recycle,testing time:24hr**	**Workable**
Constant Tempture Testing	**Tempture:40±5℃ 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 tempture:：260℃ Heating time:Max.35,distance between welding and base:5mm**	**Workable**