CdS光敏电阻说明书

(Instructions for CdS Photoconductive Cells)

乐清市万众电子厂是专业生产CdS光敏电阻的企业，本厂采用先进CdS工艺技术和生产设备，选用高品质原材料生产。产品经过严格的老化筛选，各项指标均达到国际同类产品先进水平，本厂产品质优量大，品种规格齐全,阻值稳定，反应灵敏，广泛应用于光自动控制领域，万众电子的宗旨是“让客户使用放心的产品”。万众电子殷切希望与广大客户合作，共创辉煌的明天。

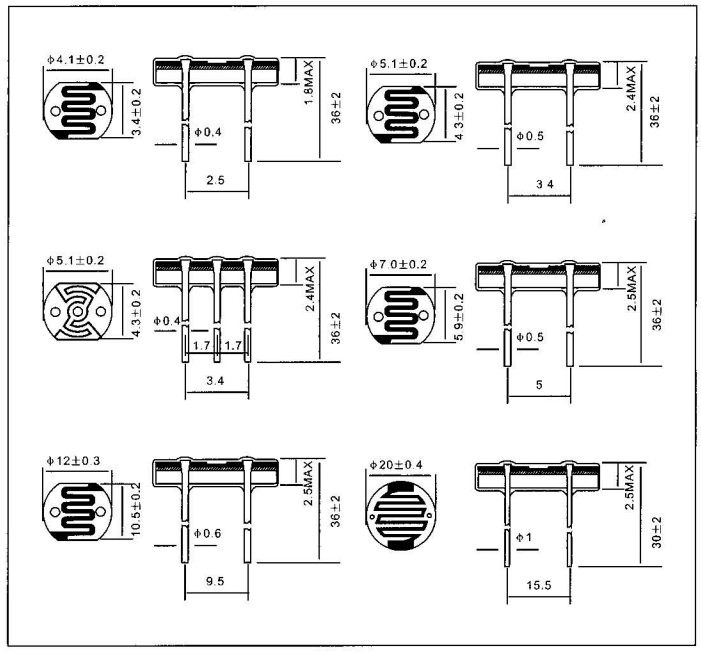
Yueqing Wanzhong Electronic Factory, an enterprise specialzing in manufacturing cds light dependent resistors, employs the advanced cds technology and production facilities as well as the high quality materails. All of the products have been subjected to the strict aging screening so each of the indexes is up to the international advanced level. Our factory is also capable of manufacturing high quality products in enormous quantities. Our products are complete in variety and specifications, steady in resistance and sensitive in response so they are widely applied to the photocontrol field. With the aim of " Offer the customers the assured products " Wanzhong Electron would like to establish business relationship with wide customers to create a brilliant future together.

特点：(Features:)

- 环氧树脂封装
- Epoxy Encapsulated
- 体积小
- Small Size
- 反应速度快
- Quick Response
- 可靠性好
- Reliable Performance
- 灵敏度高
- High Sensitivity
- 光谱特性好
- Good Characteristic of Spectrum

应用：(Applications:)

- 照相机自动测光
- Auto Flash for Cameras
- 室内光线控制
- Room Light Control
- 工业控制
- Industrial Control
- 光控灯
- Photolamp
- 光电控制
- Photoelectric Control
- 报警器
- Annunciator
- 光控开关
- Photoswitch
- 电子玩具
- Electronic Toys



光谱响应特性(图1)

Spectral Response(Fig 1)

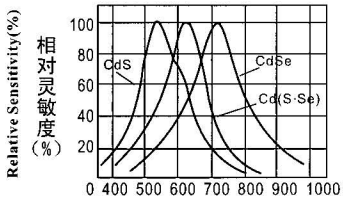


图1. 波长(nm) **Fig 1. Wavelength(nm)**

照度-电阻特性(图2-图6) **Illuminance Vs.Photo Resistance(Fig 2-6)**

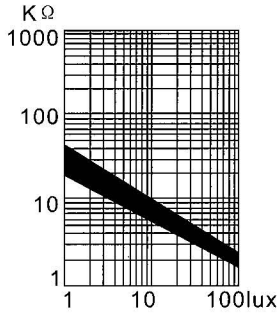


图2 **Fig 2**

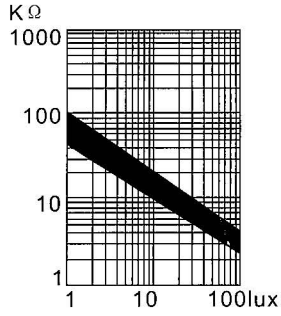


图3 **Fig 3**

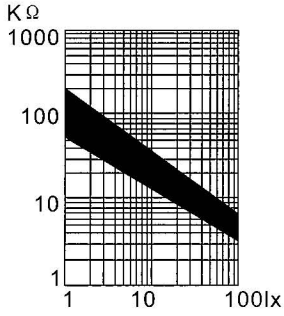


图4 **Fig 4**

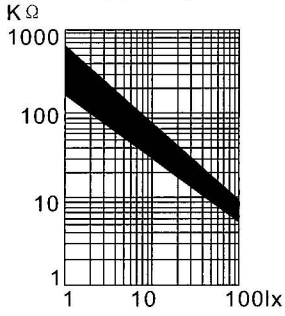


图5 **Fig 5**

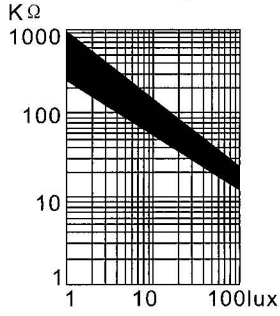


图6 **Fig 6**

测试条件：(Measuring Conditions:)

1、亮电阻，
用400~600Lux光照射2小时后，在标准A光源(色温2854K)下用10Lux和100Lux光测量。
2、暗电阻，
关闭10Lux光照后第10秒的电阻值。
3、γ 值，
表示电阻的变化与入射光线变化之间的关系，可由下式计算:

$$\gamma = \frac{\lg(R10/R100)}{\lg(100/10)} = \lg(R10/R100)$$

R10、R100分别为10Lux、100Lux照度下的电阻值。γ 的公差为±0.1。
4、最大功率损耗，
环境温度为25℃时的最大功率。
5、最大外加电压，
在黑暗中可连续施加给元件的最大电压。

1、Light resistance:
Measured at 10 Lux with standard light A (2854K color temperature) and 2hr illumination at 400-600 lux prior testing.
2、Dark Resistance:
Measured 10 seconds after closed 10 lux.
3、Gamma Characteristic:
The relation between the rate of change of resistance and the variation of incident ray may be calculated through the formula noted below:

$$\gamma = \frac{\lg(R10/R100)}{\lg(100/10)} = \lg(R10/R100)$$

R10、R100 Cell resistance at 10 lux and 100 lux, The error of γ is ±0.1.
4、Pmax:
Max.Power dissipation at ambient temperature of 25℃.
5、Vmax:
Max.Voltage in darkness that may be applied to the cell continuously.

规格：Specification

型号 model	最大电压 Vmax (VDC)	最大功耗 Pmax (mW)	环境温度 Ambient Temp (℃)	光谱峰值 Spectral Peak (nm)	亮电阻 Photo Resistance (KΩ) R10	R100	暗电阻 Dark Resistance (MΩ)	γ 100/10	响应时间 Response Time (ms) 上升 Rise Time	下降 Decay Time	照度电阻特性 Illuminance Vs Photo Resistance
GL5516	150	100	−30~+70	540	5~10	≤2	0.2	0.6	30	30	2
GL5528	150	100	−30~+70	540	10~20	2~4	1.0	0.7	20	30	3
√ GL5537	150	100	−30~+70	540	20~50	4~10	2.0	0.7	20	30	4
GL5539	150	100	−30~+70	540	50~90	10~15	5.0	0.8	20	30	5
GL5549	150	100	−30~+70	540	90~150	15~20	10.0	0.9	20	30	6
GL5559	150	100	−30~+70	540	150~300	20~60	20.0	0.9	20	30	6
GL5616D	150	100	−30~+70	560	5~10	≤2	1.0	0.6	30	30	2
GL5626D	150	100	−30~+70	560	10~20	2~4	2.0	0.6	20	30	3
GL5637D	150	100	−30~+70	560	20~50	4~10	5.0	0.7	20	30	4
GL5639D	150	100	−30~+70	560	50~90	10~15	10.0	0.8	20	30	5
GL5649D	150	100	−30~+70	560	90~150	15~20	20.0	0.9	20	30	6
GL5659D	150	100	−30~+70	560	150~300	20~60	20.0	0.9	20	30	6