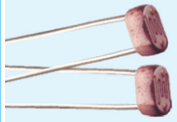
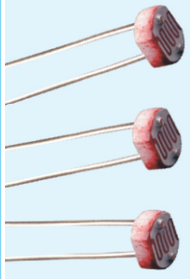
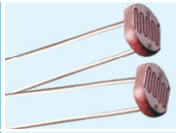
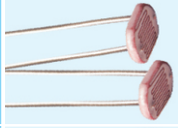
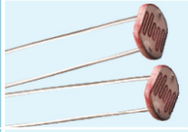
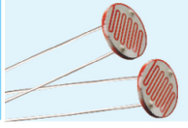
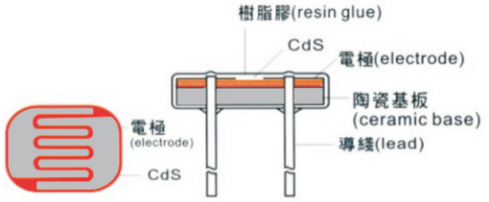
Specification 規格	Photo 圖片	Type 型號	Max.Voltage 最大電壓(VDC)	Max.Power 最大功耗(MW)	Spectrum Peak Value 光譜峰值(nm)	Light Resistance 亮電阻(KΩ)	Dark Resistance 暗電阻(MΩ)	γ_{10}^{100}	Response Time 回應時間(ms)	
									Increase 上升	Decrease 下降
Φ3 Series/系列		GL3516	100	50	540	5–10	0.6	0.5	30	30
		GL3526	100	50	540	10–20	1	0.6	30	30
		GL3537–1	100	50	540	20–30	2	0.6	30	30
		GL3537–2	100	50	540	30–50	3	0.7	30	30
		GL3547–1	100	50	540	50–100	5	0.8	30	30
Φ4 Series/ 系列		GL4516	150	50	540	5–10	0.6	0.5	30	30
		GL4526	150	50	540	10–20	1	0.6	30	30
		GL4537–1	150	50	540	20–30	2	0.6	30	30
		GL4537–2	150	50	540	30–50	3	0.7	30	30
		GL4548–1	150	50	540	50–100	5	0.8	30	30
Φ5 Series/系列		GL5516	150	90	540	5–10	0.5	0.5	30	30
		GL5528	150	100	540	10–20	1	0.6	20	30
		GL5537–1	150	100	540	20–30	2	0.6	20	30
		GL5537–2	150	100	540	30–50	3	0.7	20	30
		GL5539	150	100	540	50–100	5	0.8	20	30
		GL5549	150	100	540	100–200	10	0.9	20	30
		GL5606	150	100	560	4–7	0.5	0.5	30	30
		GL5616	150	100	560	5–10	0.8	0.6	30	30
		GL5626	150	100	560	10–20	2	0.6	20	30
		GL5637–1	150	100	560	20–30	3	0.7	20	30
		GL5637–2	150	100	560	30–50	4	0.8	20	30
		GL5639	150	100	560	50–100	8	0.9	20	30
		GL5649	150	100	560	100–200	15	0.95	20	30
Φ7 Series/系列		GL7516	150	100	540	5–10	0.5	0.6	30	30
		GL7528	150	100	540	10–20	1	0.6	30	30
		GL7537–1	150	150	560	20–30	2	0.7	30	30
		GL7537–2	150	150	560	30–50	4	0.8	30	30
		GL7539	150	150	560	50–100	8	0.8	30	30
Φ10 Series/系列		GL10516	200	200	560	5–10	1	0.6	30	30
		GL10528	200	200	560	10–20	2	0.6	30	30
		GL10537–1	200	200	560	20–30	3	0.7	30	30
		GL10537–2	200	200	560	30–50	5	0.8	30	30
		GL10539	200	200	560	50–100	8	0.8	30	30
Φ12 Series/系列		GL12516	250	200	560	5–10	1	0.6	30	30
		GL12528	250	200	560	10–20	2	0.6	30	30
		GL12537–1	250	200	560	20–30	3	0.7	30	30
		GL12537–2	250	200	560	30–50	5	0.7	30	30
		GL12539	250	200	560	50–100	8	0.8	30	30
Φ20 Series/系列		GL20516	500	500	560	5–10	1	0.6	30	30
		GL20528	500	500	560	10–20	2	0.6	30	30
		GL20537–1	500	500	560	20–30	3	0.7	30	30
		GL20537–2	500	500	560	30–50	5	0.7	30	30
		GL20539	500	500	560	50–100	8	0.8	30	30

Introduction 簡介

LDR Sensor is a resistor which made of semi–conductor material, and the conductance changes with luminance variation .
LDR Sensor can be manufactured with different figures and illuminated area based on this characteristic.LDR Sensor is widely used in many industries, such as toys,lamps,camera,etc.

光敏電阻是一種半導體材料製成的電阻，其電導率隨著光照度的變化而變化。利用這一特性製成不同形狀和受光面積的光敏電阻。光敏電阻廣泛應用於玩具、燈具、照相機等行業。

Schematic Drawing 結構示意圖



Performances and Features 性能及特點

- Coated with epoxy 環氧樹脂封裝
- Good reliability 可靠性好
- High sensitivity 靈敏度高
- Small volume 體積小
- Fast response 反應速度快
- Good spectrum characteristic 光譜特性好

Appliication 應用範圍

- Switch 光控開關
- Light control 室內光線控制
- Electronic toy 電子玩具
- Light control lamp 光控燈
- Photoelectric contro 光電控制
- Industrial control 工業控制
- Camera automatic photometry 照相機自動測光
- Annunciator 報警器

Test Conditions 測試條件

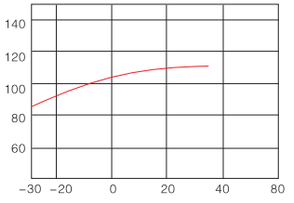
- Light resistance: Irradiated by 400–600Lux light for two hours, then test with 10Lux under standard light source A(as colour temperature 2856K).
- 亮電阻： 用400–600Lux 光照射2 小時後，在標準光源（色溫2856K）10Lux 光下的測試值；
  Dark resistance: Refer to the resistance ten seconds after the 10Lux light is shut up.
- 暗電阻： 關閉10Lux 光照後第10 秒的阻值；
- γ value: Logarithm of the ratio of the standard resistance value under 10Lux and that under 100Lux. γ值： 10Lux 照度和100Lux 照度下的標準電阻值之比的對數。

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

- R10,R100 are the resistances under 10Lux and 100Lux respectively
  R10、R100 分別爲10Lux、100Lux 照度下的電阻值（γ的公差爲±0.1）
- Max. power consumption: Maximum power at the environmental temperature 25℃.
  最大功耗： 環境溫度爲25℃時的最大功耗；
- Max. external voltage: Maximum voltage to be continuously given to component in the dark.
  最大外加電壓：在黑暗中可連續施加給元件的最大電壓；

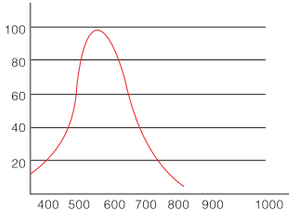
Main Characteristics Curve and Dimensions 主要特性曲線

Relative Resistance(%)
電阻變化率（%）



Temperature–Property 温度特性曲綫

Relative Response(%)
相對靈敏度（%）



Spectrum Response Characteristic 光譜回應特性曲綫

Illuminance–Resistance Characteristics Curve 光照度–電阻特性曲線

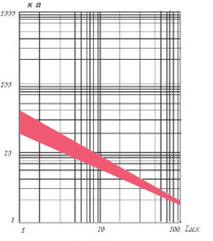


Fig. 1

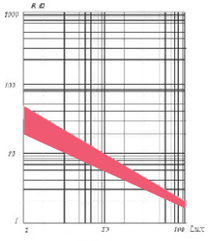


Fig. 2

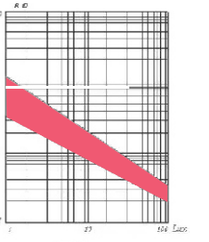


Fig.3

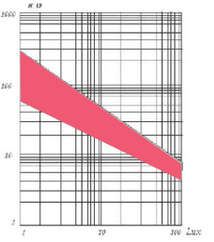


Fig.4

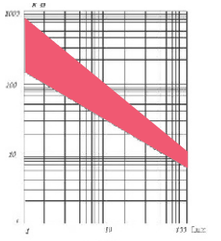


Fig. 5

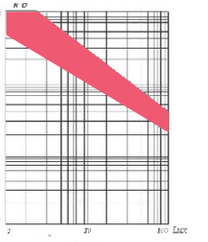


Fig.6