Waitrony

Photo Conductive Cell, CdS, LDR

Model No. : KE-10720

General Description:

By using the sintering film fabrication method, the manufacturing process of the photo conductive layer can offer high sensitivity and easy fabrication of large sensitive areas, a large mass production effect, and relatively superior production profitability

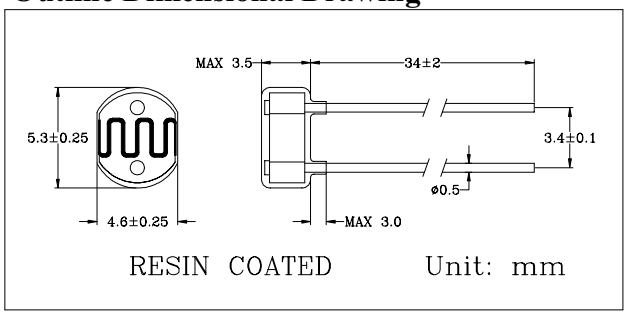
Features:

- Low Cost
- Exceptional temperature stability
- Fast response time
- Excellent chopping capability

Applications:

- Automatic dimmer
- Automatic flasher
- Optical relay

Outline Dimensional Drawing



Electrical Characteristics

(Ta=25°C)

Descriptions	Symbol	Min.	Typ.	Max.	Unit
Photo Resistance at 10 Lux (Light Source: 2856K)	R_L	10		20	kΩ
Dark Resistance After 10 sec. Removal of 10 Lux	R_D	0.5			MΩ
Gamma Value at 10 ~ 100 Lux	γ_{10}^{100}		0.7		
Maximum Power Dissipation	P_D			35	mW
Maximum Breakdown Voltage	V_{MAX}			100	V_{DC}
Peak Spectral Response	λp	550		650	nm
Rise Response Time at 1 fc	tr		35		ms
Fall Response Time at 1 fc	tf		5		ms
Ambient Temperature	T_A	-30 ~ +60			°C

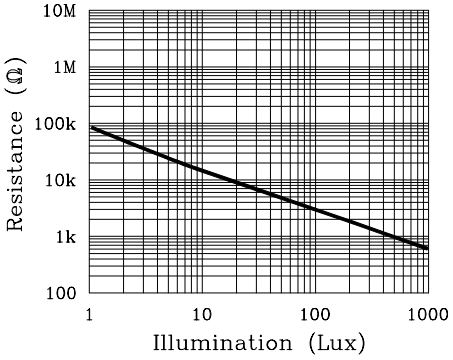
* Pre-measurement condition: Exposed in 500 Lux for more than 3 hours.

γ value: Standard gradient rate of resistance ranged by 10 ~ 100 Lux
(±0.1 unless otherwise stated)

$$\gamma_{a}^{b} = \left| \frac{\text{Log}(R_b) - \text{Log}(R_a)}{\text{Log}(E_b) - \text{Log}(E_a)} \right|$$

Where: R_x : Photo resistance as lighting x
E_x : Illumination as lighting x

Resistance vs Illumination



Relative Spectral Response