

LDR PHOTORESISTOR

4,3mm x Ø 5,1mm

C-2795



TECHNICAL CHARACTERISTICS

maximum values

Tension at 25 °C (VDC) 150
 power dissipated (mW) 90
 room temperature (°C) -25 a 75

Photoresistor or light dependent resistor consisting of a cadmium sulfide cell, highly stable, encapsulated with a transparent epoxy resin, resistent moisture. The spectral response is similar to the human eye. Their level of resistance increases when the light level decreases.

Applications: Control of contrast in televisions and monitors, automatic control of lighting in rooms, toys and electronic games, industrial controls, twilight switches, buoys and beacons automatic ignition, auto-flash, etc ...

CHARACTERISTICS a 25°C (note E)

Resistance (note A)		0 lux (note B) Min. (M?)	?(noteC) 100-10 lx (M?)	Response time to 10 lx (note D)		Spectral response (peak) (nm)
10 lux (2856K) Min. (k?)	Max(k?)			T. rise (ms)	t.drop (ms)	
50	140	20	0.9	60	25	570

Notes:

A) measured with a light source consisting of a tungsten lamp, operating at a color temperature of 2856K.

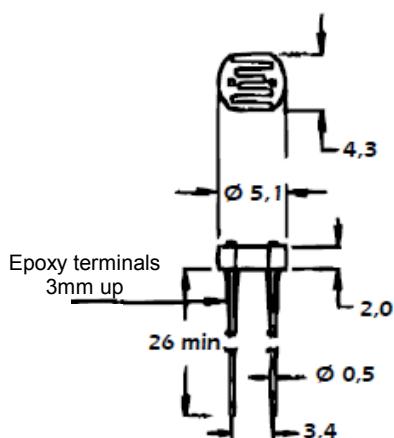
B) Measured 10 seconds after removing an incident illumination of 10 lux.

C) Sensitivity between 10 and 100 lux, given by:

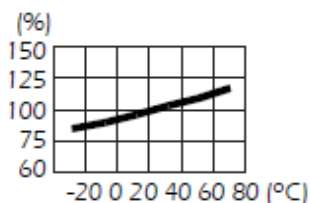
$$? = \frac{\log(E100) - \log(E10)}{\log(R100) - \log(R10)}$$

where R100, R10 are the resistances to 100 lux and 10 respectively, and E100, E10 illuminances of 100 and 10 lx, respectively.
 D) Rise time is the time required to achieve the 63% level saturation. Fall time is necessary for the cell to reach 37% from the saturation level.

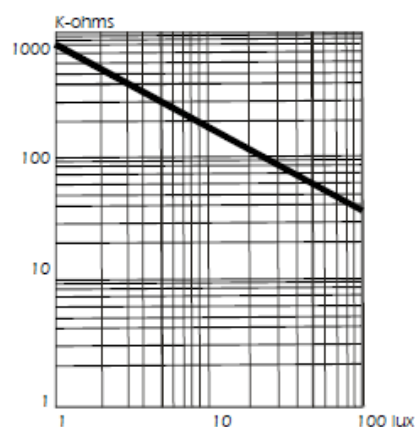
E) All characteristics are measured with the cell exposed to light LDR (100-500 lux) for 1 to 2 hours



Mesure with mm.



Variation of resistance of Cell lit in function of temperature



Cell resistance depending on the illuminance