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Product Name :

Light Dependent Resistor

Product Code :

SLE/PHY/71



Description :

Light Dependent Resistor (Product Code: SLE/PHY/71) is a cadmium sulphide (CdS) photoconductive cell used to sense light levels in school electronics circuits, physics practicals and student projects. Its resistance falls as more light reaches it, from a dark resistance of 1 M?, and its spectral response is similar to that of the human eye. It is supplied by **Jain Scientific Equipments Pvt Ltd (ScienceLab)**, Ambala, India, as a component for school physics lab equipment in India and international markets.

Specifications

Parameter	Detail
Type	Cadmium sulphide (CdS) photoconductive cell
Housing	Robust clear plastic package with clear end window;moisture-resistant coating
Top dimensions	14.35 × 7 mm (diameter × depth)
Pin length	9.53 mm
Dark resistance	1 M?
Resistance at 1 ftc (foot-candle)	5.4 k? min, 12.6 k? max
Maximum voltage	250 V peak, AC or DC
Power dissipation	250 mW max
Operating temperature	?60 °C to +75 °C
Spectral response	Similar to that of the human eye
Behaviour	Resistance reduces as the light falling on the LDR increases
Product code	SLE/PHY/71
Supplied by	Jain Scientific Equipments Pvt Ltd (ScienceLab), Ambala, India

What Is a Light Dependent Resistor Used For?

In class, the LDR is usually wired in series with a fixed resistor to form a voltage divider, so the output voltage changes with light level. That simple arrangement is the basis of automatic night lights, light meters and burglar-alarm circuits that students build in electronics lessons. It is a standard part in OPTO electronics experiment kit work alongside LEDs and phototransistors.

For a quick demonstration, connect the LDR to a multimeter on its resistance range and let students cover it, uncover it and move a lamp closer while they note the readings. Because its response is similar to the human eye, results relate well to how bright a room looks. Bend the pins gently near the body, and keep power dissipation well under the 250 mW limit.

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