

**FEATURES**

- Visible light response
- Sintered construction
- Low cost

**DESCRIPTION**

The **PDV-P9002-1** are (CdS), Photoconductive photocells designed to sense light from 400 to 700 nm. These light dependent resistors are available in a wide range of resistance values. They're packaged in a two leaded plastic-coated ceramic header.

**APPLICATIONS**

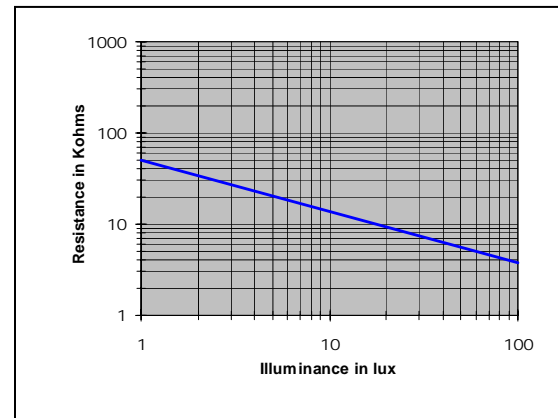
- Camera exposure
- Shutter controls
- Night light Controls

**ABSOLUTE MAXIMUM RATING** (TA)= 23°C UNLESS OTHERWISE NOTED

| SYMBOL                | PARAMETER                         | MIN | MAX  | UNITS |
|-----------------------|-----------------------------------|-----|------|-------|
| V <sub>pk</sub>       | Applied Voltage                   |     | 150  | V     |
| P <sub>d Δpo/Δt</sub> | Continuous Power Dissipation      |     | 90   | mW/°C |
| T <sub>O</sub>        | Operating and Storage Temperature | -30 | +75  | °C    |
| T <sub>S</sub>        | Soldering Temperature*            |     | +260 | °C    |

\* 0.200 inch from base for 3 seconds with heat sink.

**CELL RESISTANCE VS. ILLUMINANCE**



**ELECTRO-OPTICAL CHARACTERISTICS RATING** (TA)= 23°C UNLESS OTHERWISE NOTED

| SYMBOL             | CHARACTERISTIC             | TEST CONDITIONS  | MIN | TYP | MAX | UNITS |
|--------------------|----------------------------|--|-----|-----|-----|-------|
| R <sub>D</sub>     | Dark Resistance            | After 10 sec. @ 10 Lux @ 2856 °K   | 0.5 |     |     | MΩ    |
| R <sub>I</sub>     | Illuminated Resistance     | 10 Lux @ 2856 °K   | 11  |     | 20  | KΩ    |
| S                  | Sensitivity                | $\frac{\text{LOG}(R_{100})-\text{LOG}(R_{10})^{**}}{\text{LOG}(E_{100})-\text{LOG}(E_{10})^{***}}$ |     | 0.7 |     | Ω/Lux |
| λ <sub>range</sub> | Spectral Application Range | Flooded  | 400 |     | 700 | nm    |
| λ <sub>peak</sub>  | Spectral Application Range | Flooded  |     | 520 |     | nm    |
| t <sub>r</sub>     | Rise Time                  | 10 Lux @ 2856 °K   |     | 60  |     | ms    |
| T <sub>f</sub>     | Fall Time                  | After 10 Lux @ 2856 °K   |     | 25  |     | ms    |

\*\*R100, R10: cell resistances at 100 Lux and 10 Lux at 2856 °K respectively .

\*\*\*E100, E10: luminances at 100 Lux and 10 Lux 2856 °K respectively.

Information in this technical datasheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice.