

### **FEATURES**

- · Visible light response
- Sintered construction
- · Low cost

## **DESCRIPTION**

The **PDV-P5002** 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**

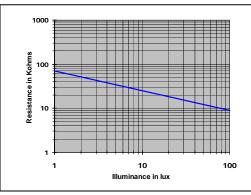
- · Camera exposure
- · Shutter controls
- Night light Controls

# **CELL RESISTANCE VS. ILLUMINANCE**

# ABSOLUTE MAXIMUM RATING (TA)= 23°C UNLESS OTHERWISE NOTED SYMBOL PARAMETER MIN MAX UN

| SYMBOL                | PARAMETER                         | MIN | MAX  | UNITS |
|-----------------------|-----------------------------------|-----|------|-------|
| $V_{pk}$              | Applied Voltage                   |     | 350  | V     |
| P <sub>d ∆po/∆t</sub> | Continuous Power Dissipation      |     | 400  | mW/°C |
| To                    | Operating and Storage Temperature | -30 | +75  | °C    |
| Ts                    | Soldering Temperature*            |     | +260 | °C    |

<sup>\* 0.200</sup> inch from base for 3 seconds with heat sink.



## 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 |      |     | $\mathbf{M}\Omega$ |
| R <sub>I</sub>  | Illuminated Resistance     | 10 Lux @ 2856 °K                              | 12  |      | 30  | ΚΩ                 |
| S               | Sensitivity                | LOG(R100)-LOG(R10)**<br>LOG(E100)-LOG(E10)*** |     | 0.75 |     | $\Omega/{ m Lux}$  |
| $\lambda$ range | Spectral Application Range | Flooded                                       | 400 |      | 700 | nm                 |
| $\lambda$ peak  | Spectral Application Range | Flooded                                       |     | 520  |     | nm                 |
| t <sub>r</sub>  | Rise Time                  | 10 Lux @ 2856 °K                              |     | 55   |     | ms                 |
| T <sub>f</sub>  | Fall Time                  | After 10 Lux @ 2856 °K                        |     | 25   |     | ms                 |

<sup>\*\*</sup>R100, R10: cell resistances at 100 Lux and 10 Lux at 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.

<sup>\*\*\*</sup>E100, E10: luminances at 100 Lux and 10 Lux 2856  $^{\circ}$ K respectively.