



### FEATURES

- Visible light response
- Sintered construction
- Low cost

### DESCRIPTION

The **PDV-P5001** 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 |
|----------------------------|-----------------------------------|-----|------|-------|
| $V_{pk}$                   | Applied Voltage                   |     | 350  | V     |
| $P_{d \Delta p0/\Delta t}$ | Continuous Power Dissipation      |     | 400  | mW/°C |
| $T_O$                      | Operating and Storage Temperature | -30 | +75  | °C    |
| $T_S$                      | Soldering Temperature*            |     | +260 | °C    |

\* 0.200 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 |
|--------------------------|----------------------------|--|-----|-----|-----|-------|
| $R_D$                    | Dark Resistance            | After 10 sec. @ 10 Lux @ 2856 °K   | 0.3 |     |     | MΩ    |
| $R_I$                    | Illuminated Resistance     | 10 Lux @ 2856 °K   | 8   |     | 16  | KΩ    |
| S                        | Sensitivity                | $\frac{\text{LOG}(R_{100})-\text{LOG}(R_{10})^{**}}{\text{LOG}(E_{100})-\text{LOG}(E_{10})^{***}}$ |     | 0.6 |     | Ω/Lux |
| $\lambda_{\text{range}}$ | Spectral Application Range | Flooded  | 400 |     | 700 | nm    |
| $\lambda_{\text{peak}}$  | Spectral Application Range | Flooded  |     | 520 |     | nm    |
| $t_r$                    | Rise Time                  | 10 Lux @ 2856 °K   |     | 55  |     | ms    |
| $T_f$                    | 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.