

FEATURES

- Visible light response
- Sintered construction
- Low cost

DESCRIPTION

The **PDV-P8107** 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

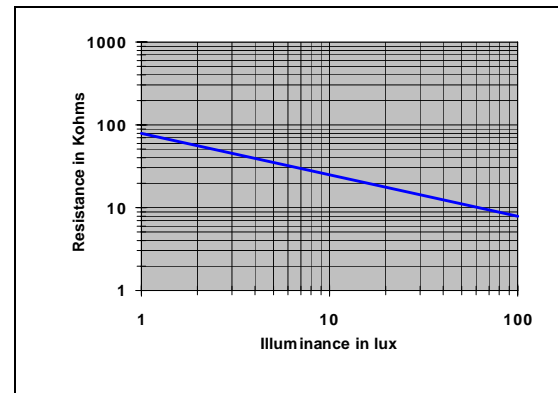
- Camera exposure
- Shutter controls
- Night light Controls

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

| SYMBOL | PARAMETER | MIN | MAX | UNITS |
|-----------------------|-----------------------------------|-----|------|-------|
| V _{pk} | Applied Voltage | | 150 | V |
| P _{d Δpo/Δt} | Continuous Power Dissipation | | 100 | 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.

CELL RESISTANCE VS. ILLUMINANCE



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 | 20 | | | MΩ |
| R _I | Illuminated Resistance | 10 Lux @ 2856 °K | 80 | | 240 | KΩ |
| S | Sensitivity | $\frac{\text{LOG}(R_{100})-\text{LOG}(R_{10})^{**}}{\text{LOG}(E_{100})-\text{LOG}(E_{10})^{***}}$ | | 0.9 | | Ω/Lux |
| λ _{range} | Spectral Application Range | Flooded | 400 | | 700 | nm |
| λ _{peak} | Spectral Application Range | Flooded | | 520 | | nm |
| t _r | Rise Time | 10 Lux @ 2856 °K | | 60 | | 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.