## DESCRIPTION

The **PDV-P9103** 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.

## FEATURES

- Visible light response
- Sintered construction
- Low cost

## RELIABILITY

This Luna high-reliability device is in principle able to meet military test requirements (Mil-STD-750, Mil-STD-883) after proper screening and group test.
Contact Luna for recommendations on specific test conditions and procedures.

## APPLICATIONS

- Camera exposure
- Shutter controls
- Night light controls

## ABSOLUTE MAXIMUM RATINGS

| SYMBOL | MIN | | MAX | UNITS | (TA)= 23°C UNLESS OTHERWISE NOTED |
|---|---|---|---|---|---|
| Applied Voltage | - | - | 150 | V | - |
| Continuous Power Dissipation | - | - | 90 | mW/°C | - |
| Operation and Storage Temperature | -30 | to | +75 | V | - |
| Soldering Temperature* | - | - | +260 | °C | - |

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

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**Precision – Control – Results**

$T_a$ = 23°C UNLESS NOTED OTHERWISE

## OPTO-ELECTRICAL PARAMETERS

| PARAMETER | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|---|---|---|---|---|---|
| Dark Resistance | After 10 sec. @10 Lux @ 2856°K | 1 | - | - | MΩ |
| Illuminated Resistance | 10 Lux @ 2856°K | 20 | - | 45 | KΩ |
| Sensitivity | $\dfrac{\text{Log}(R100) - \text{Log}(R10)\ **}{\text{Log}(E100) - \text{Log}(E10)\ ***}$ | - | 0.80 | - | Ω/Lux |
| Spectral Application Range | Flooded | 400 | - | 700 | nm |
| Spectral Application Range | Flooded | - | 570 | - | nm |
| Rise Time | 10 Lux @ 2856 °K | - | 60 | - | ms |
| 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.

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