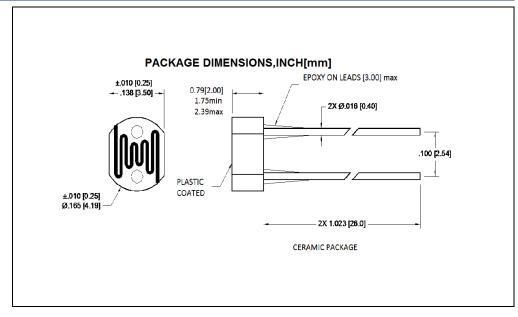


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## **Precision - Control - Results**





### **DESCRIPTION**

The **PDV-P9005** 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 API high-reliability detector is in principle able to meet military test requirements (Mil-STD-750, Mil-STD-883) after proper screening and group test.

Contact API for recommendations on specific test conditions and procedures.

## **APPLICATIONS**

- Camera exposure
- Shutter controls
- Night light Controls

#### **ABSOLUTE MAXIMUM RATINGS**

 $T_a = 23$ °C non condensing 1/16 inch from case for 3 seconds max

| PARAMETER                         | MIN | MAX  | UNITS |
|-----------------------------------|-----|------|-------|
| Applied Voltage                   | -   | 150  | V     |
| Continuous Power Dissipation      | -   | 90   | mW/°C |
| Operating and Storage Temperature | -30 | +75  | °C    |
| Soldering Temperature*            | -   | +260 | °C    |

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.



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# **Precision – Control – Results**

## **OPTO-ELECTRICAL PARAMETERS**

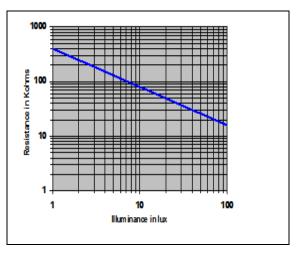
 $T_a = 23$ °C unless noted otherwise

| CHARACTERISTIC             | TEST CONDITIONS                  | MIN | TYP | MAX | UNITS              |
|----------------------------|----------------------------------|-----|-----|-----|--------------------|
| Dark Resistance            | After 10 sec. @ 10 Lux @ 2856 °K | 2.5 | -   | -   | $\mathbf{M}\Omega$ |
| Illuminated Resistance     | 10 Lux @ 2856 °K                 | 50  | -   | 94  | ΚΩ                 |
| Sensitivity                | LOG(R100)-LOG(R10)**             | -   | 0.9 | -   | $\Omega/{\sf Lux}$ |
| Sensitivity                | LOG(E100)-LOG(E10)***            | -   | 0.9 | -   | $\Omega/{\sf Lux}$ |
| Spectral Application Range | Flooded                          | 400 | -   | 700 | nm                 |
| Spectral Application Range | Flooded                          | -   | 520 | -   | ms                 |
| Rise Time                  | 10 Lux @ 2856 °K                 | -   | 60  | -   | ms                 |
| Fall Time                  | After 10 Lux @ 2856 °K           | -   | 25  | -   | $\mathbf{M}\Omega$ |

<sup>\*\*</sup>R100, R10: cell resistances at 100 Lux and 10 Lux at 2856 

K respectively.

#### **CELL RESISTANCE VS. ILLUMINANCE**



<sup>\*\*\*</sup>E100, E10: luminances at 100 Lux and 10 Lux at 2856 

K respectively