

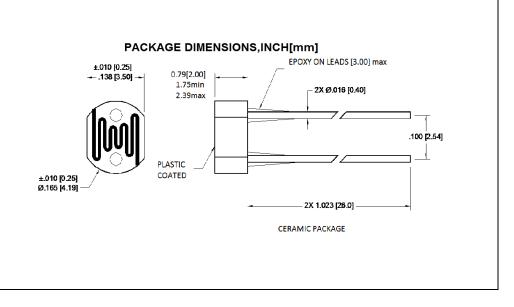
CdS Photoconductive Photocells

PDV-P9002-1

WWW.ADVANCEDPHOTONIX.COM

Precision – Control – Results





DESCRIPTION

The **PDV-P9002-1** 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.

ABSOLUTE MAXIMUM RATINGS

APPLICATIONS

- Camera exposure
- Shutter controls
- Night light Controls

 $T_a = 23^{\circ}C$ 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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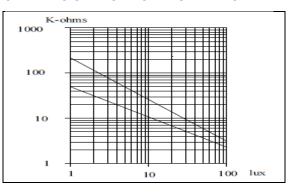
OPTO-ELECTRICAL PARAMETERS

 $T_a = 23^{\circ}C$ unless noted otherwise

| CHARACTERISTIC | TEST CONDITIONS | MIN | ТҮР | MAX | UNITS |
|----------------------------|----------------------------------|-----|-----|-----|--------------|
| Dark Resistance | After 10 sec. @ 10 Lux @ 2856 °K | 0.5 | - | - | MΩ |
| Illuminated Resistance | 10 Lux @ 2856 °K | 11 | - | 27 | ΚΩ |
| Sensitivity | LOG(R100)-LOG(R10)** | - | 0.7 | - | Ω/Lux |
| Sensitivity | LOG(E100)-LOG(E10)*** | 400 | - | 700 | nm |
| Spectral Application Range | Flooded | - | 570 | - | nm |
| Spectral Application Range | Flooded | - | 60 | - | ms |
| Rise Time | 10 Lux @ 2856 °K | - | 25 | - | ms |
| Fall Time | After 10 Lux @ 2856 °K | 0.5 | - | - | MΩ |

**R100, R10: cell resistances at 100 Lux and 10 Lux at 2856 IIK respectively.

***E100, E10: luminances at 100 Lux and 10 Lux at 2856 DK respectively



CELL RESISTANCE VS. ILLUMINANCE

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