

### **FEATURES**

- · Visible light response
- Sintered construction
- · Low cost

## **DESCRIPTION**

The **PDV-P5002** 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**

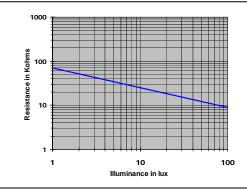
- · Camera exposure
- · Shutter controls
- Night light Controls

## **CELL RESISTANCE VS. ILLUMINANCE**

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
$V_{pk}$	Applied Voltage		350	V
P <sub>d Δpo/Δt</sub>	Continuous Power Dissipation		400	mW/°C
To	Operating and Storage Temperature	-30	+75	°C
T <sub>S</sub>	Soldering Temperature*		+260	°C

<sup>\* 0.200</sup> 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 <sub>D</sub>	Dark Resistance	After 10 sec. @ 10 Lux @ 2856 °K	0.5			$\mathbf{M}\Omega$
R <sub>I</sub>	Illuminated Resistance	10 Lux @ 2856 °K	12		30	ΚΩ
S	Sensitivity	LOG(R100)-LOG(R10)** LOG(E100)-LOG(E10)***		0.75		$\Omega/{ m Lux}$
$\lambda$ range	Spectral Application Range	Flooded	400		700	nm
$\lambda$ peak	Spectral Application Range	Flooded		520		nm
t <sub>r</sub>	Rise Time	10 Lux @ 2856 °K		55		ms
T <sub>f</sub>	Fall Time	After 10 Lux @ 2856 °K		25		ms

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

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