

### FEATURES

- Visible light response
- Sintered construction
- Low cost

### DESCRIPTION

The **PDV-P8101** 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

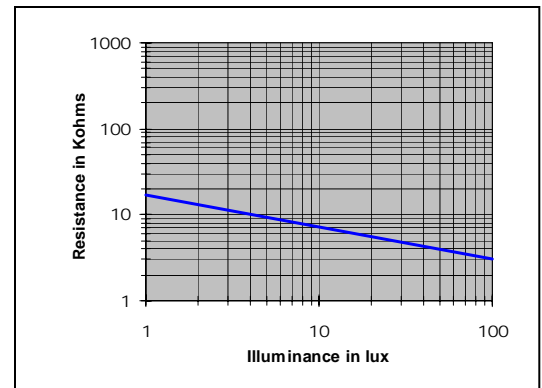
- Camera exposure
- Shutter controls
- Night light Controls

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
V <sub>pk</sub>	Applied Voltage		150	V
P <sub>d Δpo/Δt</sub>	Continuous Power Dissipation		100	mW/°C
T <sub>O</sub>	Operating and Storage Temperature	-30	+75	°C
T <sub>S</sub>	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 <sub>D</sub>	Dark Resistance	After 10 sec. @ 10 Lux @ 2856 °K	0.15			MΩ
R <sub>I</sub>	Illuminated Resistance	10 Lux @ 2856 °K	4		11	KΩ
S	Sensitivity	$\frac{\text{LOG}(R_{100})-\text{LOG}(R_{10})^{**}}{\text{LOG}(E_{100})-\text{LOG}(E_{10})^{***}}$		0.65		Ω/Lux
λ <sub>range</sub>	Spectral Application Range	Flooded	400		700	nm
λ <sub>peak</sub>	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		20		ms

\*\*R<sub>100</sub>, R<sub>10</sub>: cell resistances at 100 Lux and 10 Lux at 2856 °K respectively .

\*\*\*E<sub>100</sub>, E<sub>10</sub>: 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.