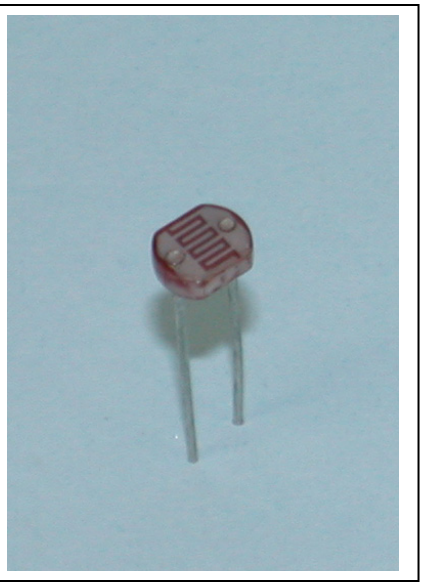
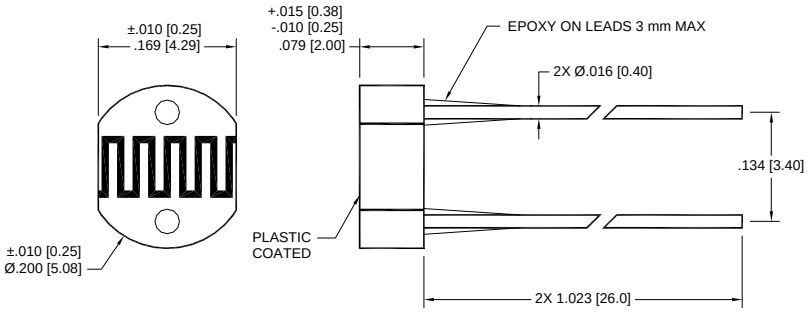
Advanced Photonix, Inc.

CdS Photoconductive Photocells

PDV-P8107



PACKAGE DIMENSIONS INCH [mm]



CERAMIC PACKAGE

FEATURES

- Visible light response
- Sintered construction
- Low cost

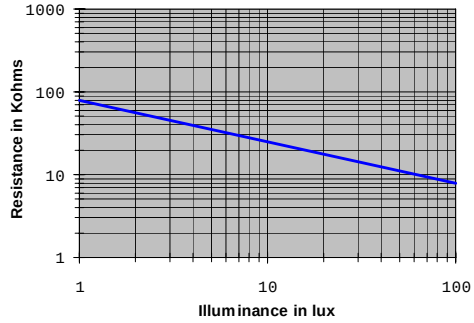
DESCRIPTION

The **PDV-P8107** 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		150	V
$P_{d\ \Delta po/\Delta t}$	Continuous Power Dissipation		100	mW/°C
T_O	Operating and Storage Temperature	-30	+75	°C
T_S	Soldering Temperature*		+260	°C

* 0.200 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_D	Dark Resistance	After 10 sec. @ 10 Lux @ 2856 °K	20			MΩ
R_I	Illuminated Resistance	10 Lux @ 2856 °K	80		240	KΩ
S	Sensitivity	LOG(R100)-LOG(R10)** / LOG(E100)-LOG(E10)***		0.9		Ω/Lux
λrange	Spectral Application Range	Flooded	400		700	nm
λpeak	Spectral Application Range	Flooded		520		nm
t_r	Rise Time	10 Lux @ 2856 °K		60		ms
T_f	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.

REV 3/30/06