



### 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

$T_a = 23^\circ\text{C}$  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

#### OPTO-ELECTRICAL PARAMETERS

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

CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Dark Resistance	After 10 sec. @ 10 Lux @ 2856 °K	2.5	-	-	$\text{M}\Omega$
Illuminated Resistance	10 Lux @ 2856 °K	50	-	94	$\text{K}\Omega$
Sensitivity	$\text{LOG}(\text{R}100) - \text{LOG}(\text{R}10)^{**}$	-	0.9	-	$\Omega/\text{Lux}$
Sensitivity	$\text{LOG}(\text{E}100) - \text{LOG}(\text{E}10)^{***}$	-	0.9	-	$\Omega/\text{Lux}$
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	-	$\text{M}\Omega$

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

\*\*\*E100, E10: luminances at 100 Lux and 10 Lux at 2856 °K respectively

#### CELL RESISTANCE VS. ILLUMINANCE

