



DESCRIPTION

The **PDV-P5003** 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

Applied Voltage			350	V	$T_a = 23^\circ\text{C}$
Operating Temperature	-30	to	+75	$^\circ\text{C}$	non condensing
Storage Temperature	-30	to	+75	$^\circ\text{C}$	
Soldering Temperature			+260	$^\circ\text{C}$	0.2 inch from base for 3 sec with heat sink
Wavelength Range	400	to	700	nm	
Continuous Power Dissipation			400	mW/ $^\circ\text{C}$	

OPTO-ELECTRICAL PARAMETERS

T_a = 23°C unless noted otherwise

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Dark resistance	After 10 sec @ 10Lux @2856 °K	1	-	-	MΩ
Illuminated resistance	10Lux @2856 °K	12	-	58-	MΩ
Sensitivity	$\frac{\text{LOG}(R100)-\text{LOG}(R10)**}{\text{LOG}(E100)-\text{LOG}(E10)***}$	-	0.7	-	Ω/Lux
Spectral Peak	Flooded		520	-	nm
Rise Time	10Lux @ 2856 °K	-	55	100	ms
Fall Time	After 10Lux @ 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.

TYPICAL PERFORMANCE