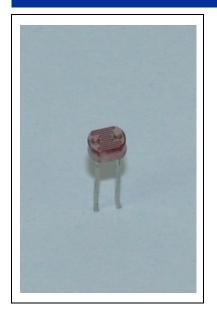
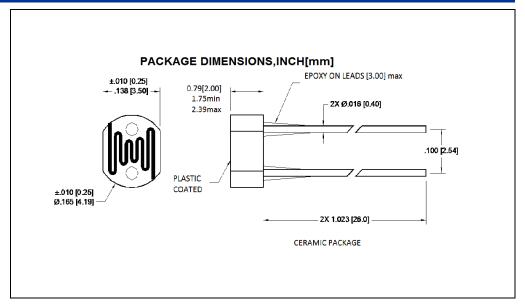


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# **Precision – Control – Results**





#### DESCRIPTION

The **PDV-P9002-1** 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.

## **RELIABILITY**

This Luna high-reliability device is in principle able to meet military test requirements (Mil-STD-750, Mil-STD-883) after proper screening and group test.

Contact Luna for recommendations on specific test conditions and procedures.

#### **FEATURES**

- Visible light response
- Sintered construction
- Low cost

### **APPLICATIONS**

- Camera exposure
- Shutter controls
- Night light controls

### **ABSOLUTE MAXIMUM RATINGS**

SYMBOL	MIN		MAX	UNITS	(TA)= 23°C UNLESS OTHERWISE NOTED		
Applied Voltage	-	-	150	V	-		
Continuous Power Dissipation	-	-	90	mW/°C	-		
Operation and Storage Temperature	-30	to	+75	V	-		
Soldering Temperature*	-	-	+260	°C	-		

<sup>\* 0.200</sup> inch from base for 3 seconds with heat sink.



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## **Precision – Control – Results**

## **OPTO-ELECTRICAL PARAMETERS**

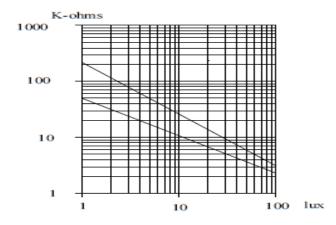
T<sub>a</sub> = 23°C UNLESS NOTED OTHERWISE

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Dark Resistance	After 10 sec. @10 Lux @ 2856°K	0.5	-	-	МΩ
Illuminated Resistance	10 Lux @ 2856°K	11	-	27	ΚΩ
Sensitivity	$\frac{\operatorname{Log}(R100) - \operatorname{Log}(R10)}{\operatorname{Log}(E100) - \operatorname{Log}(E10)}$	400	0.70	-	Ω/Lux
Spectral Application Range	Flooded	-	-	700	nm
Spectral Application Range	Flooded	-	570	-	nm
Rise Time	10 Lux @ 2856 °K	-	60	-	ms
Fall Time	After 10 Lux @ 2856 °K	0.5	25	-	ms

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

## **TYPICAL PERFORMANCE**

## **CELL RESISTANCE vs. ILLUMINANCE**



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