# OPTOELECTRONICS

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## CDS Photoconductive Photocells PDV-P8107

#### **Precision – Control – Results**





#### 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.

#### **FEATURES**

- Visible light response
- Sintered construction
- Low cost

#### RELIABILITY

Contact Luna for recommendations on specific test conditions and procedures.

#### **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	-	-	100	mW/°C	-		
Operation and Storage Temperature	-30	to	+75	V	-		
Soldering Temperature*	-	-	+260	°C	-		

\* 0.200 inch from base for 3 seconds with heat sink.

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.

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#### **OPTO-ELECTRICAL PARAMETERS**

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PARAMETER	TEST CONDITIONS	MIN	ТҮР	MAX	UNITS	
Dark Resistance	After 10 sec. @10 Lux @ 2856°K		-	-	MΩ	
Illuminated Resistance	10 Lux @ 2856°K	80	-	240	KΩ	
Sensitivity	$\frac{Log(R100) - Log(R10) **}{Log(E100) - Log(E10) ***}$	-	0.9	-	Ω/Lux	
Spectral Application Range	Flooded	400	-	700	nm	
Spectral Application Range	Flooded	-	520	-	nm	
Rise Time	10 Lux @ 2856 °K	-	60	-	ms	
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.

#### **TYPICAL PERFORMANCE**

#### **CELL RESISTANCE vs. ILLUMINANCE**



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