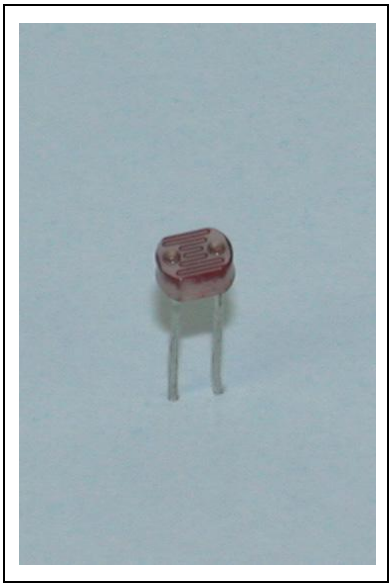
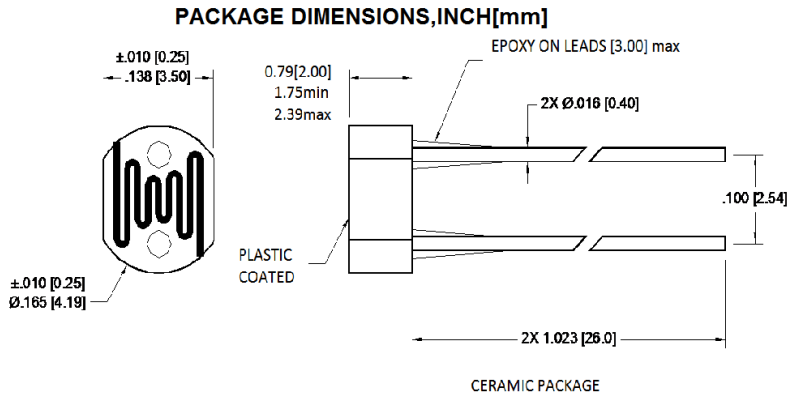
CdS Photoconductive Photocells

PDV-P9005

WWW.LUNAINC.COM — **Precision – Control – Results**





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 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.

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	-	-	900	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.

REV 10-24-16

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OPTO-ELECTRICAL PARAMETERS

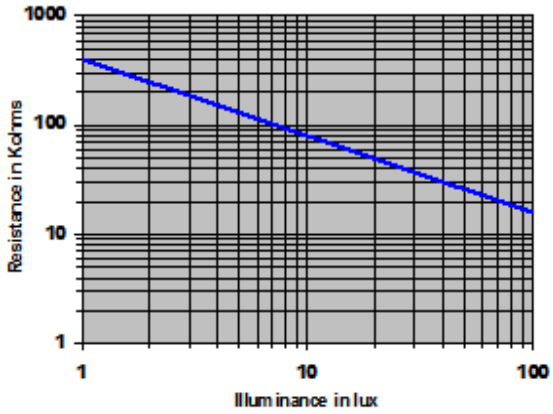
T_a = 23°C UNLESS NOTED OTHERWISE

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Dark Resistance	After 10 sec. @10 Lux @ 2856°K	2.5	-	-	MΩ
Illuminated Resistance	10 Lux @ 2856°K	50	-	94	KΩ
Sensitivity	$\frac{\mathrm{Log(R100)} - \mathrm{Log(R10)}\ **}{\mathrm{Log(E100)} - \mathrm{Log(E10)}\ ***}$	-	0.90	-	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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