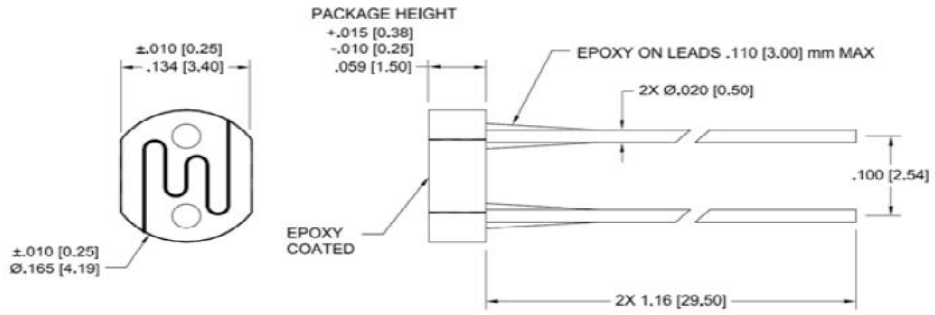
CDS Photoconductive Photocells

PDV-P9003

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





DESCRIPTION

The **PDV-P9003** 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	-	-	90	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.

REV 01-04-16

© 2016 Luna Optoelectronics. All rights reserved.

Luna Optoelectronics, 1240 Avenida Acaso, Camarillo CA 93012 • Phone (805) 987-0146 • Fax (805) 484-9935

OPTO-ELECTRICAL PARAMETERS

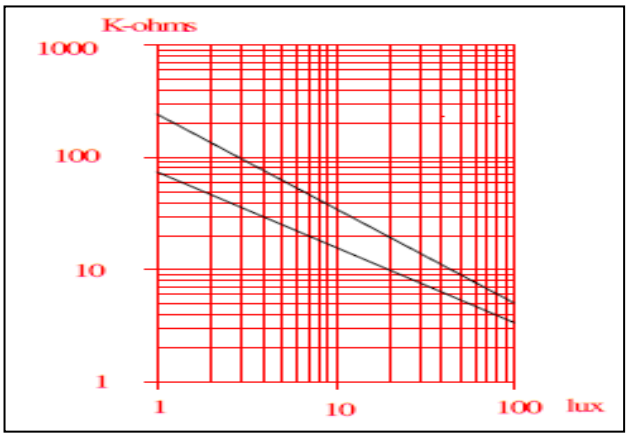
T_a = 23°C UNLESS NOTED OTHERWISE

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Dark Resistance	After 10 sec. @10 Lux @ 2856°K	1	-	-	MΩ
Illuminated Resistance	10 Lux @ 2856°K	16	-	33	KΩ
Sensitivity	$\frac{\mathrm{Log}(\mathrm{R100}) - \mathrm{Log}(\mathrm{R10})}{\mathrm{Log}(\mathrm{E100}) - \mathrm{Log}(\mathrm{E10})}$	-	0.7	-	Ω/Lux
Spectral Application Range	Flooded	400	-	700	nm
Spectral Application Range	Flooded	-	570	-	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



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.

REV 01-04-16

© 2016 Luna Optoelectronics. All rights reserved.

Luna Optoelectronics, 1240 Avenida Acaso, Camarillo CA 93012 • Phone (805) 987-0146 • Fax (805) 484-9935

Unikeyic Electronics

Global Electronic Components Distributor

Click to view pricing, inventory, delivery, and lifecycle information:

Advanced Photonix:

NSL-5910 PDB-V615-2 PDV-P8101 PDV-P9002 PDV-P9203 100-41-21-231 PDV-P9200 0050-3111-111 NSL-32SR2 PDB-C613-2 NSL-32SR3 SD019-141-411-G SD200-12-22-041 NSL-4960 019-141-411-G 118-23-21-021 0090-3111-185 NSL-19M51 PDV-P5002 076-14-21-011 NORPS-12 PDB-C154SM PDV-P9008 100-12-22-021 NSL-5540 PDV-P8006 PDV-P9004 019-111-411 APX-SC0010 NSL-5150