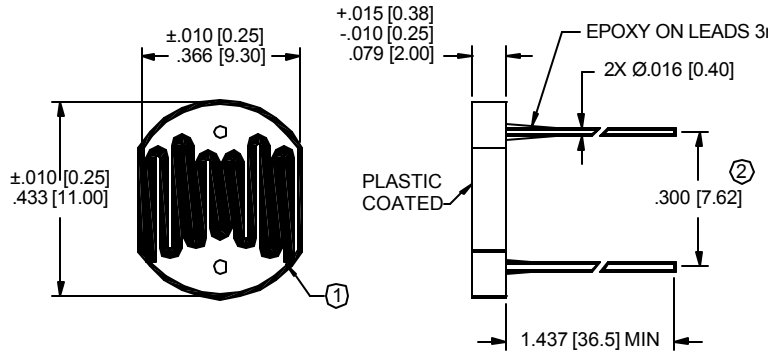
PHOTONIC DETECTORS INC.

Cadmium Sulfoselenide (CdS) Photoconductive Photocells

Type PDV-P500X

PACKAGE DIMENSIONS INCH [mm]

INDUSTRY EQUIVALENTS
VT400 & NSL-4962



PLASTIC COATED CERAMIC PACKAGE

1. PHOTOCELL "GRID" PATTERN CAN VARY, PDI RESERVES THE RIGHT TO CHANGE AND MIX GRID PATTERNS.
2. DIMENSION CONTROLLED AT BASE OF CERAMIC HEADER PACKAGE.

FEATURES

- Visible light response
- Sintered construction
- Low cost
- High Reliability

DESCRIPTION

PDV-P500X are (CdS) photoconductive photocells designed to sense light from 400 nm to 700 nm. As light dependent resistors, they are available in a wide range of resistance values. They are packaged in a two leaded plastic-coated ceramic header.

APPLICATIONS

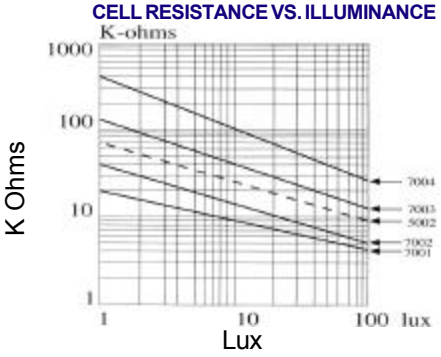
- Audio equipment
- Electronic Toys
- Modulation circuits
- Volume controls

ABSOLUTE MAXIMUM RATING (TA=25°C unless otherwise noted)

SYMBOL	PARAMETER	MIN	MAX	UNITS
V_{PK}	Applied Voltage		350	V dc
$P_{d\Delta\ po\Delta t}$	Continuous Power Dissipation		400	mW/°C
T_{stg} & T_o	Operating Temperature Range & Storage	-30	+75	°C
T_S	Soldering Temperature*		+260	°C

*.200 inch (5 mm) from bottom of header for 3 secs max with heat sink

CELL RESISTANCE VS. ILLUMINANCE



ELECTRO-OPTICAL CHARACTERISTICS TA=25°C (2 HOURS LIGHT ADAPT, MIN)***

MODEL NO.	CELL RESISTANCE** (Ohms)				SENSITIVITY	SPECTRAL PEAK	RESPONSE TIME @10 Lux	
	10 Lux @2856K		DARK		LOG(R100)-LOG(R10) / LOG (E100)-LOG(E10)	(nm)	RISE TIME (ms)	FALL TIME (ms)
	MIN (KΩ)	MAX (KΩ)	MIN (MΩ)	SEC	(λ TYP)	TYP	TYP	TYP
PDV-P5001	8	16	0.3	10	0.6	520	55	25
PDV-P5002	12	30	0.5	10	0.75	520	55	25
PDV-P5003	12	58	1	10	0.7	520	55	25

 ** Photocells are light adapted at 100 to 500 Lux. *** Photocells are tested at 2856°K at a 10 Lux light level. Resistance values are for reference only.