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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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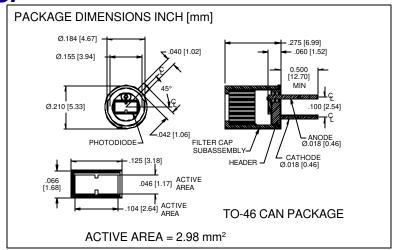






**PHOTONIC** Silicon Photodiode, Filter Combination Photovoltaic **DETECTORS INC.** 550 nm (green color) Type PDV-V404-46





RESPONSIVITY (A/W)

## **FEATURES**

- 550 nm CWL
- 70 nm FWHM
- · Large active area

### **DESCRIPTION**

The **PDV-V404-46** is a silicon, PIN planar diffused, photodiode with a green color 550 nm +/- 2 nm CWL wide band interferance filter and a wide 70 nm half bandwidth. Ideal for photometry and radiometry measurment

## **APPLICATIONS**

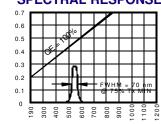
- Green color matching
- Color meters
- Film processing

# applications. **ABSOLUTE MAXIMUM RATING** (TA=25°C unless otherwise noted)

SYMBOL	PARAMETER	MIN	MAX	UNITS
V <sub>BR</sub>	Reverse Voltage		75	V
T <sub>stg</sub>	Storage Temperature	-20	+85	°C
То	Operating Temperature Range	-15	+70	°C
Ts	Soldering Temperature*		+240	°C
I	Light Current		0.5	mA

<sup>\*1/16</sup> inch from case for 3 secs max

## **SPECTRAL RESPONSE**



WAVELENGTH (nm)

### **ELECTRO-OPTICAL CHARACTERISTICS** (TA=25°C unless otherwise noted)

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
lsc	Short Circuit Current***	H = 100 fc, 2850 K	35	40		μΑ
ΙD	Dark Current	H = 0, V <sub>R</sub> = 10 V		150	300	рА
RsH	Shunt Resistance	H = 0, V <sub>R</sub> = 10 mV	1.0	6		GΩ
TC Rsh	Rsн Temp. Coefficient	H = 0, V <sub>R</sub> = 10 mV		-8		%/℃
Cı	Junction Capacitance	H = 0, V <sub>R</sub> = 0 V**		340		pF
CWL	Center Wavelength	(CWL, $\lambda$ o) +/- 2 nm		550		nm
HBW	Half Bandwidth	(FWHM)		70		nm
V <sub>BR</sub>	Breakdown Voltage	I = 10 // A	30	50		V
N EP	Noise Equivalent Power	V <sub>R</sub> = 10 mV @ Peak		5x10 <sup>-14</sup>		W/ <del>V Hz</del>
tr	Response Time	RL = 1 KΩ V <sub>R</sub> = 0 V		450		nS

Information in this technical data sheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice.\*\*f = 1 MHz, \*\*\*without filter [FORM NO. 100-PDV-V404-46 REV N/C]