# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

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!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



## **PHOTONIC** DETECTORS INC.

# Silicon Photodiode, Filter Combination Photovoltaic

.040 [1.02]

.042 [1.06]

.046 [1.17] ACTIVE AREA

ACTIVE

AREA

.125 [3.18]

.104 [2.64]

ACTIVE AREA = 2.98 mm<sup>2</sup>

FILTER CAP SUBASSEMBL

HEADER



(photopic response) Type PDV-V400-46 PACKAGE DIMENSIONS INCH [mm]

#### DESCRIPTION

The PDV-V400-46 is a silicon, PIN planar diffused, photodiode with a photopic response filter. The detector filter combination has a wide bandwidth designed to simulate the spectral response of the human eye.

Ø.184 [4.67]

Ø.155 [3.94]

Ø.210 [5.33]

.066 [1.68] PHOTODIODE

#### **APPLICATIONS**

- Photometry
- Radiometry

**TO-46 CAN PACKAGE** 

Film color processing

.275 [6.99]

0.500 [12 70] MIN

CATHODE
Ø.018 [0.46]

.060 [1.52]

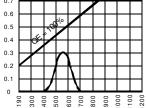
.100 [2.54]

ANODE Ø.018 [0.46]

### packaged in a TO-46 metal can. ABSOLUTE MAXIMUM RATING (TA=25°C unless otherwise noted)

SYMBOL	PARAMETER	MIN	MAX	UNITS	Ś				
VBR	Reverse Voltage		75	V	K (P				
T <sub>stg</sub>	Storage Temperature	-20	+85	°C	Ξ				
То	Operating Temperature Range	-15	+70	°C	ISNO				
Ts	Soldering Temperature*		+240	°C	SPC				
Ι	Light Current		0.5	mA	끮				





WAVELENGTH (nm)

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

**FEATURES** 

· Low noise

Large active area

High transmission

#### 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		μA
ΙD	Dark Current	H = 0, V <sub>R</sub> = 10 V		150	300	pА
Rsн	Shunt Resistance	H = 0, V <sub>R</sub> = 10 mV	1.0	6		GΩ
TC Rsh	RsH Temp. Coefficient	H = 0, V <sub>R</sub> = 10 mV		-8		% / °C
CJ	Junction Capacitance	H = 0, V <sub>R</sub> = 0 V**		340		pF
CWL	Center Wavelength	(CWL, $\lambda$ o) +/- 2 nm		525		nm
HBW	Half Bandwidth	(FWHM)		150		nm
VBR	Breakdown Voltage	I = 10 µµA	30	50		V
N EP	Noise Equivalent Power	V <sub>R</sub> = 10 mV @ Peak		5x10 <sup>-14</sup>		W/ V Hz
tr	Response Time	$RL = 1 \ K\Omega \ V_R = 0 \ V$		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 IFORM NO. 100-PDV-V400-46 REV N/C [FORM NO. 100-PDV-V400-46 REV N/C]