## mail

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

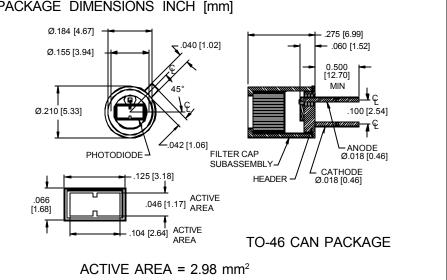
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# **PHOTONIC**<br/>Silicon Photodiode, Filter Combination Photoconductive<br/>600 nm (red color) Type PDV-C403-46



PACKAGE DIMENSIONS INCH [mm]



**RESPONSIVITY (A/W)** 

#### FEATURES

- 600 nm CWL
- 65 nm FWHM
- Low noise
- The **PDV-C403-46** is a silicon, PIN planar diffused, photodiode with a red color 600 nm +/- 2 nm CWL wide band interference filter and a wide 65 nm half bandwidth. Ideal for photometry and radiometry measurment applications.

#### **APPLICATIONS**

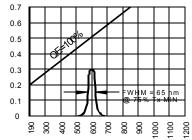
- Red color matching
- Color meters
- Film processing

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

DESCRIPTION

SYMBOL	PARAMETER	MIN	MAX	UNITS
Vbr	Reverse Voltage		100	V
T <sub>STG</sub>	Storage Temperature	-20	+85	$^{\circ}$ C
To	Operating Temperature Range	-15	+70	°C
Ts	Soldering Temperature*		+240	°C
Ι	Light Current		500	mA

#### SPECTRALRESPONSE



#### WAVELENGTH(nm)

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

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

SYMBOL	CHARACTERISTIC	TESTCONDITIONS	MIN	TYP	MAX	UNITS			
lsc	Short Circuit Current***	H = 100 fc, 2850 K	40	45		$\mu$ A			
ΙD	Dark Current	H = 0, V <sub>R</sub> = 10 V		.15	1.0	nA			
Rsh	Shunt Resistance	H = 0, V <sub>R</sub> = 10 mV	.5	1.0		GΩ			
TC RSH	RsH Temp. Coefficient	H = 0, V <sub>R</sub> = 10 mV		-8		% / ℃			
CJ	Junction Capacitance	H = 0, V <sub>R</sub> = 10 V**		10		pF			
CWL	Center Wavelength	(CWL, $\lambda$ o) +/- 2 nm		600		nm			
HBW	Half Bandwidth	(FWHM)		65		nm			
Vbr	Breakdown Voltage	I = 10 μA	70	100		V			
NEP	Noise Equivalent Power	V <sub>R</sub> = 10 V @ Peak		1.5x10 <sup>-14</sup>		W/√ <sup>Hz</sup>			
tr	Response Time	RL = 1 KΩ V <sub>R</sub> = 50 V		10		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=1MHz, \*\*\* without filter [FORM NO. 100-PDV-C403-46 REV N/C]