

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!



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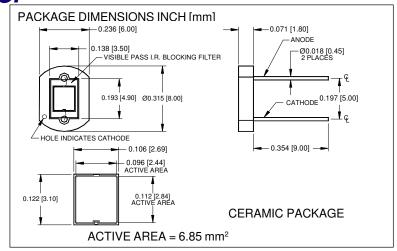




# PHOTONIC DETECTORS INC.

## Silicon Photodiode, Visible Light Detector Type PDV-V418





#### **FEATURES**

- Visible response
- Low dark current
- Good linearity
- Low noise

#### DESCRIPTION

The **PDV-V418** is a silicon PIN photodiode, with a built in visible pass, I.R. blocking optical filter. Housed in a black ceramic package with two leads. Designed for photovoltaic operation with 0 volt bias.

#### **APPLICATIONS**

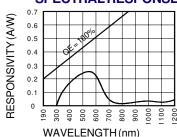
- Camera exposure meter
- Light meters
- Visible detector

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

SYMBOL	PARAMETER	MIN	MAX	UNITS	
V <sub>BR</sub>	Reverse Voltage		10	V	
T <sub>STG</sub>	Storage Temperature	-20	+80	∘C	
To	Operating Temperature Range	-20	+60	∘C	
Ts	Soldering Temperature*		+240	°C	
I <sub>L</sub>	Light Current		0.5	mA	

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

#### **SPECTRAL RESPONSE**



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

SYMBOL	CHARACTERISTIC	TESTCONDITIONS	MIN	TYP	MAX	UNITS
Isc	Short Circuit Current	H = 100 fc, 2850 K	5.75	7.45		$\mu$ A
ΙD	Dark Current	$H = 0, V_R = 10 V$		75	150	pА
Rsh	Shunt Resistance	H = 0, V <sub>R</sub> = 10 mV	1.0	1.5		GΩ
TC Rsh	Rsн Temp. Coefficient	H = 0, V <sub>R</sub> = 10 mV		-8		%/°C
Сı	Junction Capacitance	H = 0, V <sub>R</sub> = 0 V**		800	1000	pF
λrange	Spectral Application Range	Spot Scan	320		730	nm
λр	Spectral Response - Peak	Spot Scan		560		nm
VBR	Breakdown Voltage	I = 10 μA	10	15		V
NEP	Noise Equivalent Power	V <sub>R</sub> = 10 V @ Peak		5x10 <sup>-14</sup>		W/ √ Hz
tr	Response Time	RL = 1 KΩ V <sub>R</sub> = 10 V		500		nS