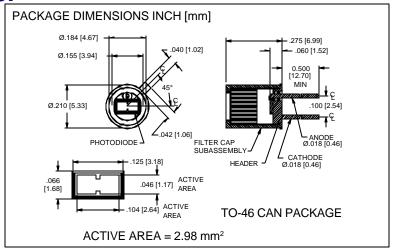
PHOTONIC Silicon Photodiode, Filter Combination Photovoltaic **DETECTORS INC.** (center wavelength 680 nm) Type PDR-V468-46





RESPONSIVITY (AVV)

FEATURES

- 680 nm CWL
- 10 nm FWHM
- · Large active area

DESCRIPTION

The **PDR-V468-46** is a silicon, PIN planar diffused, photodiode with a narrow band interferance filter. The detector filter combination has a narrow 10 nm half bandwidth designed for low noise photovoltaic applications. Packaged in a TO-46 metal cap

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

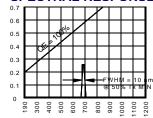
SYMBOL	PARAMETER	MIN	MAX	UNITS
V_{BR}	Reverse Voltage		75	V
T_{stg}	Storage Temperature	-20	+85	°C
То	Operating Temperature Range	-15	+70	°C
Ts	Soldering Temperature*		+240	°С
I _L	Light Current		0.5	mA

^{*1/16} inch from case for 3 secs max

APPLICATIONS

- Spectrophotometry
- Chemistry instrumentation
- Liquid chromatography

SPECTRAL RESPONSE



WAVELENGTH (nm)

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

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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 _R = 10 V		150	300	pА				
RsH	Shunt Resistance	$H = 0$, $V_R = 10 \text{ mV}$	1.0	6		GΩ				
TC Rsh	Rsн Temp. Coefficient	$H = 0, V_R = 10 \text{ mV}$		-8		%/℃				
С	Junction Capacitance	H = 0, V _R = 0 V**		340		pF				
CWL	Center Wavelength	(CWL, λ o) +/- 2 nm		680		nm				
HBW	Half Bandwidth	(FWHM)		10		nm				
V _{BR}	Breakdown Voltage	I = 10 µ A	30	50		V				
N EP	Noise Equivalent Power	V _R = 10 mV @ Peak		5x10 ⁻¹⁴		W/ √Hz				
tr	Response Time	RL = 1 KΩ 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 [FORM NO. 100-PDR-V468-46 REV N/C]