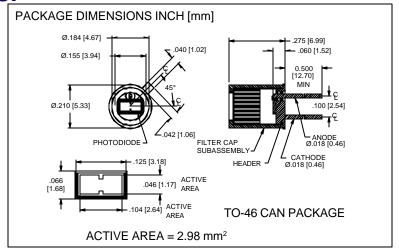
PHOTONIC Silicon Photodiode, Filter Combination Photovoltaic **DETECTORS INC.** 500 nm (blue color) Type PDV-V405-46





RESPONSIVITY (AVV)

FEATURES

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

DESCRIPTION

The **PDV-V405-46** is a silicon, PIN planar diffused, photodiode with a blue color 500 nm +/- 2 nm CWL wide band interferance filter and a wide 70 nm half bandwidth. Ideal for color meters, & photometry and radio-

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

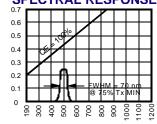
SYMBOL	PARAMETER	MIN	MAX	UNITS
V_{BR}	Reverse Voltage		75	V
T _{stg}	Storage Temperature	-20	+85	°C
To	Operating Temperature Range	-15	+70	°C
Ts	Soldering Temperature*		+240	°C
I _L	Light Current		0.5	mA

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

APPLICATIONS

- · Blue color matching
- Color meters
- Film processing

SPECTRAL RESPONSE



WAVELENGTH (nm)

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

ELECTRO OF HORE OF MICHOTOS (171-20 O difference of follow)									
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	рА			
RsH	Shunt Resistance	$H = 0$, $V_R = 10 \text{ mV}$	1.0	6		GΩ			
TC Rsh	Rsн Temp. Coefficient	H = 0, V _R = 10 mV		-8		%/℃			
Cı	Junction Capacitance	H = 0, V _R = 0 V**		340		pF			
CWL	Center Wavelength	(CWL, λ o) +/- 2 nm		500		nm			
HBW	Half Bandwidth	(FWHM)		70		nm			
V _{BR}	Breakdown Voltage	I = 10 µA	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-PDV-V405-46 REV N/C]