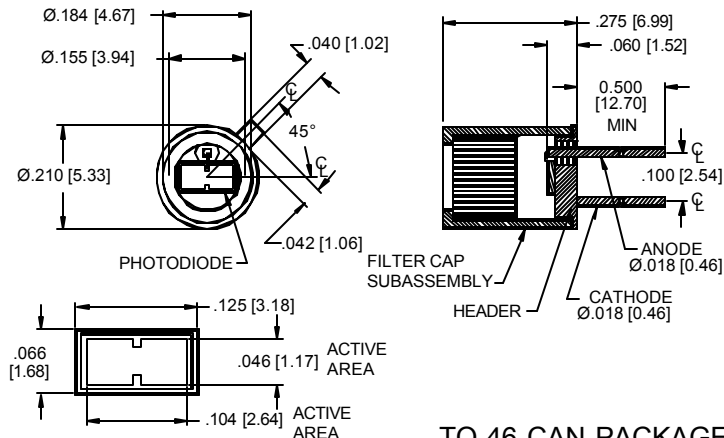


PHOTONIC DETECTORS INC.

Silicon Photodiode, Filter Combination Photoconductive 600 nm (red color) Type PDV-C403-46



PACKAGE DIMENSIONS INCH [mm]



ACTIVE AREA = 2.98 mm²

FEATURES

- 600 nm CWL
- 65 nm FWHM
- Low noise

DESCRIPTION

The **PDV-C403-46** is a silicon, PIN planar diffused, photodiode with a red color 600 nm $\pm$ 2 nm CWL wide band interference filter and a wide 65 nm half bandwidth. Ideal for photometry and radiometry measurement applications.

APPLICATIONS

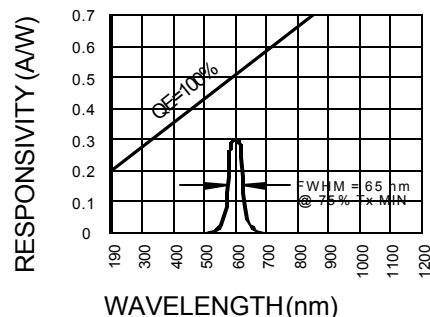
- Red color matching
- Color meters
- Film processing

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
V _{BR}	Reverse Voltage		100	V
T _{STG}	Storage Temperature	-20	+85	°C
T _O	Operating Temperature Range	-15	+70	°C
T _S	Soldering Temperature*		+240	°C
I _L	Light Current		500	mA

*1/16 inch from case for 3 secs max

SPECTRAL RESPONSE



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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _{SC}	Short Circuit Current***	H = 100 fc, 2850 K	40	45		μ A
I _D	Dark Current	H = 0, V _R = 10 V		.15	1.0	nA
R _{SH}	Shunt Resistance	H = 0, V _R = 10 mV	.5	1.0		G Ω
TC R _{SH}	R _{SH} Temp. Coefficient	H = 0, V _R = 10 mV		-8		% / °C
C _J	Junction Capacitance	H = 0, V _R = 10 V**		10		pF
CWL	Center Wavelength	(CWL, λ_o) $\pm$ 2 nm		600		nm
HBW	Half Bandwidth	(FWHM)		65		nm
V _{BR}	Breakdown Voltage	I = 10 μ A	70	100		V
NEP	Noise Equivalent Power	V _R = 10 V @ Peak		1.5x10 ⁻¹⁴		W/ $\sqrt{\text{Hz}}$
tr	Response Time	R _L = 1 K Ω V _R = 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 = 1 MHz, ***without filter

[FORM NO. 100-PDV-C403-46 REV N/C]