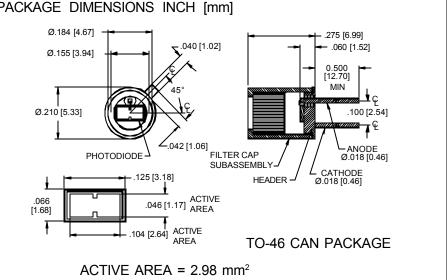
# **PHOTONIC**<br/>Silicon Photodiode, Filter Combination Photoconductive<br/>**DETECTORS INC.**600 nm (red color) Type PDV-C403-46



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**

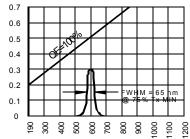
- Red color matching
- Color meters
- Film processing

## **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	$^{\circ}$
To	Operating Temperature Range	-15	+70	°C
Ts	Soldering Temperature*		+240	Ŷ
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=1 MHz, \*\*\* without filter [FORM NO. 100-PDV-C403-46 REVN/C]