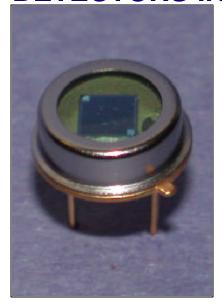
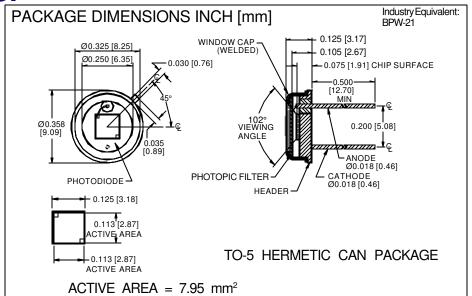
PHOTONIC Silicon Photodiode, Filter Combination Photoconductive **DETECTORS INC.** Visible Spectral Response Range Type PDV-C406-LP





FEATURES

Wide view angle

- Human eye response
- Low noise, low capacitance
- Hermetic package

DESCRIPTION

The **PDV-C406-LP** is a silicon, PIN planar diffused, photodiode with a visible spectral response range. The detector filter combination has a wide bandwidth designed to simulate the spectral response of the human eye. Packaged

in a low profile hermetic TO-5 metal can.

APPLICATIONS

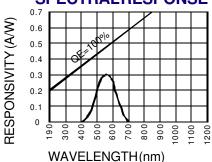
- Photometry
- Radiometry
- Film color processing

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

SYMBOL	PARAMETER	MIN	MAX	UNITS	
VBR	Reverse Voltage		100	V	
T _{STG}	Storage Temperature	-50	+100	⊙C	
То	Operating Temperature Range	-40	+85	∘C	
Ts	Soldering Temperature*		+240	∘C	
IL	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
Isc	Short Circuit Current	H = 100 fc, 2850 K	90	110		μΑ
ΙD	Dark Current	$H = 0, V_R = 10 V$		5	20	nA
RsH	Shunt Resistance	$H = 0, V_R = 10 \text{ mV}$	150	300		MΩ
TC Rsh	RSH Temp. Coefficient	$H = 0, V_R = 10 \text{ mV}$		-8		%/°C
Сı	Junction Capacitance	$H = 0, V_R = 10 V^{**}$		60	150	рF
λ range	Spectral Application Range	Flooded	350		820	nm
λр	Spectral Response Peak	(FWHM)		550		nm
V _{BR}	Breakdown Voltage	I = 10 μμΑ	75	100		V
NEP	Noise Equivalent Power	V _R = 10 V @ Peak		5x10 ⁻¹⁴		W/ √ Hz
tr	Response Time	$RL = 1 K\Omega V_R = 10 V$		50		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