

FEATURES

- Visible response
- Low dark current
- Good linearity
- Low noise

DESCRIPTION

The **PDV-V418** is a silicon PIN photodiode, with a built in visible pass, I.R. blocking optical filter. Housed in a black ceramic package with two leads. Designed for photovoltaic operation with 0 volt bias.

APPLICATIONS

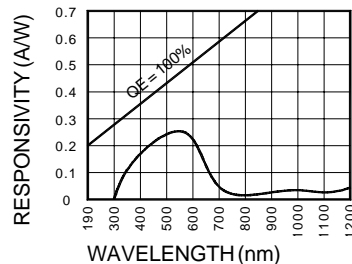
- Camera exposure meter
- Light meters
- Visible detector

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
V _{BR}	Reverse Voltage		10	V
T _{STG}	Storage Temperature	-20	+80	°C
T _O	Operating Temperature Range	-20	+60	°C
T _S	Soldering Temperature*		+240	°C
I _L	Light Current		0.5	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	5.75	7.45		μA
I _D	Dark Current	H = 0, V _R = 10 V		75	150	pA
R _{SH}	Shunt Resistance	H = 0, V _R = 10 mV	1.0	1.5		GΩ
TC _{RSH}	R _{SH} Temp. Coefficient	H = 0, V _R = 10 mV		-8		% / °C
C _J	Junction Capacitance	H = 0, V _R = 0 V**		800	1000	pF
λ _{range}	Spectral Application Range	Spot Scan	320		730	nm
λ _p	Spectral Response - Peak	Spot Scan		560		nm
V _{BR}	Breakdown Voltage	I = 10 μA	10	15		V
NEP	Noise Equivalent Power	V _R = 10 V @ Peak		5x10 ⁻¹⁴		W/√Hz
tr	Response Time	RL = 1 KΩ V _R = 10 V		500		nS