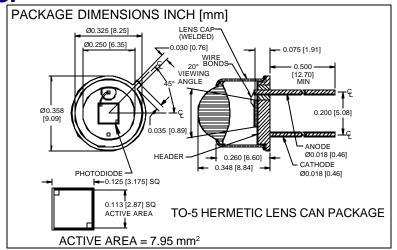
PHOTONIC Silicon Photodiode, Blue Enhanced Photovoltaic DETECTORS INC. (OP913WSL Industry Equivalent) Lens Type PDB-V119L





FEATURES

- Narrow angle
- · High speed
- Large active area
- Low dark current

DESCRIPTION

The PDB-V119L is a silicon, PIN planar diffused, blue enhanced photodiode. Ideal for low noise photovoltaic applications. Packaged in a hermetic TO-5 metal can with a glass lens window cap.

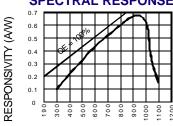
APPLICATIONS

- Bar code detector
- Encoder sensor
- Laser detection
- Instrumentation

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

PARAMETER	MIN	MAX	UNITS
Reverse Voltage		75	V
Storage Temperature	-55	+150	°C
Operating Temperature Range	-40	+125	°C
Soldering Temperature*		+240	°C
Light Current		0.5	mA
	Reverse Voltage Storage Temperature Operating Temperature Range Soldering Temperature*	Reverse Voltage Storage Temperature -55 Operating Temperature Range -40 Soldering Temperature* Light Current	Reverse Voltage 75 Storage Temperature -55 +150 Operating Temperature Range -40 +125 Soldering Temperature* +240 Light Current 0.5

SPECTRAL RESPONSE



WAVELENGTH (nm)

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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
lsc	Short Circuit Current	H = 100 fc, 2850 K	60	80		μΑ
ΙD	Dark Current	$H = 0, V_{R} = 10 \text{ mV}$		10	50	pА
Rsh	Shunt Resistance	$H = 0, V_{R} = 10 \text{ mV}$.2	1		GΩ
TC Rsh	RSH Temp. Coefficient	$H = 0, V_{R} = 10 \text{ mV}$		-8		%/℃
Cı	Junction Capacitance	$H = 0, V_R = 0 V^{**}$		800	1000	pF
λrange	Spectral Application Range	Spot Scan	350		1100	nm
λр	Spectral Response - Peak	Spot Scan		950		nm
V _{BR}	Breakdown Voltage	I = 10 µ A	5	10		V
N EP	Noise Equivalent Power	V _R = 10 V @ Peak		9x10 ⁻¹⁵		W/ √ Hz
tr	Response Time	$RL = 1 K\Omega V_R = 0 V$		750		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 [FORM NO. 100-PDB-V119L REV A]