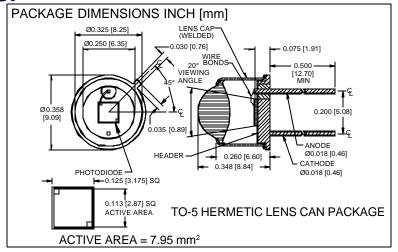
PHOTONIC
Silicon Photodiode, Blue Enhanced Photoconductive
DETECTORS INC. (OP913SL Industry Equivalent) Lens Type PDB-C119L





FEATURES

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

DESCRIPTION

The **PDB-C119L** is a silicon, PIN planar diffused, blue enhanced photodiode. Ideal for high speed photoconductive applications. Packaged in a hermetic TO-5 metal can with a glass lens window cap.

APPLICATIONS

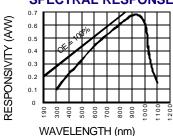
- Bar code detector
- Encoder sensor
- Laser detection
- Instrumentation

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
V _{BR}	Reverse Voltage		100	V
T _{STG}	Storage Temperature	-55	+150	°C
To	Operating Temperature Range -40		+125	°C
Ts	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
lsc	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		%/℃
Cı	Junction Capacitance	$H = 0, V_R = 10 V^{**}$		60	150	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.Α	75	100		V
N EP	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 [FORM NO. 100-PDB-C119L REV A]