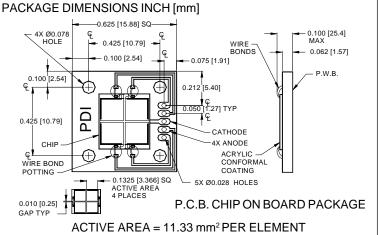
PHOTONIC <u>DETECTORS INC.</u>

Silicon Photodiode, Blue Enhanced Photoconductive Quadrant Type PDB-C206



FEATURES

- Narrowgap
- P.C.B. mount
- Blue enhanced
- Large active area

DESCRIPTION

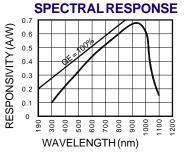
The **PDB-C206** is a silicon, pin planar diffused, blue enhanced large area quadrant photodiode. Each element is 11.33 mm² with a .010 inch (0.25 mm) gap. Packaged on a .062 inch thick P.C.B. chip on board.

APPLICATIONS

- Optical alignment
- · Position sensing
- Edge sensing
- Instrumentation

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
Vbr	Reverse Voltage		100	V
T _{stg}	Storage Temperature	-50	+125	°C
To	Operating Temperature Range	-40	+100	°C
Ts	Soldering Temperature*		+240	°C
Ι	Light Current		0.5	mA



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	100	185		μ A
ΙD	Dark Current	H = 0, V _R = 10 V		10	50	nA
Rsн	Shunt Resistance	H = 0, V _R = 10 mV	50	100		MΩ
TC Rsh	RsH Temp. Coefficient	H = 0, V _R = 10 mV		-8		%/°C
CJ	Junction Capacitance	H = 0, V _R = 10 V		50		pF
λrange	Spectral Application Range	Spot Scan	350		1100	nm
λρ	Spectral Response - Peak	Spot Scan		950		nm
Vbr	Breakdown Voltage	I = 10 μA	50	75		V
NEP	Noise Equivalent Power	V _R = 10 V @ Peak		1.0x10 ⁻¹⁴		W/ √ Hz
tr	Response Time	$RL = 1 K\Omega V_R = 10 V$		25		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. [FORM NO. 100-PDB-C206 REV A]