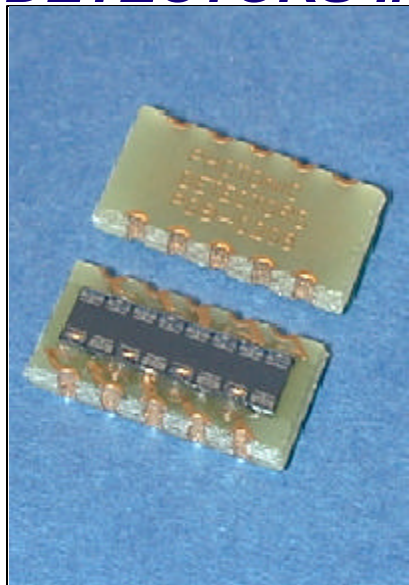
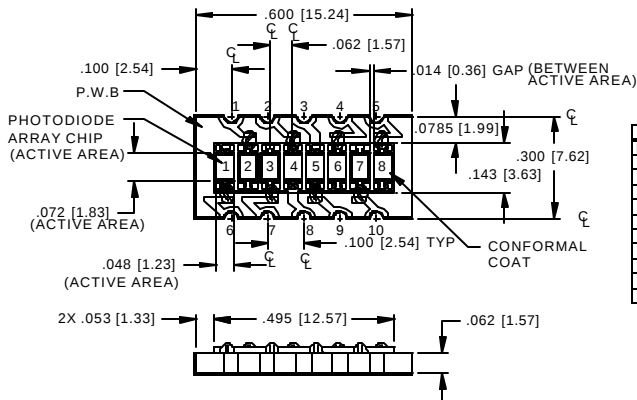


PHOTONIC DETECTORS INC.

Silicon Photodiode Array, Photovoltaic 8 element Type PDB-V208



PACKAGE DIMENSIONS INCH (mm)



PIN CONNECTIONS	
ELEMENT NO.	PIN NO.
1	6
2	1
3	7
4	2
5	9
6	4
7	10
8	5
CATHODE	3
CATHODE	8

SURFACE MOUNT PCB PACKAGE

ACTIVE AREA = 2.31 mm² per element

FEATURES

- .062 inch centers
- Low cost
- Blue enhanced
- Low dark current

DESCRIPTION

The **PDB-V208** is a silicon, PIN planar diffused, blue enhanced linear array photodiode. Ideal for low noise photovoltaic applications. Packaged in low profile surface mount PCB substrate.

APPLICATIONS

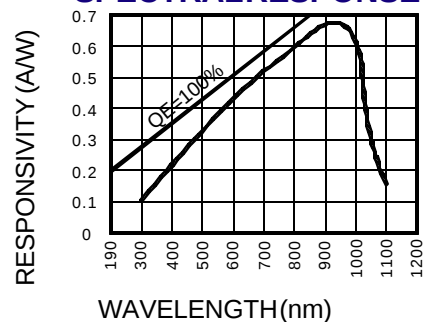
- Cardreader
- Scanners
- Instrumentation
- Character recognition

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
V _{BR}	Reverse Voltage		50	V
T _{STG}	Storage Temperature	-40	+100	°C
T _O	Operating Temperature Range	-20	+75	°C
T _S	Soldering Temperature*		+265	°C
I _L	Light Current		0.5	mA

*edge of PCB for 3secs 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	18	28		μA
I _D	Dark Current	H = 0, V _R = 1 V		1.0	5.0	nA
R _{SH}	Shunt Resistance	H = 0, V _R = 10 mV	200	400		MΩ
TC R _{SH}	R _{SH} Temp. Coefficient	H = 0, V _R = 10 mV		-8		% / °C
C _J	Junction Capacitance	H = 0, V _R = 0 V**		300	400	pF
λ _{range}	Spectral Application Range	Spot Scan	350		1100	nm
λ _p	Spectral Response - Peak	Spot Scan		950		nm
V _{BR}	Breakdown Voltage	I = 10 μA	15	30		V
NEP	Noise Equivalent Power	V _R = 10 V @ Peak		2x10 ⁻¹⁴		W/√Hz
tr	Response Time	RL = 50 Ω 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-V208 REV E]