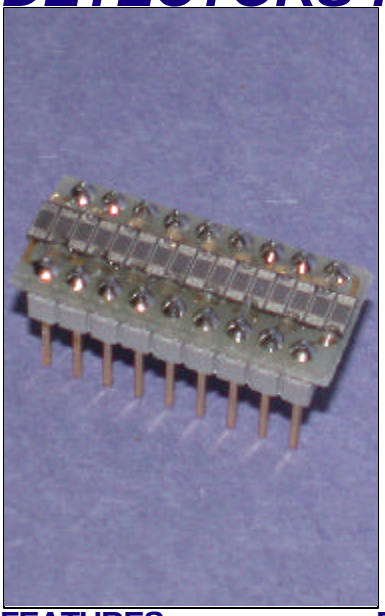
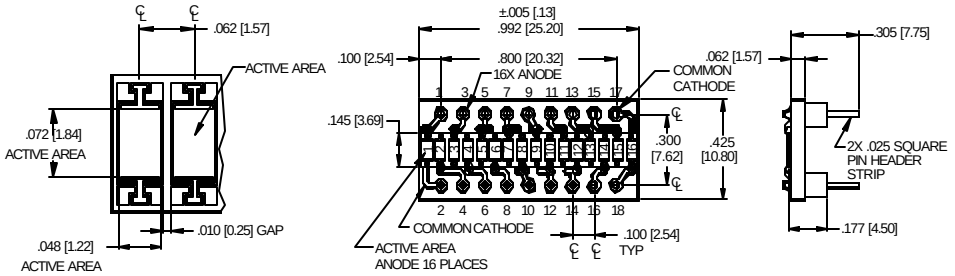
PHOTONIC DETECTORS INC.

Silicon Photodiode Array, Photovoltaic
16 element Type PDB-V216



PACKAGE DIMENSIONS INCH [mm]



PIN CONNECTIONS			
ELEMENT NO.	PIN NO.	ELEMENT NO.	PIN NO.
1	1	10	12
2	4	11	11
3	3	12	14
4	6	13	13
5	5	14	16
6	8	15	15
7	7	16	18
8	10	CATHODE	2
9	9	CATHODE	17

PWB PACKAGE WITH TERMINAL STRIP

ACTIVE AREA = 2.31mm^2

FEATURES

- .062 inch centers
- Stackable
- Blue enhanced
- Low cost

DESCRIPTION

The **PDB-V216** is a common cathode, monolithic silicon PIN photodiode linear array. Designed to be stacked end to end to form a line of pixels. Plugable into Mill-Max or 3M terminal receptacles.

APPLICATIONS

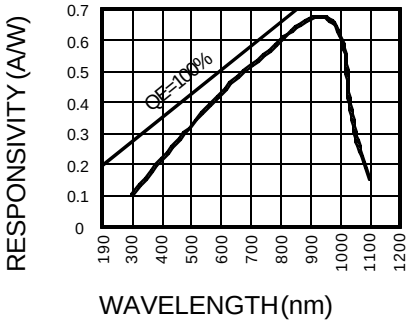
- Cardreader
- Scanners
- Characterrecognition

ABSOLUTE MAXIMUM RATING (TA=25^{O}C unless otherwise noted)

SYMBOL	PARAMETER	MIN	MAX	UNITS
V_{BR}	Reverse Voltage		50	V
T_{STG}	Storage Temperature	-40	+100	^{O}C
T_{O}	Operating Temperature Range	-20	+75	^{O}C
T_{S}	Soldering Temperature*		+265	^{O}C
I_{L}	Light Current		0.5	mA

*1/16 inch from case for 3 secs max

SPECTRAL RESPONSE



ELECTRO-OPTICAL CHARACTERISTICS (TA=25^{O}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
TCR_{SH}	RSH Temp. Coefficient	H = 0, V_R = 10 mV		-8		% / ^{o}C
C_{J}	Junction Capacitance	H = 0, V_R = 0 V**		300	400	pF
λrange	Spectral Application Range	Spot Scan	350		1100	nm
λp	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/$\sqrt{Hz}$
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-V216 REV D]