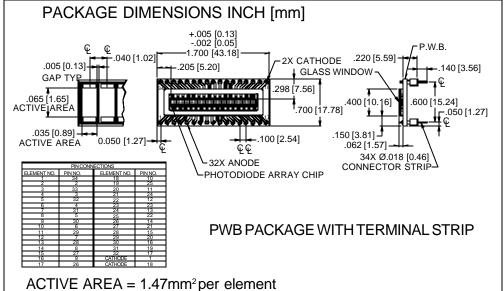
# PHOTONIC DETECTORS INC.

# Silicon Photodiode Array, Photoconductive 32 Element Type PDB-C232





#### **FEATURES**

- .100 inch centers
- Uniform outputs (\*/-5%)
- Blue enhanced
- Low crosstalk (+/-2%)

# **DESCRIPTION**

The **PDB-C232** is a common cathode, monolithic silicon PIN photodiode linear array. Packaged on a custom P.C.B. substrate, with dual .100 inch center terminal strips.

#### **APPLICATIONS**

- Card reader
- Scanners

RESPONSIVITY (A/W)

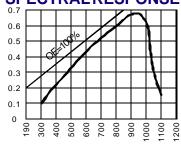
Character recognition

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
$V_{\mathtt{BR}}$	Reverse Voltage		50	V
T <sub>STG</sub>	Storage Temperature	-50	+100	οС
T <sub>o</sub>	Operating Temperature Range	-40	+75	οС
T <sub>s</sub>	Soldering Temperature*		+265	οС
IL	Light Current		0.5	mA

<sup>\*1/16</sup> inch from case for 3 secs max

# **SPECTRAL RESPONSE**



WAVELENGTH (nm)

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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
l <sub>sc</sub>	Short Circuit Current	H = 100 fc, 2850 K	7.5	11		μΑ
I <sub>D</sub>	Dark Current	$H = 0, V_R = 5 V$		100	150	pA
R <sub>SH</sub>	Shunt Resistance	$H = 0, V_R = 10 \text{ mV}$	100	250		МΩ
TCR <sub>SH</sub>	RSH Temp. Coefficient	$H = 0, V_R = 10 \text{ mV}$		-8		%/℃
C <sub>J</sub>	Junction Capacitance	$H = 0, V_R = 0 V^{**}$		30		pF
λrange	Spectral Application Range	Spot Scan	350		1100	nm
λр	Spectral Response - Peak	Spot Scan		950		nm
$V_{BR}$	Breakdown Voltage	I = 10 µA	30	75		V
NEP	Noise Equivalent Power	V <sub>R</sub> = 10 V @ Peak		1x10 <sup>-14</sup>		W/√ <sub>Hz</sub>
tr	Response Time	$RL = 50 \Omega V_R = 10 V$		200		nS