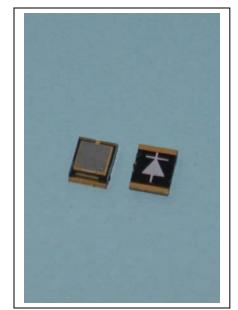
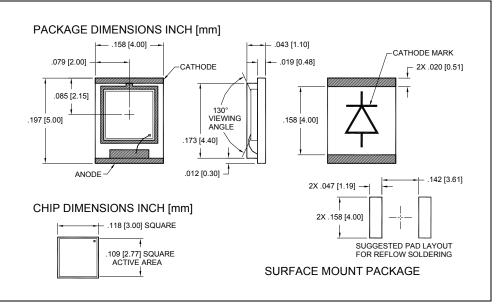
Photodiode in Plastic Surface Mount Package

Advanced Photonix Inc.

www.DataSheet4U.com

PDB-C171SM





FEATURES

- Surface mount
- Photoconductive
- Low cost
- · High speed

DESCRIPTION

The **PDB-C171SM** is a blue enhanced PIN silicon photodiode ideal for high speed photoconductive or photovoltaic applications packaged in a water clear surface mount package.

APPLICATIONS

- Photointerrupters
- · Oximeter sensors
- Barcode
- Glucometers

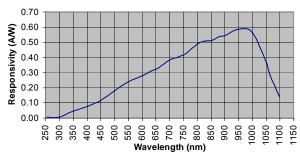


ABSOLUTE MAXIMUM RATING (TA)= 23°C UNLESS OTHERWISE NOTED

SYMBOL	PARAMETER	MIN	MAX	UNITS
V_{BR}	Reverse Voltage		60	V
T _{STG}	Storage Temperature	-55	+100	°C
To	Operating Temperature	-40	+80	°C
Ts	Soldering Temperature*		+260	°C

^{* 1/16} inch from case for 3 seconds max.

SPECTRAL RESPONSE



ELECTRO-OPTICAL CHARACTERISTICS RATING (TA)= 23°C UNLESS OTHERWISE NOTED

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _{sc}	Short Circuit Current	H = 100 fc, 2850 K		90		μ A
I _D	Dark Current	V _R = 10 V		4	30	nA
R_{SH}	Shunt Resistance	$V_R = 10 \text{ mV}$		400		$M\Omega$
CJ	Junction Capacitance	$V_R = 10 \text{ V}, \ f = 1 \text{ MHz}$		15		pF
λ range	Spectral Application Range	Spot Scan	400		1100	nm
V_{BR}	Breakdown Voltage	I = 10 μA	60			V
NEP	Noise Equivalent Power	V_R = 10V @ $\lambda =$ Peak		4x10 ⁻¹⁴		W/ √ _{Hz}
t _r	Response Time	$RL = 1K\Omega, V_R = 10 V$		20		nS

^{**}Response time of 10% to 90% is specified at 660nm wavelength light.

Information in this technical datasheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice.