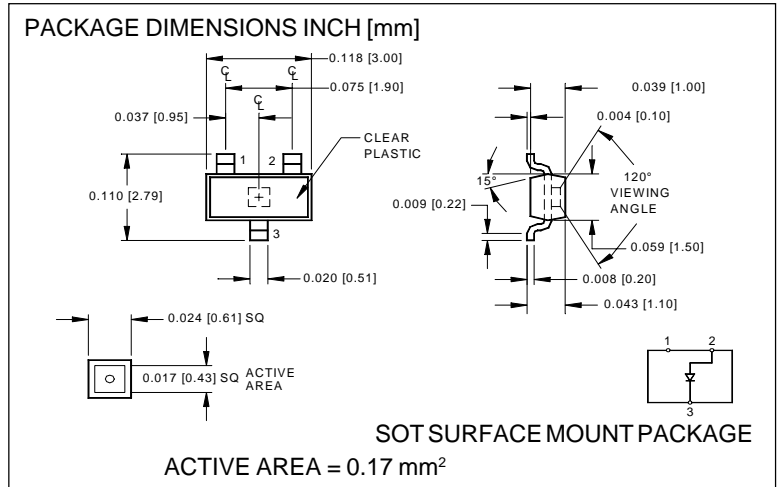


PHOTONIC DETECTORS INC.

Silicon Photodiode, Blue Enhanced Photoconductive surface mount package Type PDB-C150SM



FEATURES

- Surface mount
- Low cost
- Tape and reeled
- High speed

DESCRIPTION

The **PDB-C150SM** is a silicon, PIN planar diffused, blue enhanced photodiode. Ideal for high speed photoconductive applications. Packaged in water clear SOT, surface mount package.

APPLICATIONS

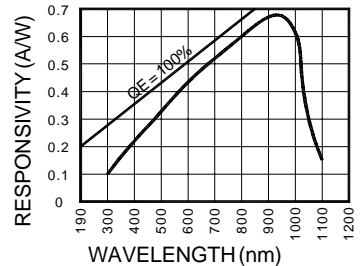
- Floppy disk drives
- Industrial controls
- Opto switches
- Opto counters

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	+125	°C
T _O	Operating Temperature Range	-40	+80	°C
T _S	Soldering Temperature*		+240	°C
I _L	Light Current		500	mA

*1/16 inch from case for 3 secs 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 = 1000 Lux, 2850 K	1.0	2		μA
I _D	Dark Current	H = 0, V _R = 10 V		2	30	nA
R _{SH}	Shunt Resistance	H = 0, V _R = 10 mV		100		MΩ
TC _{RSH}	R _{SH} Temp. Coefficient	H = 0, V _R = 10 mV		-8		% / °C
C _J	Junction Capacitance	H = 0, V _R = 0 V**		1	5	pF
λ _{range}	Spectral Application Range	Spot Scan	400		1100	nm
λ _p	Spectral Response - Peak	Spot Scan		950		nm
V _{BR}	Breakdown Voltage	I = 10 μA	30	100		V
NEP	Noise Equivalent Power	V _R = 10 V @ Peak		2.5x10 ⁻¹⁵		W/√Hz
tr	Response Time	RL = 1 KΩ V _R = 10 V		6.0		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-C150SM REV B]