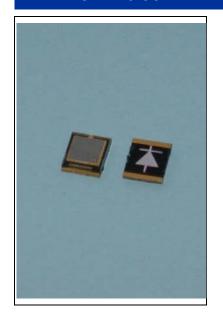
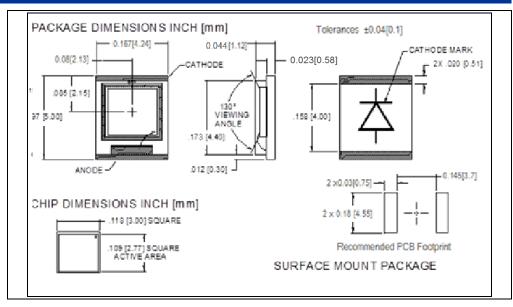


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DESCRIPTION

The **PDB-C171SM** is a blue enhanced PIN silicon photodiode ideal for high speed photoconductive or photovoltaic applications assembled in a compact surface mount package.SMD package classified as a sensitivity level 2.

RELIABILITY

Contact Luna for recommendations on specific test conditions and procedures.

FEATURES

- Surface Mount
- Photoconductive
- High Speed
- Low cost

APPLICATIONS

- Photointerrrupters
- Oximeter sensors
- Barcode
- Glucometers



ABSOLUTE MAXIMUM RATINGS

SYMBOL	MIN		MAX	UNITS	
Reverse Voltage	-	-	60	V	T _a = 23°C UNLESS OTHERWISE NOTED
Storage Temperature	-40	-	+80	°C	-
Operating Temperature	-40	to	+100	°C	-
Soldering Temperature	-	-	+260	°C	-
Wavelength Range	400	-	1050	Nm	
Maximum Power Dissipation	-	-	215	MW	

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



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OPTO-ELECTRICAL PARAMETERS

T_a = 23°C UNLESS NOTED OTHERWISE

PARAMETER	TEST CONDITIONS	MIN	ТҮР	MAX	UNITS
Breakdown Voltage	$I_{bias} = 10 \mu A$	60	-	-	V
Responsivity	λ= 900 nm	0.60	0.68	-	A/W
Responsivity	λ= 1050 nm	-	0.3	-	A/W
Dark Current	V _{bias} = 10V	-	2	30	nA
Capacitance	$V_{bias} = 3V; f = 1 MHz$	-	25	-	pF
Rise Time (1KΩ load)	$V_{bias} = 10V; \lambda = 820 \text{ nm}$	-	100	-	ns
Noise Equivalent Power	λ= 950 nm Vr=10V	-	4X10 ⁻¹⁴	-	W/√Hz

TYPICAL PERFORMANCE

SPECTRAL RESPONSE

