

PDB-C152SM



FEATURES

- Large Active Area
- Photoconductive
- High Speed
- Low Cost

DESCRIPTION

The **PDB-C152SM** is a blue enhanced PIN silicon photodiode packaged in a water clear surface mount package.

APPLICATIONS

- Industrial Controls
- Opto Switches
- Opto Counters

> Absolute Maximum Ratings

Part No.	Reverse Voltage [V]	Operating Temperature [C]	Storage Temperature [C]	Package
PDB-C152SM	50	-40 to +105	-50 to +125	1206

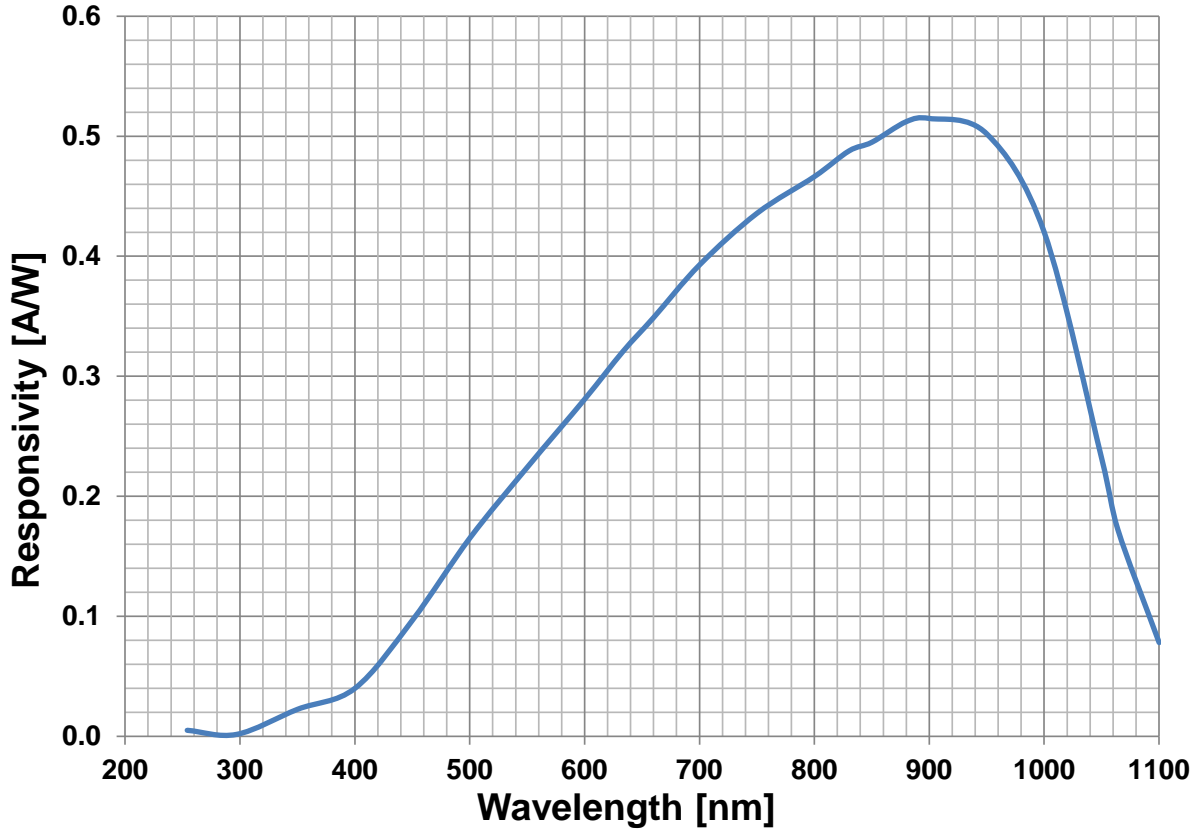
> Electrical and Optical Characteristics

Typical Characteristics (T=23°C unless specified)						
Parameter	Test Conditions	Symbol	Min	Typical	Max	Unit
Short Circuit Current	H= 100 fc, 2850 K	I _{SC}	8	10	-	μA
Dark Current	V _R = 10 V	I _D	-	2	10	nA
Shunt Resistance	V _R = 10 mV	R _{SH}	500	-	-	GΩ
Junction Capacitance	V _R = 10V; f = 1 MHz	C _J	-	15	20	pF
Spectral Application Range	Spot Scan	λ	400	-	1100	nm
Breakdown Voltage	I = 10 μA	V _{BD}	50	100	-	V
Noise Equivalent Power	V _R = 10V @ λ = Peak	NEP	-	1.5x10 ⁻¹³	-	W/√Hz
Response Time**	RL = 1KΩ, V _R = 50 V	T _R	-	50	-	nS

> Soldering

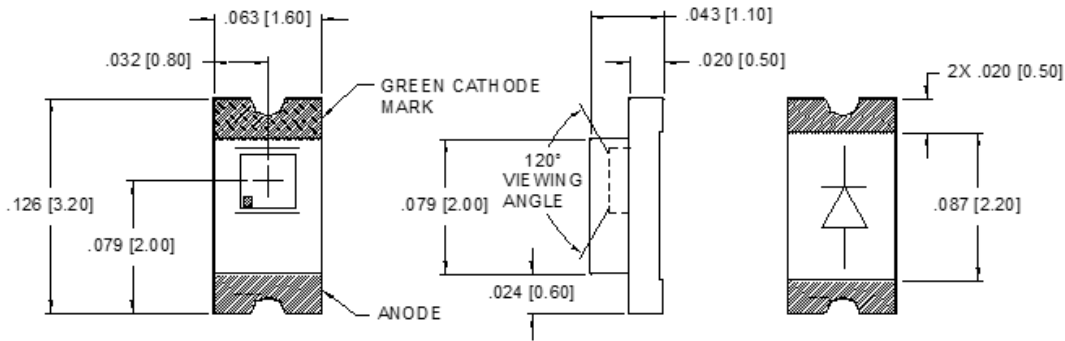
Recommendation		
Wave	Not Advised	-
IR Oven Reflow	Allowed	See Reflow Profile
Forced Convection Reflow	Recommended	See Reflow Profile
Convection Reflow	Recommended	See Reflow Profile
Vapor Phase Reflow	Recommended	See Reflow Profile
Manual	Allowed	260°C for 3 seconds max.
Moisture Sensitivity Level	3	J-STD-033

> Spectral Response

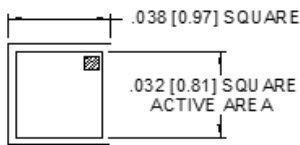


> Package Drawing

PACKAGE DIMENSIONS INCH [mm]

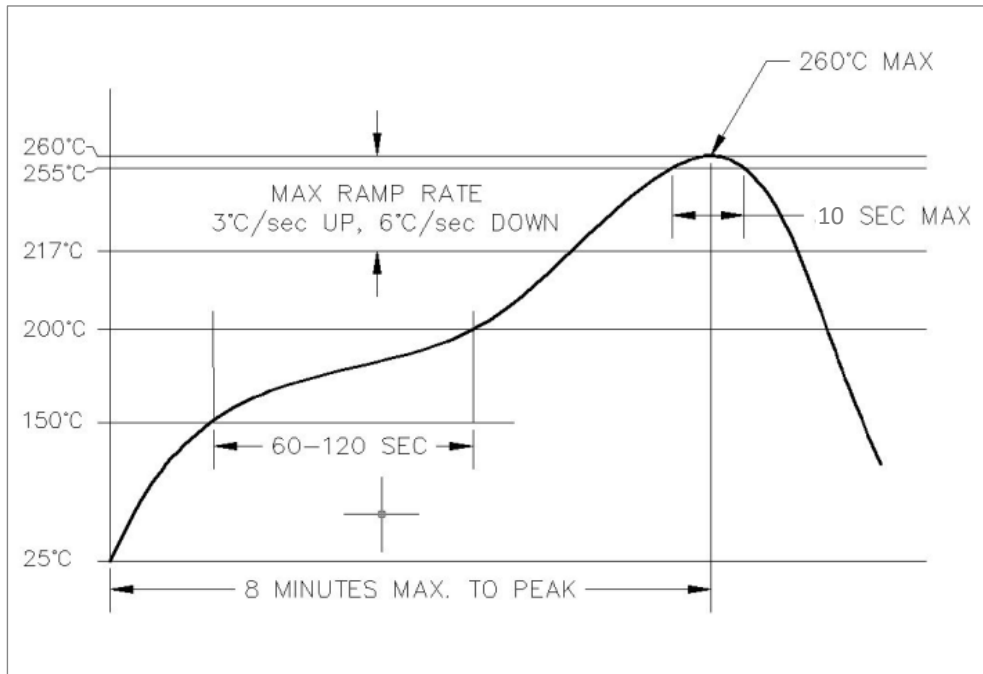


CHIP DIMENSIONS INCH [mm]



SURFACE MOUNT PACKAGE

> Reflow Profile

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MATERIALS SAFETY

This product is free of conflict minerals and meets REACH compliance. Please see website for reports.