

Spec. No.: HL5060-2P091B-NNNN

Issued Date: 2016-12-5

# SPECIFICATION

Model Name: Detector

Model NO. : HL5060-2P091B

Customer No.:

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## Detector

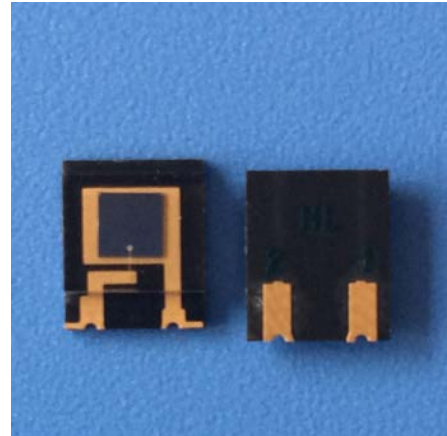
HL5060-2P091B

### ■Features

- Especially suitable for applications of 980nm.
- Short switching time

### ■Applications

- SPO2
- Optical module
- IR Remote controls of various equipment



Name	Model No.	Chip Size		Package
Detector	HL5060-2P091B	5.29mm <sup>2</sup>	2.30mm×2.30mm	2-Pin, COB

### ■Absolute Maximum Ratings at Ta=25℃

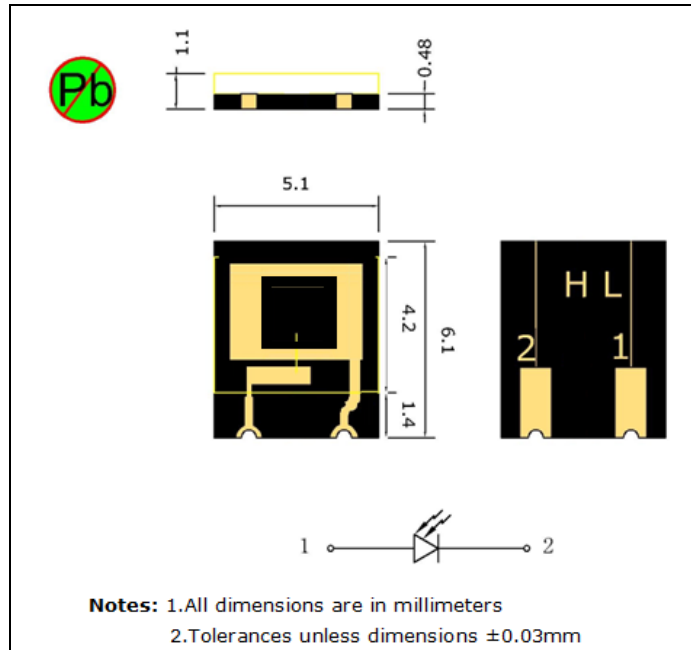
Parameter 参数	symbol 符号	Max.最大值	unit 单位	Note 备注
Operating Temperature	T <sub>opr</sub>	-25~+85	℃	---
Storage Temperature	T <sub>Stg</sub>	-40~+100	℃	---
Soldering Temperature	T <sub>SO1</sub>	≤260	℃	260℃ for 5 Seconds (260 度小于等于 5 秒)

### ■Electrical / Optical Characteristics at TA=25 ℃

Parameter	Symbol	Min.	Typ.	Max.	Units	Test Conditions
Forward Voltage	V <sub>F</sub>	--	--	1.25	V	IF=20mA
Reverse Breakdown Voltage	V <sub>BR</sub>	80	--	--	V	IR=10uA
Dark Current	I <sub>D</sub>	--	--	10	nA	VR=10V
Short Circuit current	I <sub>sc</sub>	36	46	--	uA	Note(1)
Open Circuit Voltage	V <sub>op</sub>	0.3	0.4	--	V	Note(1)
Peak Sensing Wavelength	λ <sub>p</sub>	--	980	--	nm	--
Spectral Bandwidth	Δ0.5	450	--	1000	nm	--
Junction Temperature	T <sub>J</sub>	--	150	--	℃	--

Note(1): Parallel Light of 1000lux illumination is applied by a tungsten lamp of 2856k

### ■ Dimension:



**Notes:** 1. All dimensions are in millimeters  
2. Tolerances unless dimensions  $\pm 0.1\text{mm}$

### ■ Storage and Soldering Condition

1. Do not open moisture proofs bag before the products are ready to use
2. Before opening the package, the LEDs should be kept at  $30^{\circ}\text{C}$  or less and 90% RH or less.
3. The LEDs should be used within a year.
4. After opening the package, the LEDs should be kept at  $30^{\circ}\text{C}$  or less and 70% RH or less.
5. The LEDs should be used within 168 hours (7 days) after opening the package.
6. If the moisture adsorbent material (silica gel) has fabled away or the LEDs have exceeded the storage time, baking treatment should be performed using the following conditions. Baking treatment:  $60\pm 5^{\circ}\text{C}$  for 24 hours.
7. When soldering, do not put stress on the LEDs during heating.
8. After soldering, do not warp the circuit board
9. Each terminal is to go to the tip of soldering iron temperature less than  $260^{\circ}\text{C}$  for 5 seconds within once in less than the soldering iron capacity 25W. Leave tow seconds and more intervals, and do soldering of each terminal. Be careful because the damage of the product is often started at the time of the hand solder.