Technical Data Sheet

PIN Photodiode Array：PDA61620

■ Features

. Photosensitive area of 2.3x161 mm composed of multiple photodiodes

. Fast response time

. High photo sensitivity

. Pb free

. The product itself will remain within RoHS compliant version.

■ Descriptions

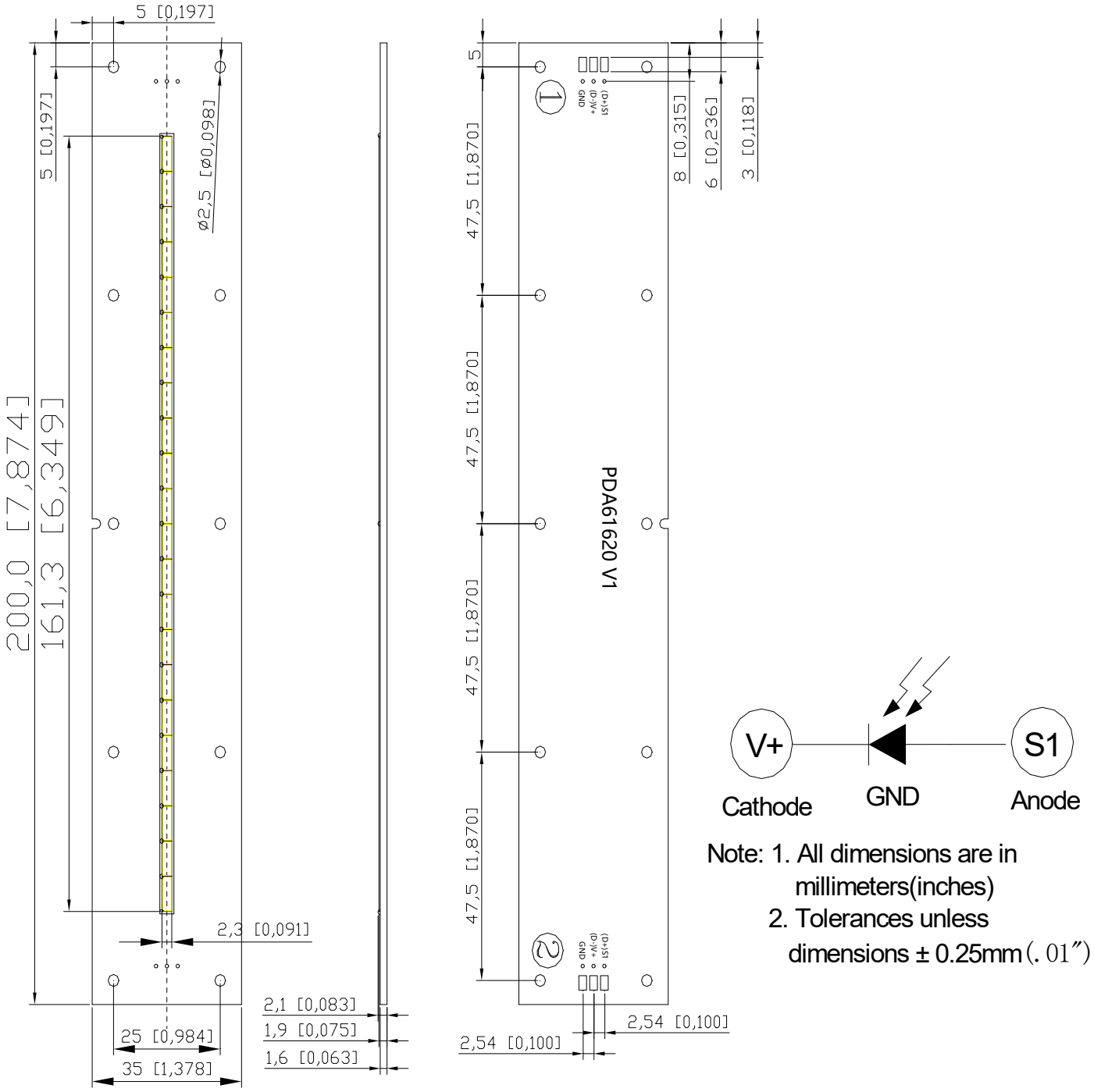
PDA61620 is a high sensitive and high speed silicon photodiodes mounted on PCB. Spliced into a long strip photo diode, The photosensitive area is 161 millimeters long and 2.3 millimeters wide.

■ Applications

. Window sensor

. Microcurrent power supply

■ Package Dimensions



Note: 1. All dimensions are in millimeters(inches)
2. Tolerances unless dimensions ± 0.25mm (. 01″)

■ Absolute Maximum Ratings (Ta=25℃)

Parameter	Symbol	Rating	Units
Reverse Voltage	VR	30	V
Power Dissipation	Pd	150	mW
Lead Soldering Temperature	Tsol	260	℃
Operating Temperature	Topr	-20～+85	℃
Storage Temperature	Tstg	-40～+85	℃

■ Electro-Optical Characteristics (Ta=25℃)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Range of Spectral Bandwidth	$\lambda_{0.5}$	---	400	---	1100	nm
Wavelength of Peak Sensitivity	λ_p	---	---	940	---	nm
Open-Circuit Voltage	V_{OC}	Note(1)	---	0.39	---	V
Short- Circuit Current	I_{SC}	Note(1)	---	3000	---	μA
Reverse Light Current	I_L	Note(1) V_R=5V	---	3000	---	μA
Dark Current	Id	Ee=0m W/cm2 V_R=10V	---	---	250	nA
Reverse Breakdown Voltage	BV_R	Ee=0m W/cm2 I_R=100 μA	60	---	---	V
Total Capacitance	Ct	Ee=0m W/cm2 V_R=5V f=1MHZ	---	500	---	pF
Rise/Fall Time	t_r/t_f	V_R=10V R_L=1KΩ		500/500		nS

Note(1):Parallel light of Ee=5mW/cm2 illumination is applied by a Tungsten lamp of 2856K

■ Typical Electro-Optical Characteristics Curves

Fig.1 Spectral Sensitivity

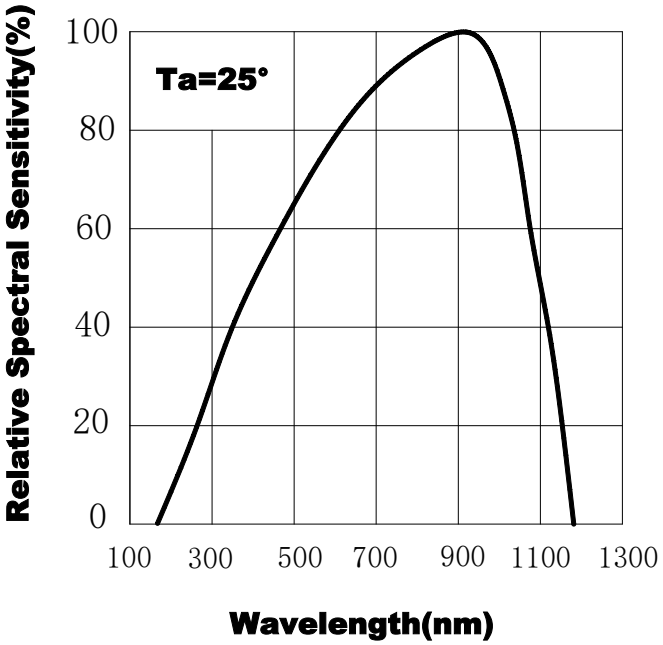


Fig.2 Dark Current vs. Ambient Temperature

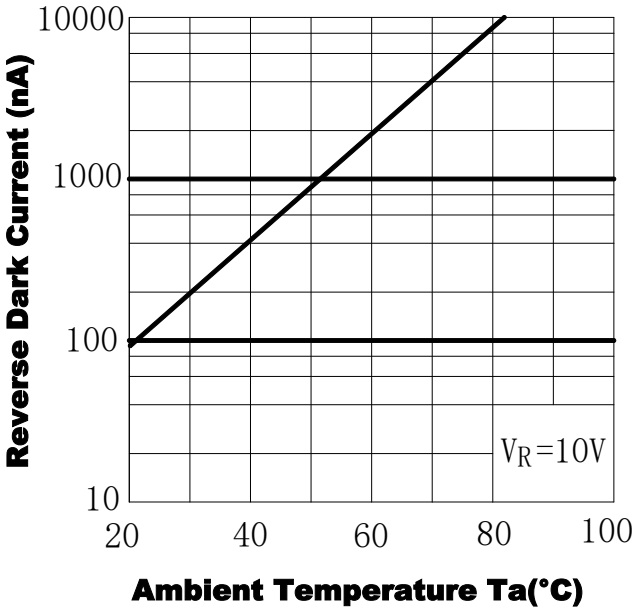


Fig.3 Reverse Light Current vs. Ee

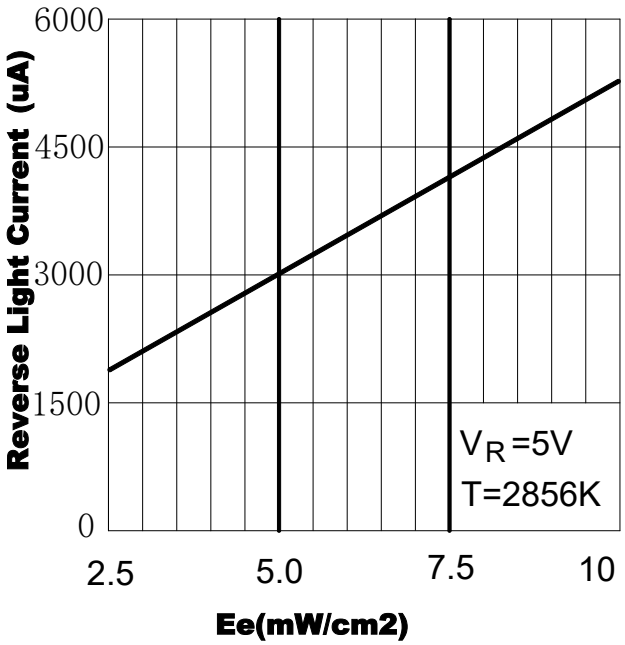


Fig.4 Terminal Capacitance vs. Reverse Voltage

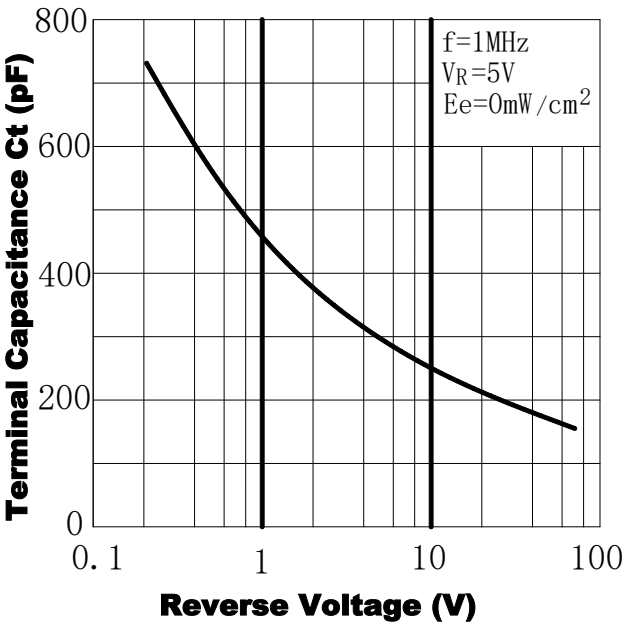
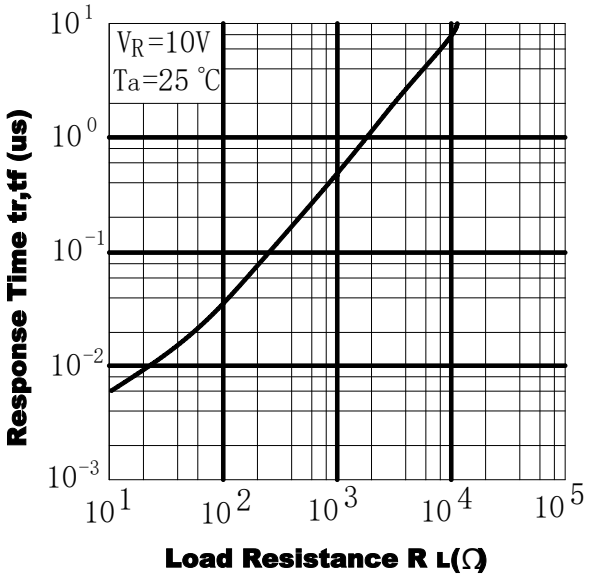


Fig.5 Response Time vs. Load Resistance



■ Notes

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2. When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. SHUGUAN assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
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5. Condensation may form on the chip surface in environments subject to sharp or sudden fluctuations in temperature, so avoid use in such locations.
6. Applying excessive force to the product using a printed circuit board may cause the board to warp. This warping may damage the chip,wires connections, so use caution.
7. Do not let anything come in contact with the chip surface. Though the chip is hard, it is also brittle an easily notched. Sharped or hard items that come in contact with the chip may case cracks or scratches, which can lead to fluctuations in electrical characteristics or poor device reliability.
8. This kind of products due to the customer's external dimensions, performance parameters and other requirements are different, standard products are difficult to meet customer needs, the company provides customized services, can be developed and designed by our company new products, can also provide customers with processing and generation services.