

3mm Photodiode PD204-6B

Features

- Fast response time
- High photo sensitivity
- Small junction capacitance
- Pb free
- This product itself will remain within RoHS compliant version.
- Compliance with EU REACH



Description

PD204-6B is a high speed and high sensitive PIN photodiode in a standard 3Φ plastic package. The device is Spectrally matched to visible and infrared emitting diode.

Applications

- Automatic door sensor
- Copier
- Game machine

产品规格咨询热线：梁 SR 18148584520（微信同号）

Device Selection Guide

Chip Materials	Lens Color
Silicon	Black

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Reverse Voltage	V_R	32	V
Operating Temperature	T_{opr}	-40 ~ +85	°C
Storage Temperature	T_{stg}	-40 ~ +100	°C
Soldering Temperature	T_{sol}	260	°C
Power Dissipation at (or below) 25°C Free Air Temperature	P_c	150	mW

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Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Range Of Spectral Bandwidth	$\lambda_{0.5}$	840	-----	1100	nm	-----
Wavelength Of Peak Sensitivity	λ_p	-----	940	-----	nm	-----
Open-Circuit Voltage	V_{OC}	-----	0.42	-----	V	Ee=1mW/cm ² λ_p =940nm
Short- Circuit Current	I_{SC}	-----	3.0	-----	μA	Ee=1mW/cm ² λ_p =940nm
Reverse Light Current	I_L	1.0	3.0	----	μA	Ee=1mW/cm ² λ_p =940nm V_R =5V
Reverse Dark Current	I_D	----	----	10	nA	Ee=0mW/cm ² V_R =10V
Reverse Breakdown Voltage	V_{BR}	32	170	----	μA	Ee=0mW/cm ² I_R =100μA
Total Capacitance	C_t	-----	5	-----	pF	Ee=0mW/cm ² V_R =5V f=1MHz
Rise Time/ Fall Time	t_r / t_f	-----	6	-----	ns	V_R =10V R_L =100Ω

Note:

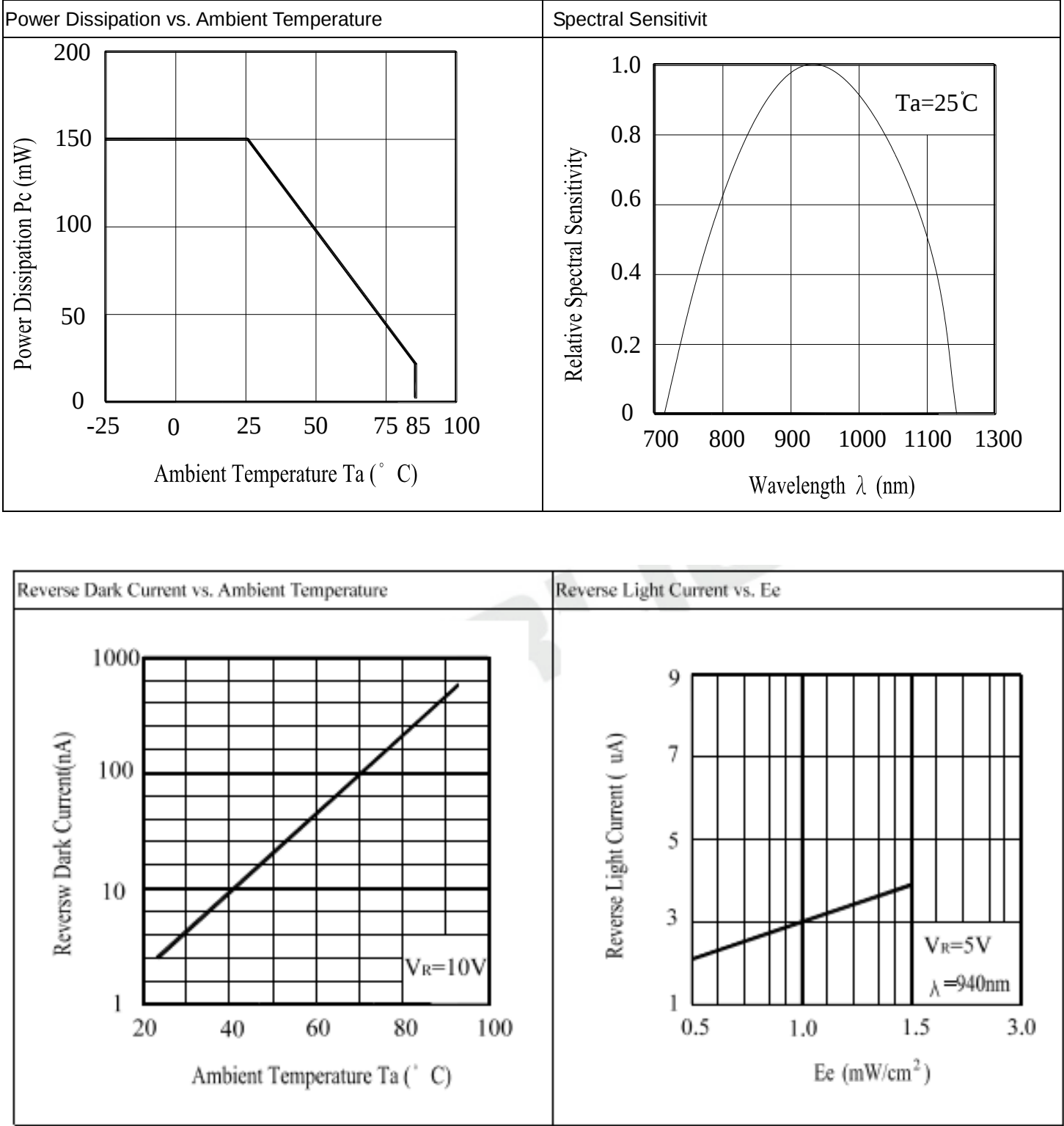
Tolerance of Luminous Intensity: ±10%

Tolerance of Dominant Wavelength: ±1nm

Tolerance of Forward Voltage: ±0.1V

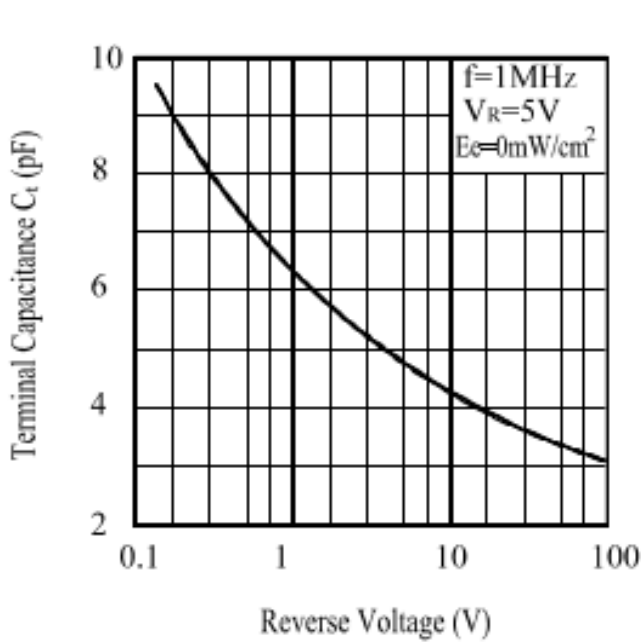
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Typical Electro-Optical Characteristics Curves

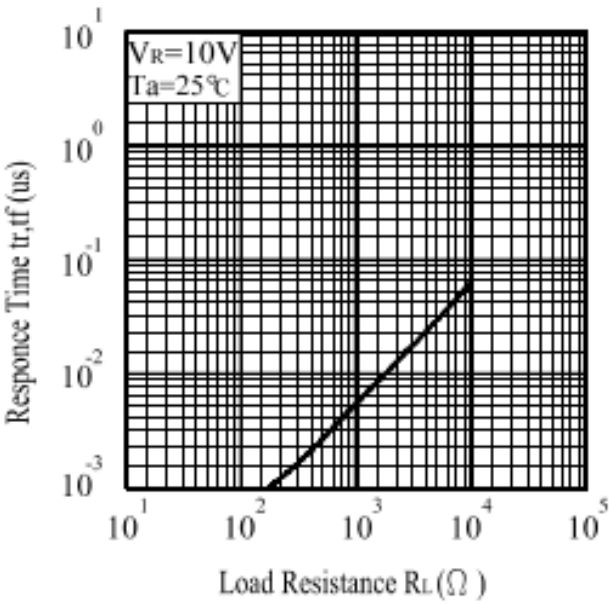


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Terminal Capacitance vs. Reverse Voltage

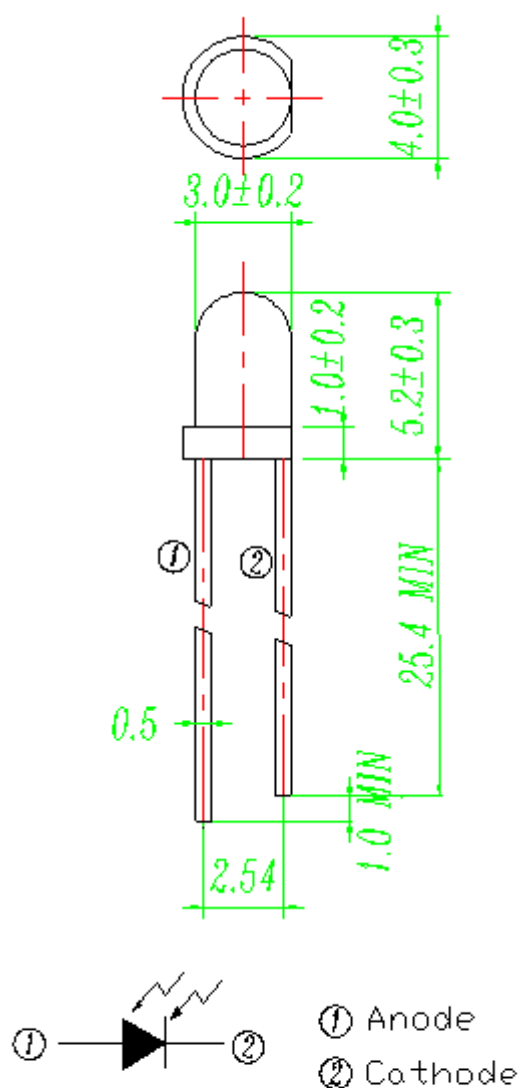


Response Time vs. Load Resistance



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Package Dimension

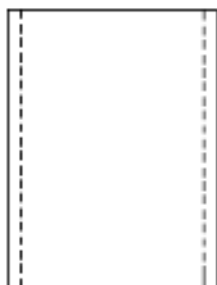


Note: Tolerances unless dimensions $\pm 0.25\text{mm}$

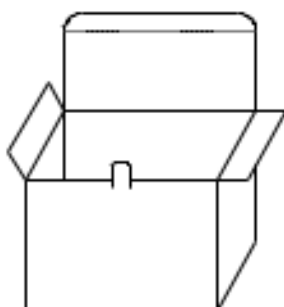
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Packing Quantity Specification

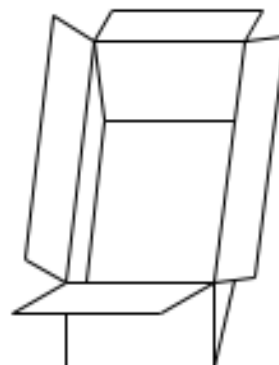
■ Anti-electrostatic bag



■ Inner Carton



■ Outside Carton



1. 200~1000PCS/1Bag,4Bags/1 Inner Carton
2. 1 Inner Cartons /1 Outside Carton

Label Form Specification

RoHS	Pb	EVERLIGHT	5
CPN: XXXXXXXXXXXXXXXXXX			
XXXXXXXXXX-XXXXXXXXXX-XXXXXXXXXX-XXXXXXXXXX-XXXXXX			
P/N: XXXXXXXXXXXX			
XXXXXXXXXX-XXXXXXXXXX-XXXXXXXXXX-XXXXXXXXXX-XXXXXX			
LOT NO: Y150716XXX-XXXXXXXXXX-XXXXXX			
QTY: 0123456789 HUE: XXXXXXXXXX			
CAT: XXXXXXXXXX REF: XXXXXXXXXX			
REFERENCE: BTPYMMDDXXXXX			
MADE IN XXXXXX			



- CPN: Customer's Product Number
- P/N: Product Number
- QTY: Packing Quantity
- CAT: Luminous Intensity Rank
- HUE: Dom. Wavelength Rank
- REF: Forward Voltage Rank
- LOT No: Lot Number
- X: Month
- Reference: Identify Label Number

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