Device Selection Guide

Chip Materials	Lens Color
Silicon	Black

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Reverse Voltage	V _R	32	mA
Power Dissipation	Pd	150	mW
Operating Temperature	T _{opr}	-40 ~ +85	Ϋ́
Storage Temperature	T _{stg}	-40 ~ +100	°C
Soldering Temperature(*1)	T _{sol}	260	°C

Notes: *1: Soldering time \leq 5 seconds.

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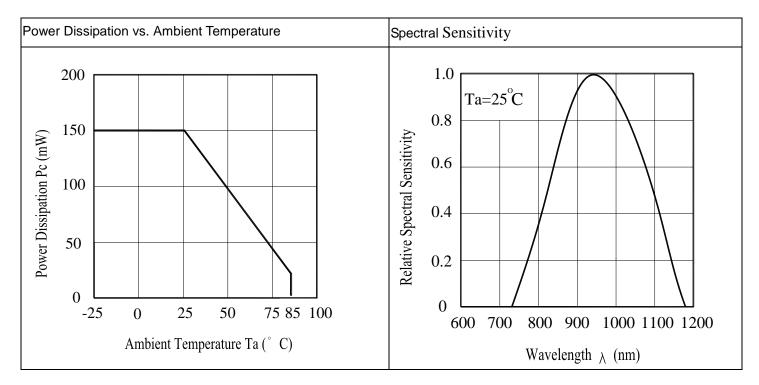
Electro-Optical Characteristics (Ta=25°C)

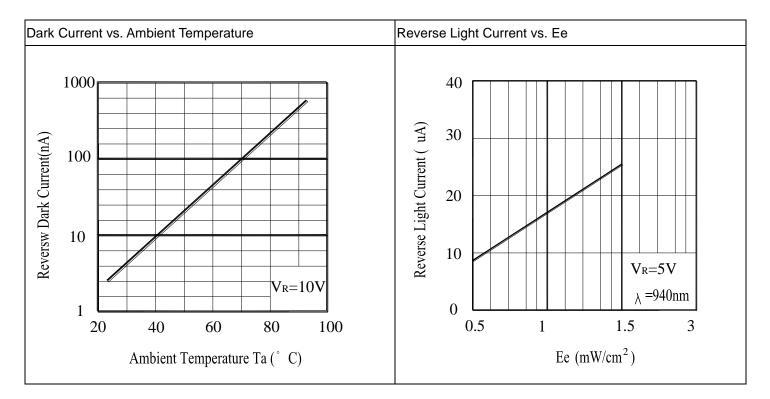
Parameter	Symbol	Min.	Тур.	Max.	Unit	Condition
Rang of Spectral Bandwidth	λ0.5	400		1100	nm	
Wavelength of Peak Sensitivity	λρ		940		nm	
Open-Circuit Voltage	VOC		0.35		V	Ee=5m W/cm2 λp=940nm
Short- Circuit Current	ISC		18		uA	Ee=1m W/cm2 λp=940nm
Reverse Light Current	ΙL	10.2	18		uA	Ee=1m W/cm2 λp=940nm VR=5V
Dark Current	Id		5	30	nA	Ee=0m W/cm2 VR=10V
Reverse Breakdown	BVR	32	170		V	Ee=0m W/cm2 IR=100µA
Total Capacitance	Ct		25		pF	Ee=0m W/cm2 VR=3V f=1MHZ
Rise/Fall Time	tr/tf		50/50		nS	VR=10V RL=1ΚΩ

Note:

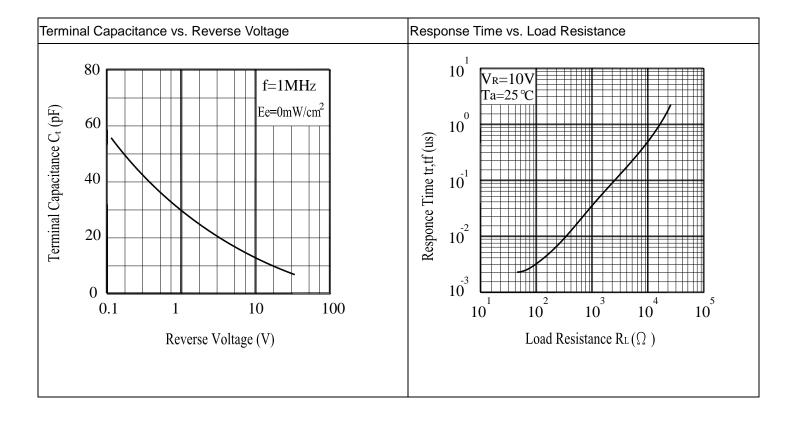
Tolerance of Luminous Intensity: $\pm 10\%$ Tolerance of Dominant Wavelength: $\pm 1nm$ Tolerance of Forward Voltage: $\pm 0.1V$

Typical Electro-Optical Characteristics Curves





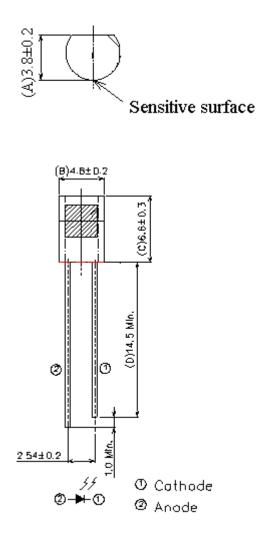
EVERLIGHT



DATASHEET 4.8mm Semi-Lens Silicon PIN Photodiode PD438B



Package Dimension



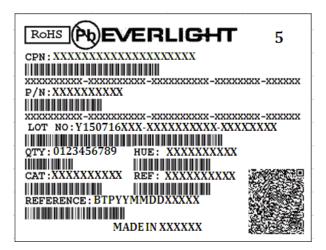
Note: Tolerances unless dimensions ±0.25mm



Packing Specification

- Packing Quantity
- 1. 500 PCS/1 Bag, 6Bags/1 Inner Carton
- 2. 10Inner Cartons/1 Outside Carton

Label Form Specification



- 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
- Reference: Identify Label Number

Notes:

- 1. Above specification may be changed without notice. EVERLIGHT will reserve authority on material change for above specification.
- 2. When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. EVERLIGHT 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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