

5mm Semi-Lens Silicon PIN Photodiode PD333-3B/L4

Features

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



Description

- PD333-3B/L4 is a high speed and sensitive PIN photodiode in a cylindrical side view plastic package. The epoxy package itself is an IR filter , spectrally matched to IR emitter.

Applications

- High speed photo detector
- Camera
- Optoelectronic switch
- VCRs , Video camera

Device Selection Guide

LED Part No.	Chip	Lens Color
	Material	
PD333-3B/L4	Silicon	Black

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Units
Reverse Voltage	V _R	32	V
Power Dissipation	P _d	150	mW
Lead Soldering Temperature	T _{sol}	260	°C
Operating Temperature	T _{opr}	-40 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +100	°C

Notes: *1:Soldering time ≤ 5 seconds.

Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Rang of Spectral Bandwidth	$\lambda_{0.5}$	-----	840	---	1100	nm
Wavelength of Peak Sensitivity	λ_p	-----	---	940	---	nm
Open-Circuit Voltage	V _{OC}	Ee=5m W/cm ² λ_p =940nm	---	0.42	---	V
Short- Circuit Current	I _{SC}	Ee=1m W/cm ² λ_p =940nm	---	10	---	μA
Reverse Light Current	I _L	Ee=1m W/cm ² λ_p =940nm V _R =5V	5.0	12	---	
Dark Current	I _d	Ee=0m W/cm ² V _R =10V	---	---	10	nA
Reverse Breakdown	BV _R	Ee=0m W/cm ² I _R =100 μA	32	170	---	V
Total Capacitance	C _t	Ee=0m W/cm ² V _R =5V f=1MHZ	---	5	---	pF

Note:

Tolerance of Luminous Intensity: $\pm 10\%$

Tolerance of Dominant Wavelength: $\pm 1\text{nm}$

Tolerance of Forward Voltage: $\pm 0.1\text{V}$

Typical Electro-Optical Characteristics Curves

Fig.1 Power Dissipation vs.

Ambient Temperature

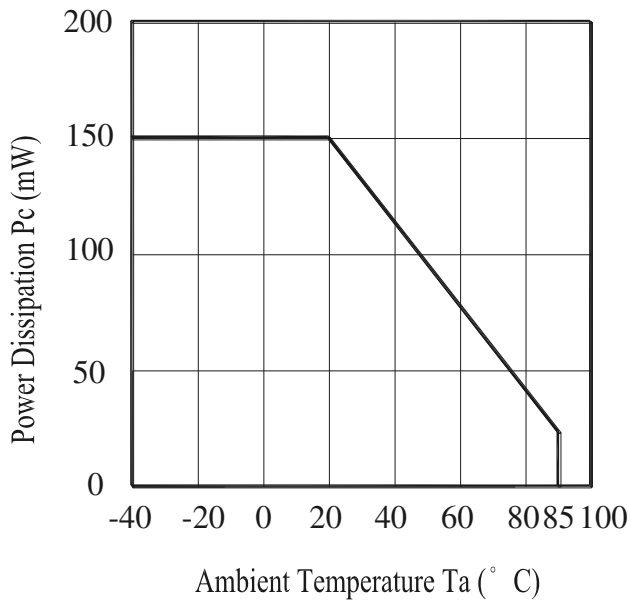


Fig.2 Spectral Sensitivity

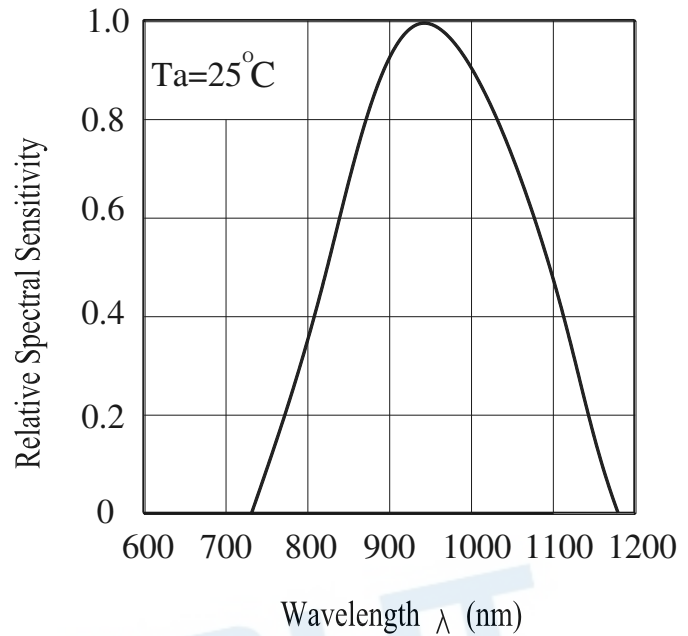


Fig.3 Dark Current vs.

Ambient Temperature

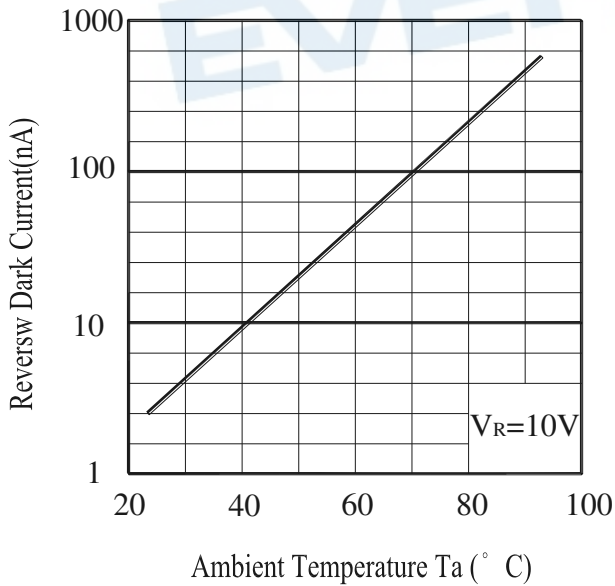
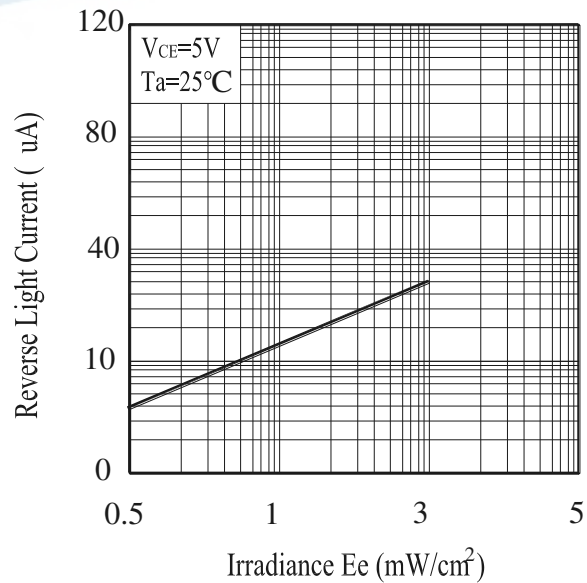


Fig. 4 Reverse Light Current vs.

E_e



Typical Electro-Optical Characteristics Curves

Fig.5 Terminal Capacitance vs.

Reverse Voltage

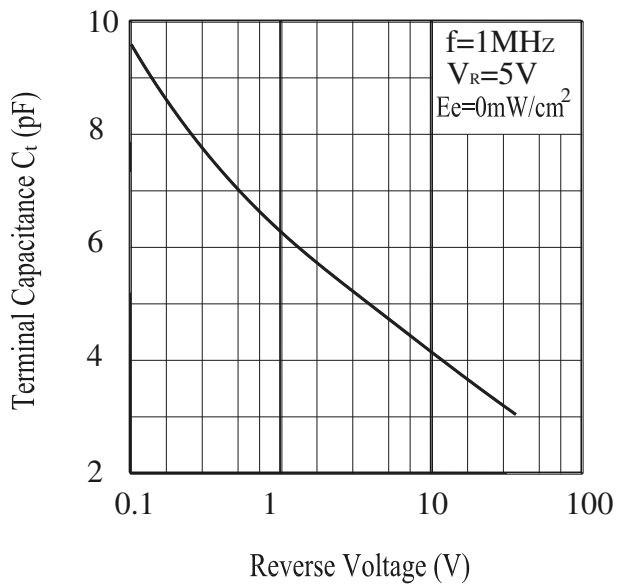
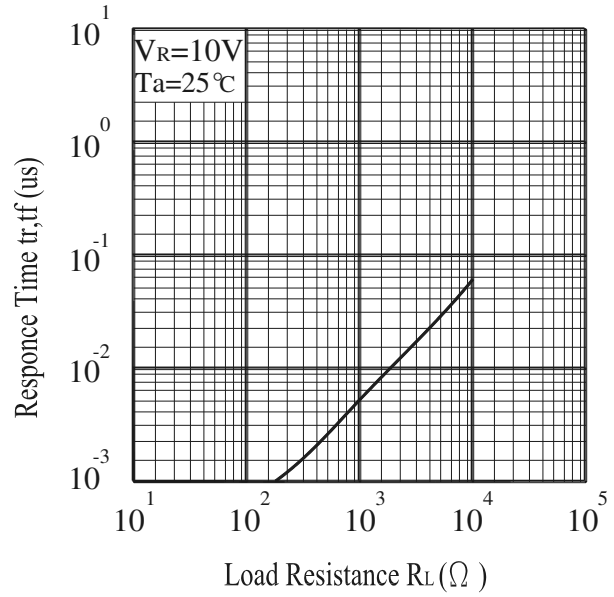


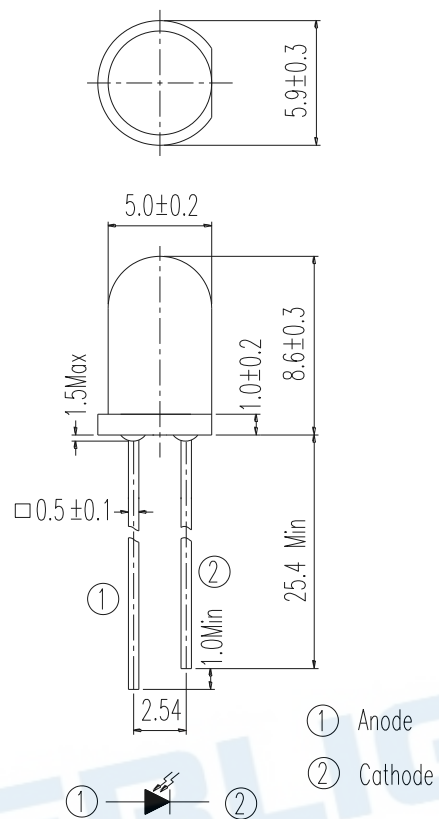
Fig.6 Response Time vs.

Load Resistance



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Package Dimensions



- Notes:**
1. All dimensions are in millimeters
 2. Tolerances unless dimensions ± 0.25 mm

Packing Quantity Specification

1.500PCS/1Bag , 5Bags/1Box

2.10Boxes/1Carton

Label Form Specification

RoHS	Ph EVERLIGHT	5
CPN : XXXXXXXXXXXXXXXXXXXX		
XXXXXXXXXX-XXXXXXXXXX-XXXXXXXXXX-XXXXXXXXXX-XXXXXX		
P/N : XXXXXXXXXXXX		
XXXXXXXXXX-XXXXXXXXXX-XXXXXXXXXX-XXXXXXXXXX-XXXXXX		
LOT NO:XXXXXXXXXX-XXXXXXXXXX-XXXXXXXXXX		
QTY: XXXXXXXXXXXX HUE: XXXXXXXXXXXX		
CAT: XXXXXXXXXXXX REF: XXXXXXXXXXXX		
REFERENCE: XXXXXXXXXXXXXXXX		
MADE IN XXXXXX		

CPN: Customer's Production Number

P/N : Production Number

QTY: Packing Quantity

CAT: Ranks

HUE: Peak Wavelength

REF: Reference

LOT No: Lot Number

X: Month

Reference: Identify Label Number

DISCLAIMER

1. EVERLIGHT reserves the right(s) on the adjustment of product material mix for the specification.
2. The product meets EVERLIGHT published specification for a period of twelve (12) months from date of shipment.
3. The graphs shown in this datasheet are representing typical data only and do not show guaranteed values.
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