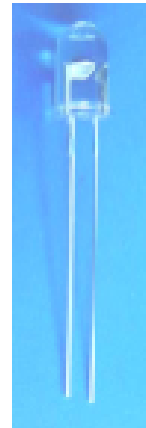


### 5mm photodiode PD333-3C/H0/L2

#### Features

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



#### Description

- PD333-3C/H0/L2 is a high speed and high sensitive PIN photodiode in a standard 5Φ plastic package. Due to its water clear epoxy the device is sensitive to infrared radiation

#### Applications

- High speed photo detector
- Security system
- Camera

## Device Selection Guide

Chip Materials	Lens Color
Silicon	Water clear

## Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Reverse Voltage	$V_R$	32	V
Operating Temperature	$T_{opr}$	-25 ~ +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

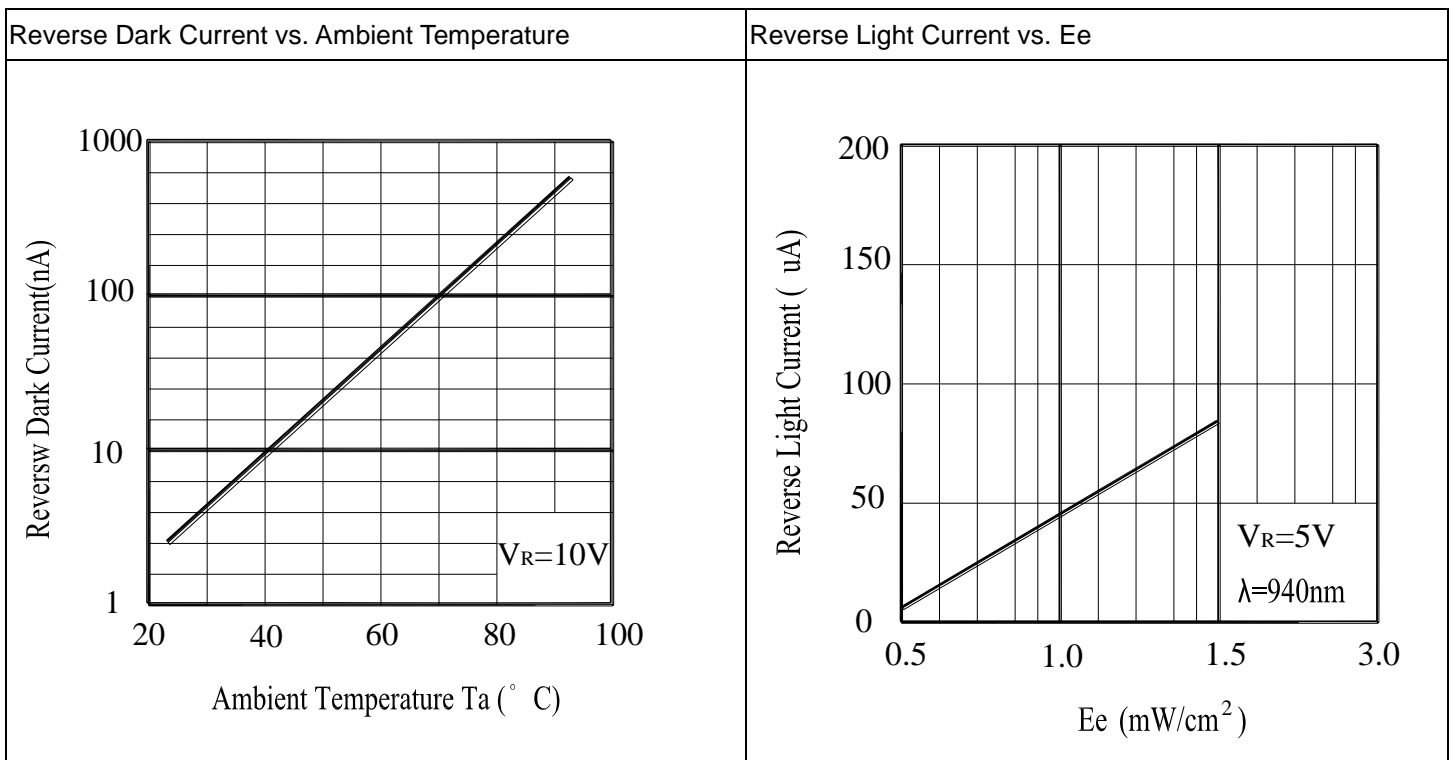
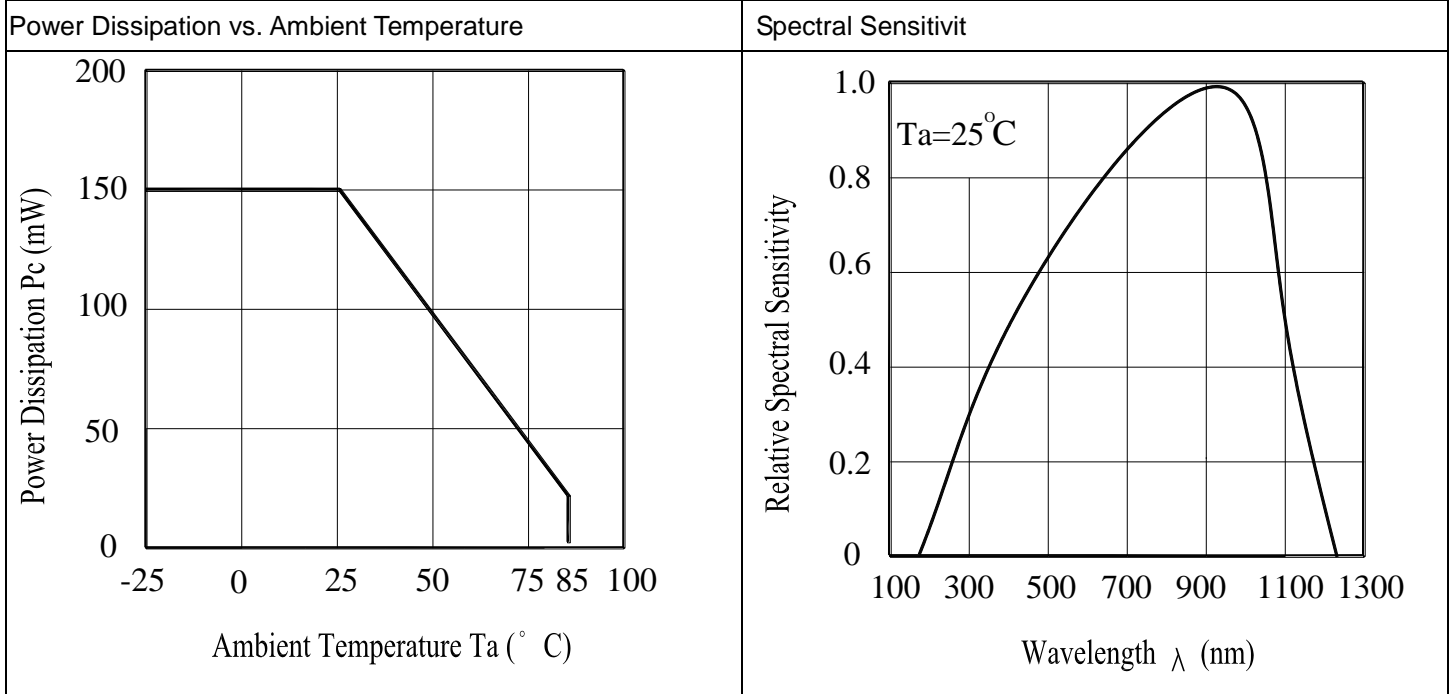
**Electro-Optical Characteristics (Ta=25°C)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Range Of Spectral Bandwidth	$\lambda_{0.5}$	400	-----	1100	nm	-----
Wavelength Of Peak Sensitivity	$\lambda_P$	-----	940	-----	nm	-----
Open-Circuit Voltage	$V_{OC}$	-----	0.39	-----	V	$E_e=1\text{mW/cm}^2$ $\lambda_p=940\text{nm}$
Short- Circuit Current	$I_{SC}$	-----	40	-----	$\mu\text{A}$	$E_e=1\text{mW/cm}^2$ $\lambda_p=940\text{nm}$
Reverse Light Current	$I_L$	36	40	-----	$\mu\text{A}$	$E_e=1\text{mW/cm}^2$ $\lambda_p=940\text{nm}$ $V_R=5\text{V}$
Reverse Dark Current	$I_D$	----	5	30	nA	$E_e=0\text{mW/cm}^2$ $V_R=10\text{V}$
Reverse Breakdown Voltage	$V_{BR}$	32	170	-----	V	$E_e=0\text{mW/cm}^2$ $I_R=100\mu\text{A}$
Total Capacitance	$C_t$	-----	18	-----	pF	$E_e=0\text{mW/cm}^2$ $V_R=5\text{V}$ $f=1\text{MHz}$
Rise Time/ Fall Time	$t_r / t_f$	-----	45/45	-----	ns	$V_R=10\text{V}$ $R_L=100\Omega$
View Angle	2 $\theta$ 1/2	-----	80	-----	deg	$I_F=20\text{mA}$

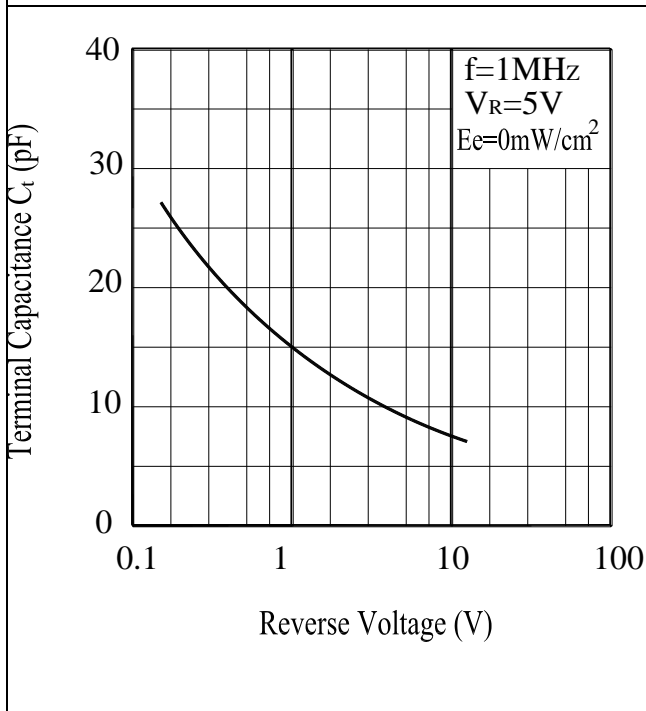
Note:

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

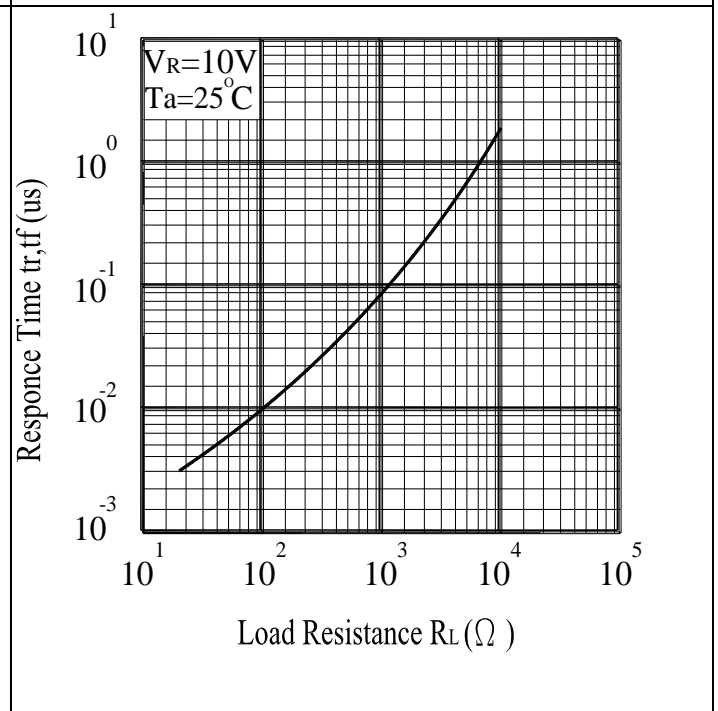
Typical Electro-Optical Characteristics Curves



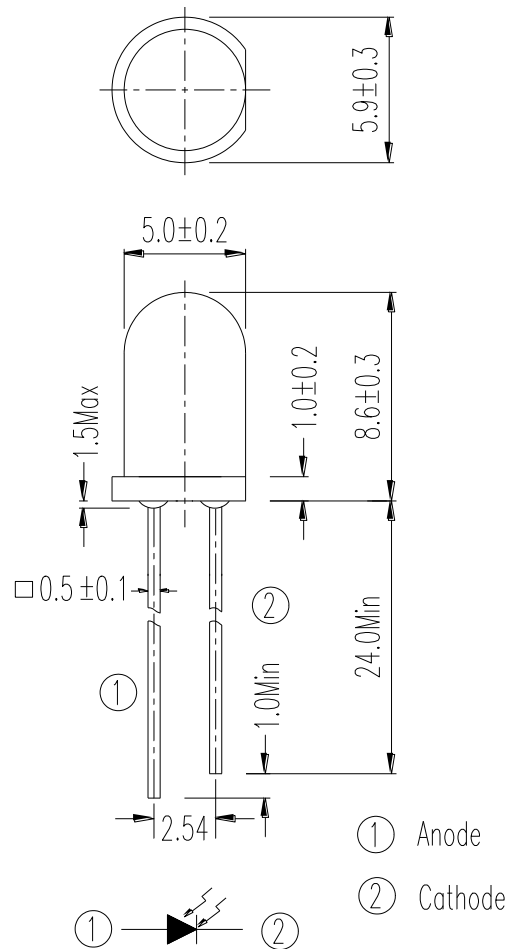
Terminal Capacitance vs. Reverse Voltage



Response Time vs. Load Resistance



## Package Dimension



Note: Tolerances unless dimensions  $\pm 0.25$ mm

**Label Form Specification**



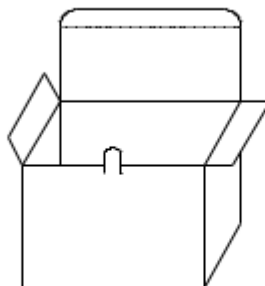
- CPN: Customer's Product Number
- P/N: Product Number
- QTY: Packing Quantity
- CAT: Luminous Intensity Rank
- HUE: Dom. Wavelength Rank
- REF: Forward Voltage Rank
- LOT No: Lot Number
- X: Month
- Reference: Identify Label Number

**Packing Quantity Specification**

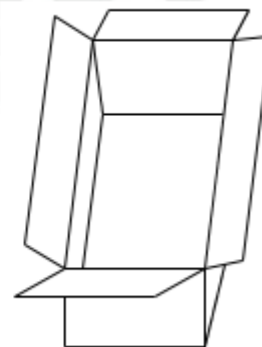
■ Anti-electrostatic bag



■ Inner Carton



■ Outside Carton



1.200~500PCS/1Bag · 5Bags/1 Inner Carton  
2.10 Inner Cartons/1 Outside Carton

## **DISCLAIMER**

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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.
4. 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 the 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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