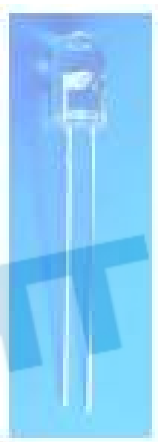
DATASHEET

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℃)

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

Electro-Optical Characteristics (Ta=25℃)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Range Of Spectral Bandwidth	$\lambda_{0.5}$	400	-----	1100	nm	-----
Wavelength Of Peak Sensitivity	λ_P	-----	940	-----	nm	-----
Open-Circuit Voltage	V_{OC}	-----	0.39	-----	V	Ee=1mW/cm^2 λp=940nm
Short- Circuit Current	I_{SC}	-----	40	-----	μA	Ee=1mW/cm^2 λp=940nm
Reverse Light Current	I_L	36	40	-----	μA	Ee=1mW/cm^2 λp=940nm V_R=5V
Reverse Dark Current	I_D	----	5	30	nA	Ee=0mW/cm^2 V_R=10V
Reverse Breakdown Voltage	V_{BR}	32	170	-----	V	Ee=0mW/cm^2 I_R=100μA
Total Capacitance	C_t	-----	18	-----	pF	Ee=0mW/cm^2 V_R=5V f=1MHz
Rise Time/ Fall Time	t_r / t_f	-----	45/45	-----	ns	V_R=10V R_L=100Ω
View Angle	2θ1/2	-----	80	-----	deg	I_F=20mA

Note:

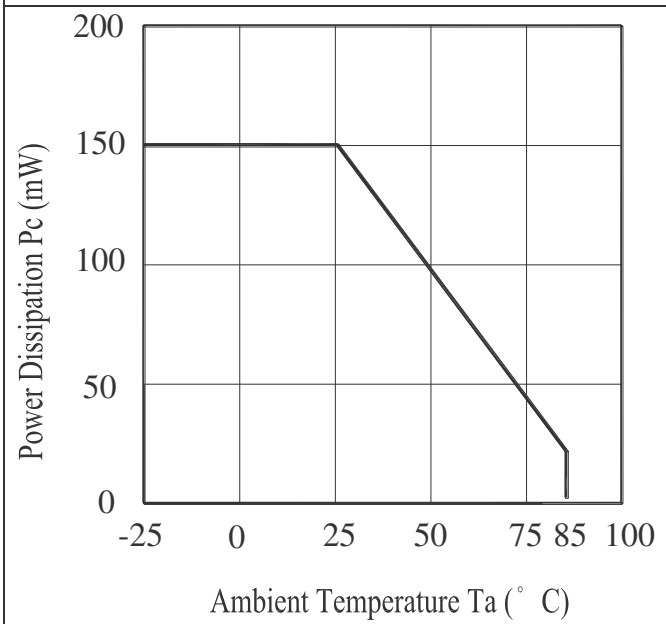
Tolerance of Luminous Intensity: ±10%

Tolerance of Dominant Wavelength: ±1nm

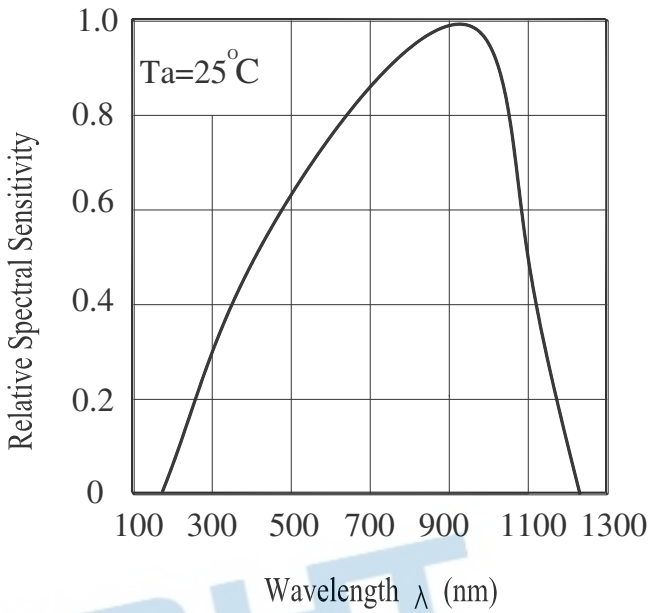
Tolerance of Forward Voltage: ±0.1V

Typical Electro-Optical Characteristics Curves

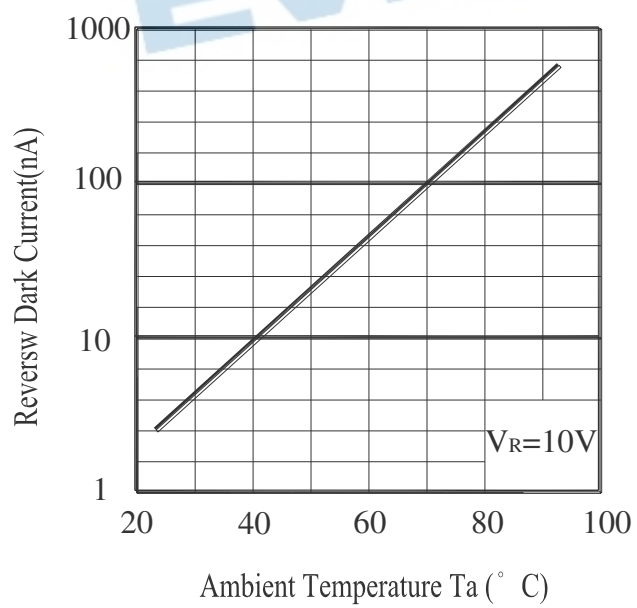
Power Dissipation vs. Ambient Temperature



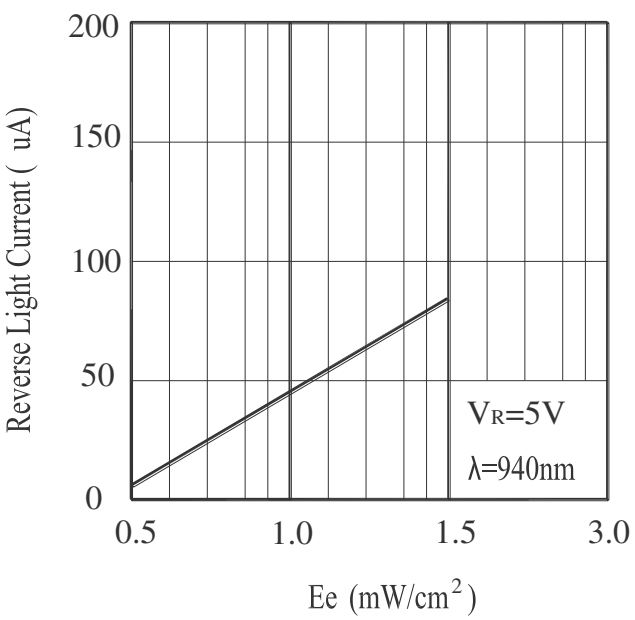
Spectral Sensitivit

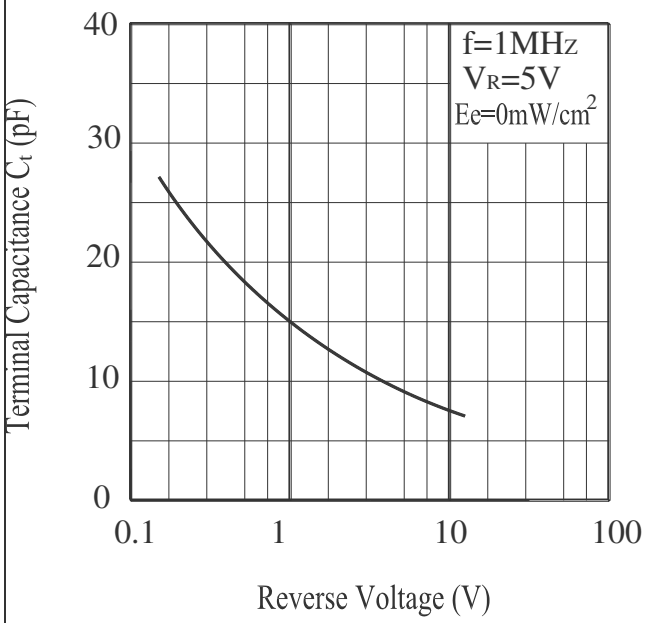
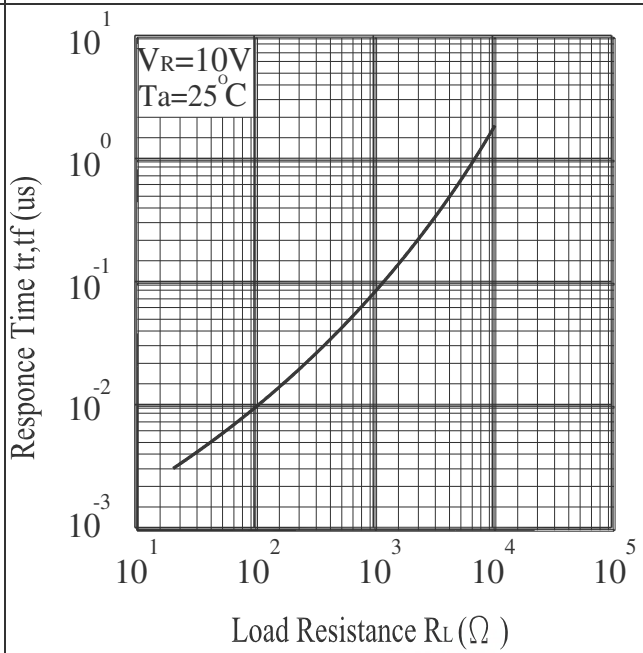


Reverse Dark Current vs. Ambient Temperature

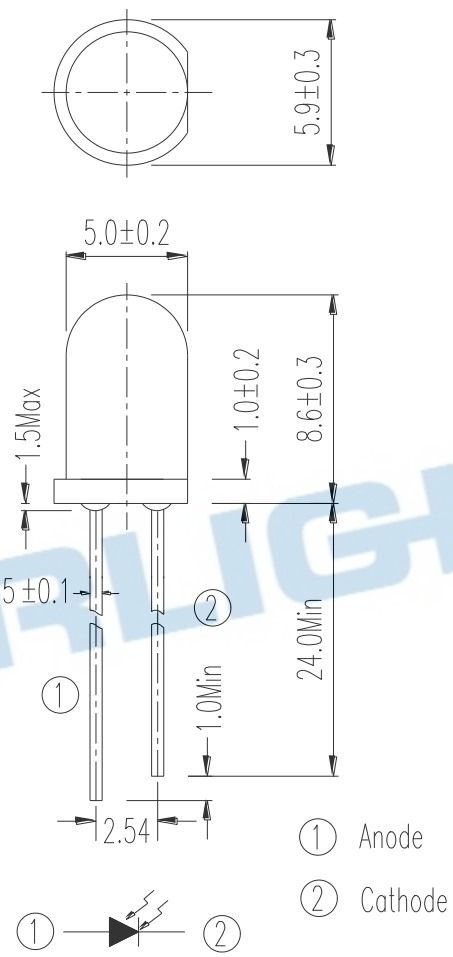


Reverse Light Current vs. Ee



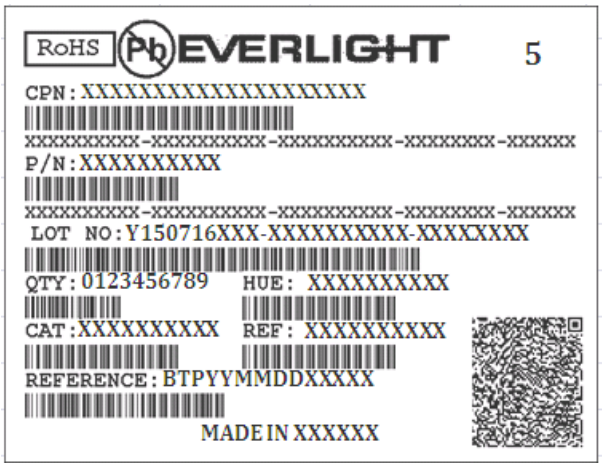
Terminal Capacitance vs. Reverse Voltage	Response Time vs. Load Resistance
	

Package Dimension



Note: Tolerances unless dimensions ±0.25mm

Label Form Specification

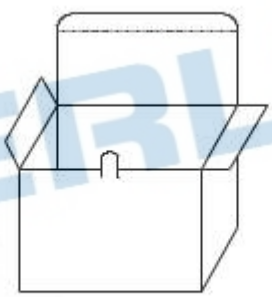


- CPN: Customer's Product Number
- P/N: Product Number
- QTY: Packing Quantity
- CAT: Luminous Intensity Rank
- HUE: Dom. Wavelength Rank
- REF: Forward Voltage Rank
- LOT No: Lot Number
- X: Month
- Reference: Identify Label Number

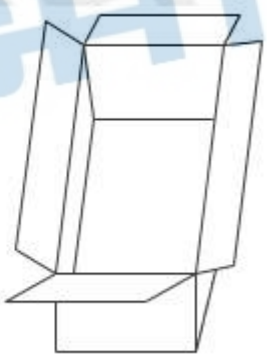
Packing Quantity Specification

■ Anti-electrostatic bag

■ Inner Carton



■ Outside Carton



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

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