

5mm Silicon PIN Photodiode , T-1 3/4 PD5443-3B/L2 (ES)



Features

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

Description

PD5443-3B/L2(ES) is a high speed and high sensitive PIN photodiode in a standard 5mm plastic package. Due to its black epoxy the device is sensitive to visible and infrared radiation.

Applications

- High speed photo detector
- Security system
- Camera

Device Selection Guide

Chip Materials	Lens Color
Silicon	Black

Absolute Maximum Ratings (Ta=25 °C)

Parameter	Symbol	Rating	Unit
Reverse Voltage	VR	32	V
Power Dissipation	Pd	150	mW
Soldering Temperature(*2)	Tsol	260	
Operating Temperature	Topr	-40 ~ +85	
Storage Temperature	Tstg	-40 ~ +100	
Peak Forward Current(*1)	IFP	1.0	A

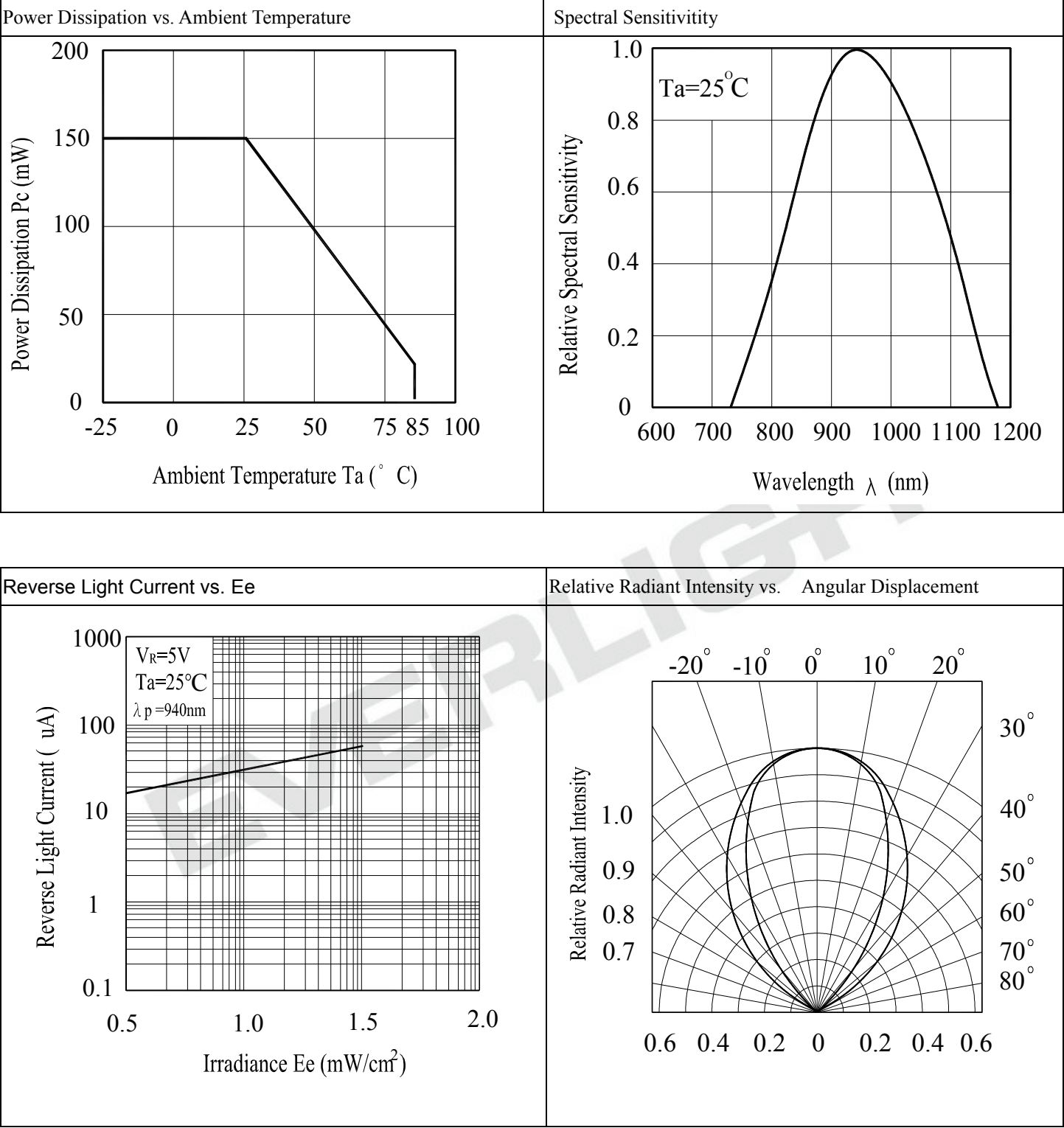
Notes: *1:IFP Conditions--Pulse Width 100μs and Duty 1%.

*2:Soldering time 5 seconds.

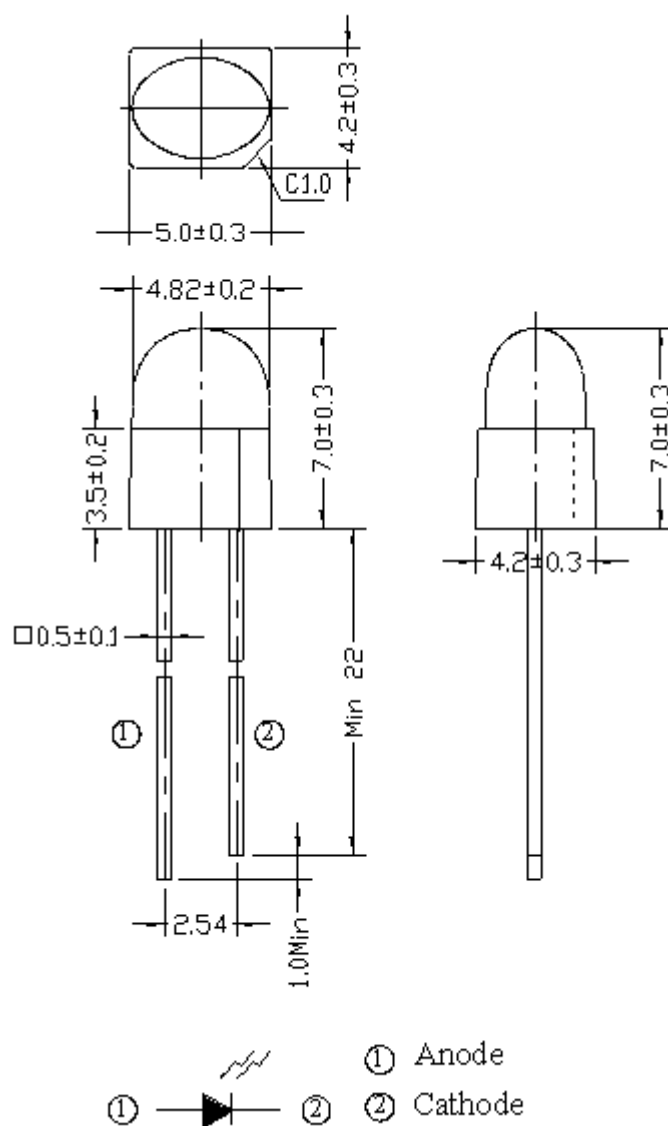
Electro-Optical Characteristics (Ta=25 °C)

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}	---	0.39	---	V	Ee=5m W/cm ² $\lambda_p=940nm$
Short- Circuit Current	I_{SC}	---	34	---	μA	Ee=1m W/cm ² $\lambda_p=940nm$
Reverse Light Current	I_L	25	35	---	μA	Ee=1m W/cm ² $\lambda_p=940nm$ $V_R=5V$
Reverse Dark Current	I_D	---	5	30	nA	Ee=0m W/cm ² $V_R=10V$
Reverse Breakdown Voltage	V_{BR}	32	170	---	V	Ee=0m W/cm ² $I_R=100 \mu A$
Total Capacitance	C_t	---	18	---	pF	Ee=0m W/cm ² $V_R=5V$ $f=1MHz$
Rise Time/ Fall Time	t_r / t_f	---	45/45	---	nS	$V_R=10V$ $R_L=1K \Omega$
View Angle	$2\theta_{1/2}$	X	80	--	deg	$V_R=5V$
		Y	60	--		

Typical Electro-Optical Characteristics Curves



Package Dimension



Note: Tolerances unless dimensions ± 0.25 mm

Packing Quantity Specification

1.500PCS/1Bag , 5Bags/1Box

2.10Boxes/1Carton

Label Form Specification

The label form is rectangular and contains the following elements:

- Top Left:** A circular logo with the letters 'Pb' inside.
- Top Center:** The word 'EVERLIGHT' in a rectangular box.
- Top Right:** A circular logo with the letter 'X' inside.
- Below Pb Logo:** The text 'CPN:' followed by 'P/N:'.
- Below P/N:** A standard 1D barcode.
- Below Barcode:** The product code 'PD5443-3B/L2(ES)'.
- Below Product Code:** The text 'QTY:' followed by a 1D barcode.
- Below QTY Barcode:** The text 'LOT NO:' followed by a 1D barcode.
- Below LOT NO Barcode:** The text 'Reference' followed by a 1D barcode.
- Below Reference Barcode:** A 1D barcode.
- Right Side:** The text 'CAT:' followed by 'HUE:' and 'REF:'.
- Bottom Right:** A rectangular box containing the text 'RoHS'.

- 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

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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