



ZPD808B

Side Look Silicon PIN Photodiode



Descriptions

ZPD818B is a high speed and high sensitive PIN photodiode in a standard plastic package. The device is matched to infrared emitting diode.

Features

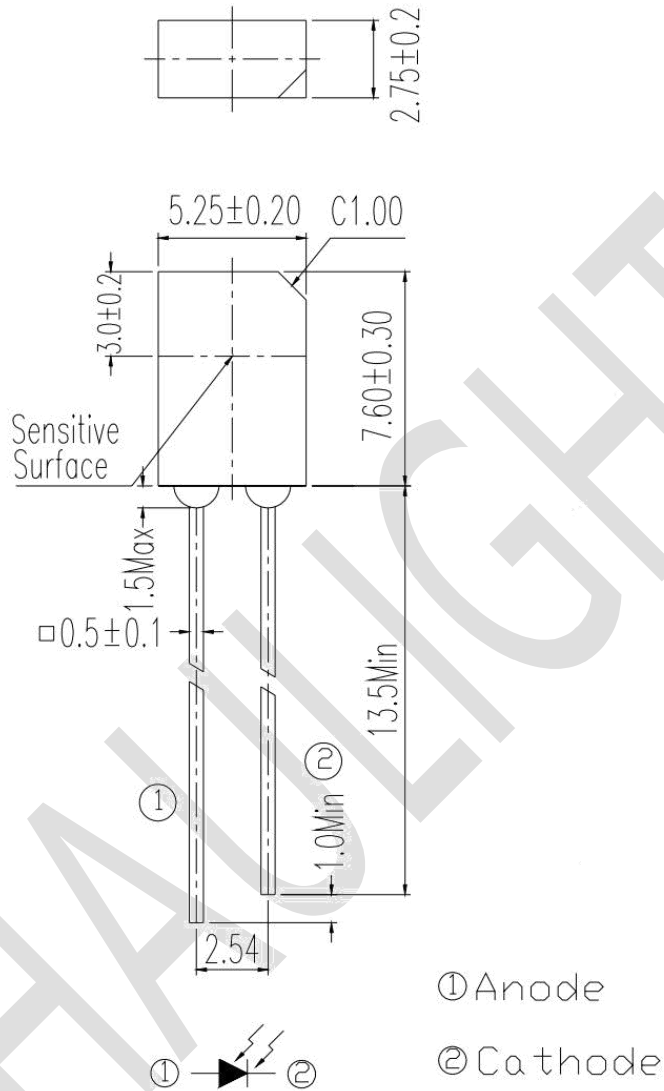
- Fast response times
- High photo sensitivity
- Small junction capacitance
- Pb.Free
- The product itself will remain within RoHS compliant version.
- Compliance with EU REACH

Applications

- Infrared applied system
- Camera



Package Dimension



Notes:

1. All dimensions are in millimeters
2. Tolerances unless dimensions ± 0.3 mm
3. Lead spacing is measured where the lead emerge from the package



Absolute Maximum Ratings (Ta=25°C)

Parameter (Ta=25°C)	Symbol	Ratings	Unit
Reverse Voltage	VR	32	mA
Power Dissipation	Pd	150	mW
Operating Temperature	Topr	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +100	°C
Soldering Temperature(*1)	Tsol	260	°C

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



Electro-Optical Characteristics

Parameter (Ta=25°C)	Symbol	Condition	Min.	Typ.	Max.	Unit
Rang of Spectral Bandwidth	$\lambda_{0.5}$	--	800	--	1100	nm
Wavelength of Peak Sensitivity	λ_p	--	--	940	--	nm
Open-Circuit Voltage	VOC	Ee=5m W/cm ² $\lambda_p=940\text{nm}$	--	0.35	--	V
Short- Circuit Current	ISC	Ee=1m W/cm ² $\lambda_p=940\text{nm}$	--	18	--	uA
Reverse Light Current	IL	Ee=1m W/cm ² $\lambda_p=940\text{nm}$ VR=5V	31.0	--	35.0	uA
Dark Current	Id	Ee=0m W/cm ² VR=10V	--	5	30	nA
Reverse Breakdown	BVR	Ee=0m W/cm ² IR=100 μ A	32	170	--	V
Total Capacitance	Ct	Ee=0m W/cm ² VR=3V f=1MHZ	--	25	--	pF
Rise/Fall Time	tr/tf	VR=10V RL=1K Ω	--	50/50	--	nS

Note:

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

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

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



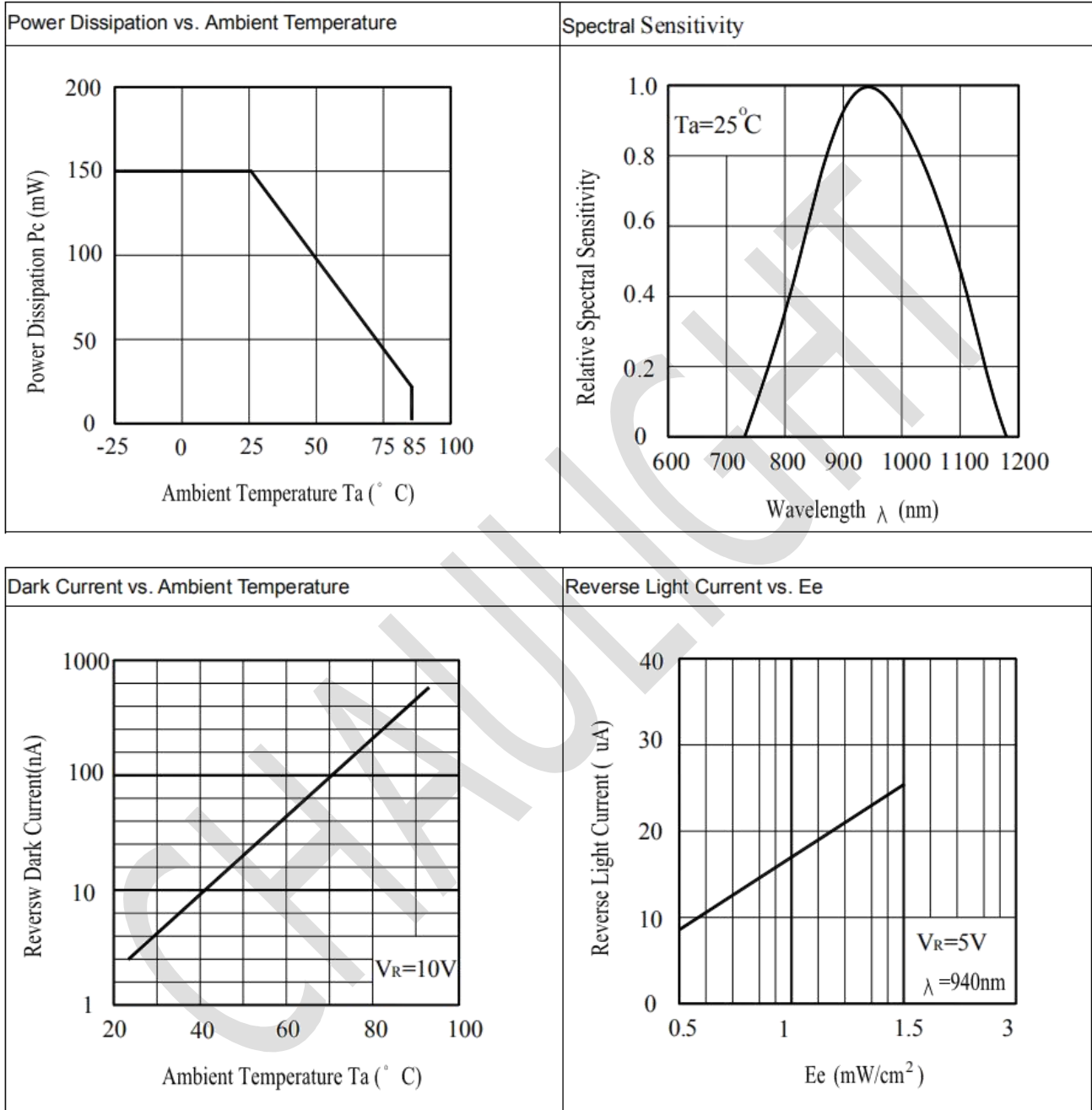
Rank

Parameter	Symbol	Condition	Min.	Max.	Unit
BIN4	IL	Ee=1m W/cm ² $\lambda_p=940\text{nm}$ VR=5V	31.0	35.0	μA

CHAU LIGHT

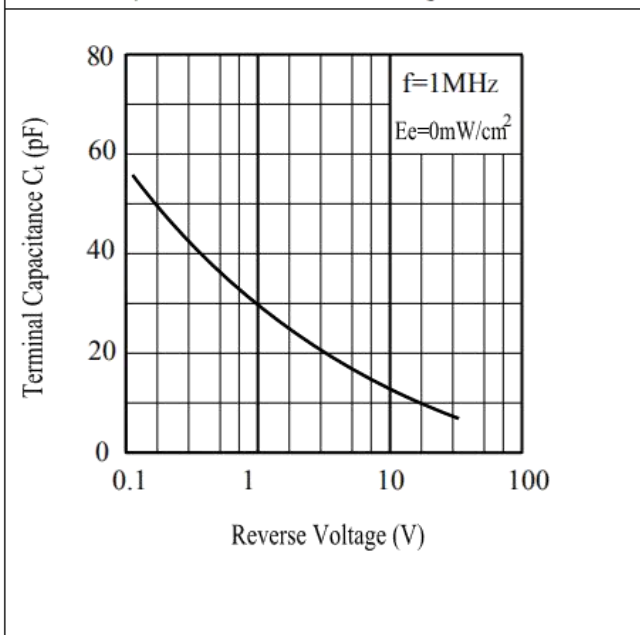


Typical Electro-Optical Characteristics Curves

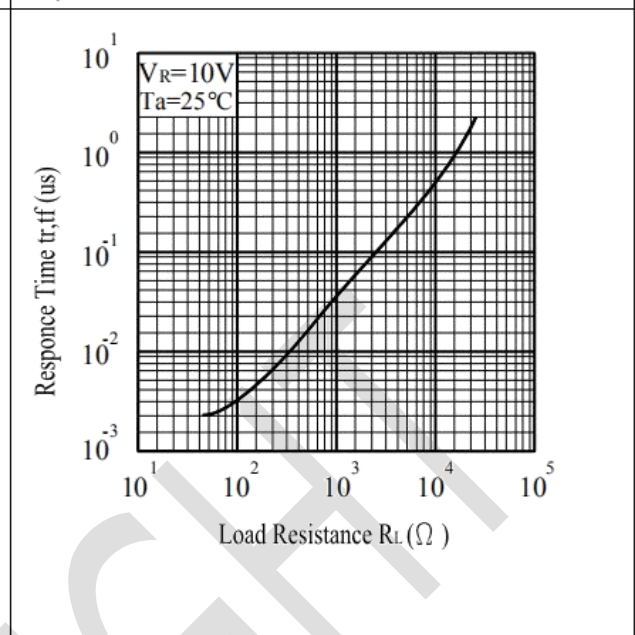




Terminal Capacitance vs. Reverse Voltage



Response Time vs. Load Resistance





Packing Quantity Specification

1. 500PCS/1Bags, 6Bags/1Box
2. 10Boxes/1Carton

Notes

1. Above specification may be changed without notice. CHAULIGHT will reserve authority on material change for above specification.

2. When using this product, please observe the absolute maximum ratings and the instruction for using outlined in these specification sheets. CHAULIGHT 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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