

### 4.8mm Semi-Lens Silicon PIN Photodiode EAPDLP04SCAA4



#### Features

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

#### Description

- EAPDLP04SCAA4 is a high speed and sensitive PIN photodiode in a flat side view plastic package. Due to its water clear epoxy the device is sensitive to visible and infrared radiation.

#### Applications

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

## Device Selection Guide

Chip Materials	Lens Color
GaAIAs	Water clear

## Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Reverse Voltage	V <sub>R</sub>	32	mA
Power Dissipation	P <sub>d</sub>	150	mW
Operating Temperature	T <sub>opr</sub>	-25 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +85	°C
Soldering Temperature(*1)	T <sub>sol</sub>	260	°C

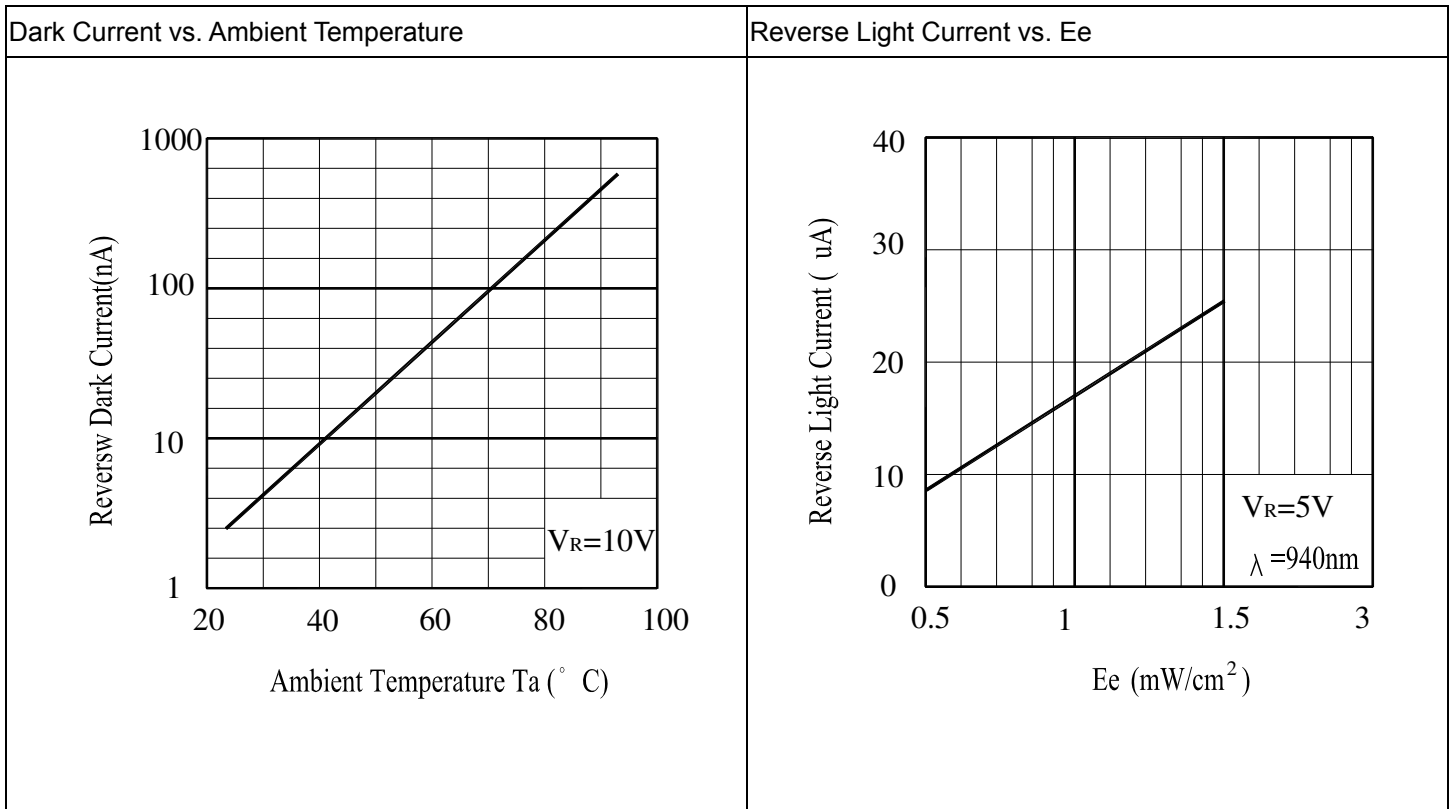
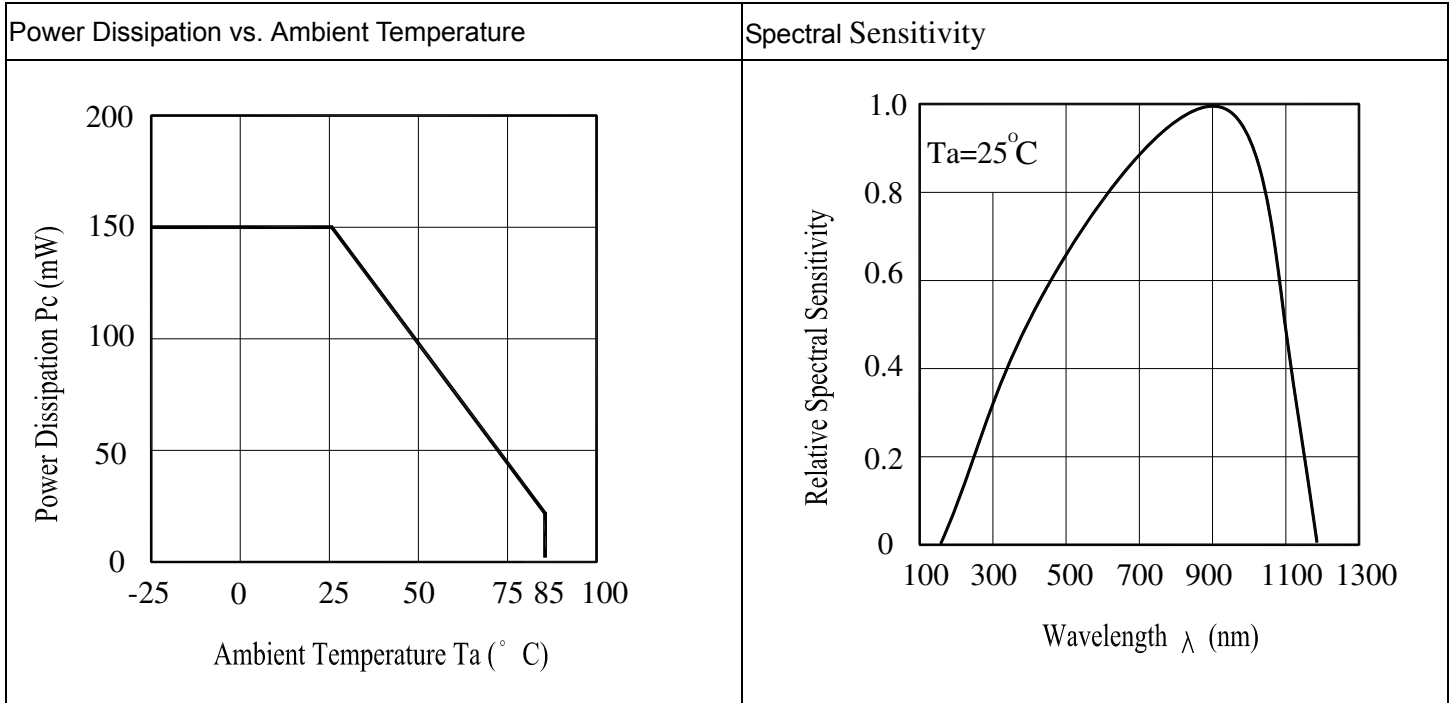
**Notes:** \*1: Soldering time  $\leq$  5 seconds.

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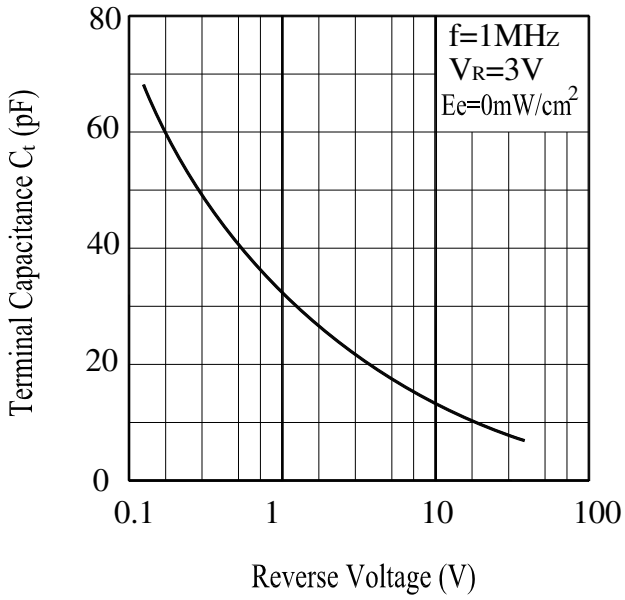
**Electro-Optical Characteristics (Ta=25°C)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Rang of Spectral Bandwidth	$\lambda_{0.5}$	400	-----	1100	nm	-----
Wavelength of Peak Sensitivity	$\lambda_p$	-----	940	-----	nm	-----
Open-Circuit Voltage	$V_{OC}$	-----	0.41	-----	V	Ee=5m W/cm <sup>2</sup> $\lambda_p$ =940nm
Short- Circuit Current	$I_{SC}$	---	18	-----	uA	Ee=1m W/cm <sup>2</sup> $\lambda_p$ =940nm
Reverse Light Current	$I_L$	10.2	18	-----	uA	Ee=1m W/cm <sup>2</sup> $\lambda_p$ =940nm $V_R$ =5V
Dark Current	$I_d$	----	5	30	nA	Ee=0m W/cm <sup>2</sup> $V_R$ =10V
Reverse Breakdown	$B_{VR}$	32	170	-----	V	Ee=0m W/cm <sup>2</sup> $I_R$ =100μA
Total Capacitance	$C_t$	----	25	----	pF	Ee=0m W/cm <sup>2</sup> $V_R$ =3V f=1MHZ
Rise/Fall Time	tr/tf	----	50/50	----	ns	$V_R$ =10V $R_L$ =1KΩ

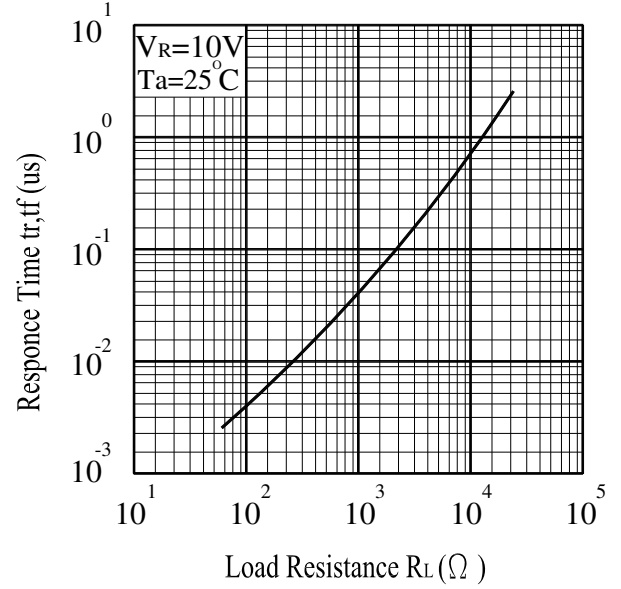
**Typical Electro-Optical Characteristics Curves**



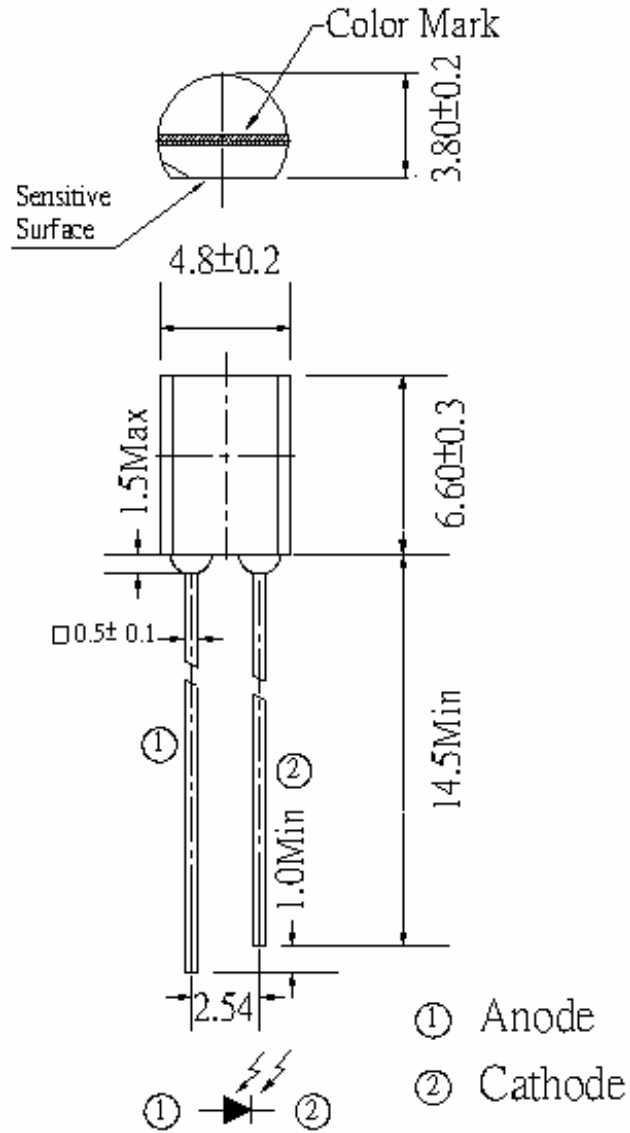
Terminal Capacitance vs. Reverse Voltage



Response Time vs. Load Resistance

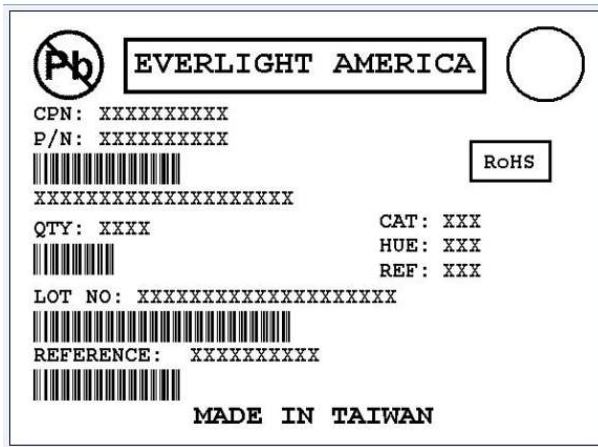


### Package Dimension



Note: Tolerances unless dimensions  $\pm 0.25$ mm

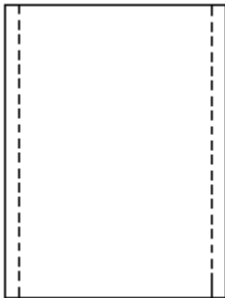
## Label Explanation



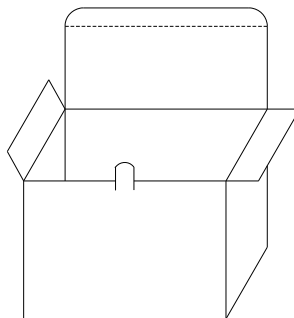
- CPN: Customer's Product Number
- P/N: Product Number
- QTY: Packing Quantity
- CAT: Luminous Intensity Rank
- HUE: Dom. Wavelength Rank
- REF: Forward Voltage Rank
- LOT No: Lot Number
- Reference: Identify Label Number

## Packing Specification

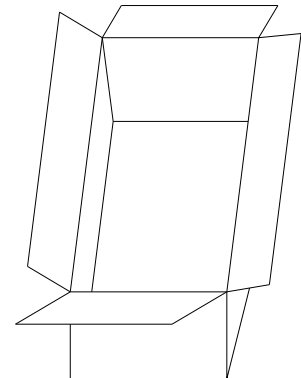
### ■ Anti-electrostatic bag



### ■ Inner Carton



### ■ Outside Carton



### ■ Packing Quantity

1. 500 PCS/1 Bag, 5 Bags/1 Inner Carton
2. 10 Inner Cartons/1 Outside Carton

## Notes

1. Above specification may be changed without notice. Everlight Americas 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 Americas 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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