

### 4.8mm Semi-Lens Silicon PIN Photodiode EAPDLP04SCAA0



#### Features

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

#### Description

- EAPDLP04SCAA0 is a high speed and sensitive PIN photodiode in a cylindrical side view plastic package. The epoxy package itself is an IR filter , spectrally matched to IR emitter.

#### Applications

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

## Device Selection Guide

Chip Materials	Lens Color
GaAIAs	Black

## 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

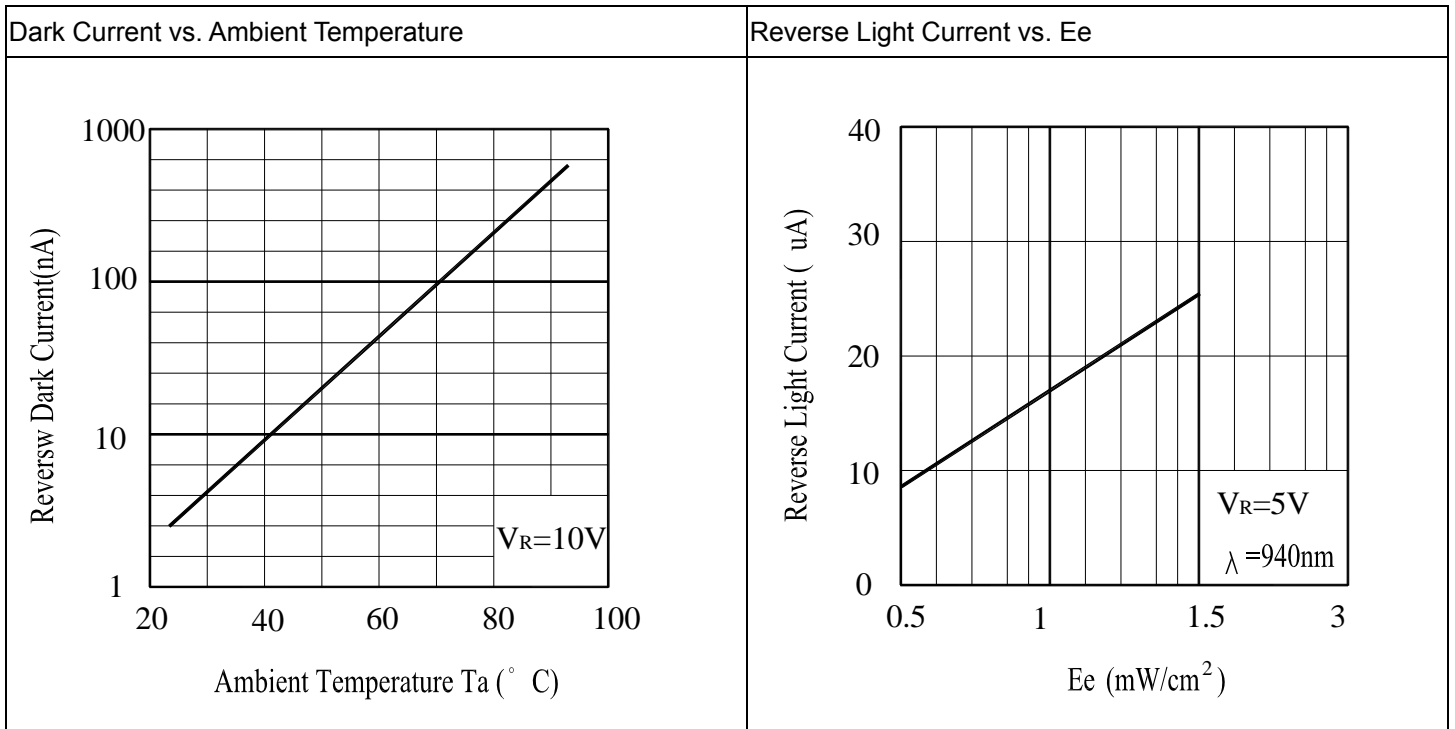
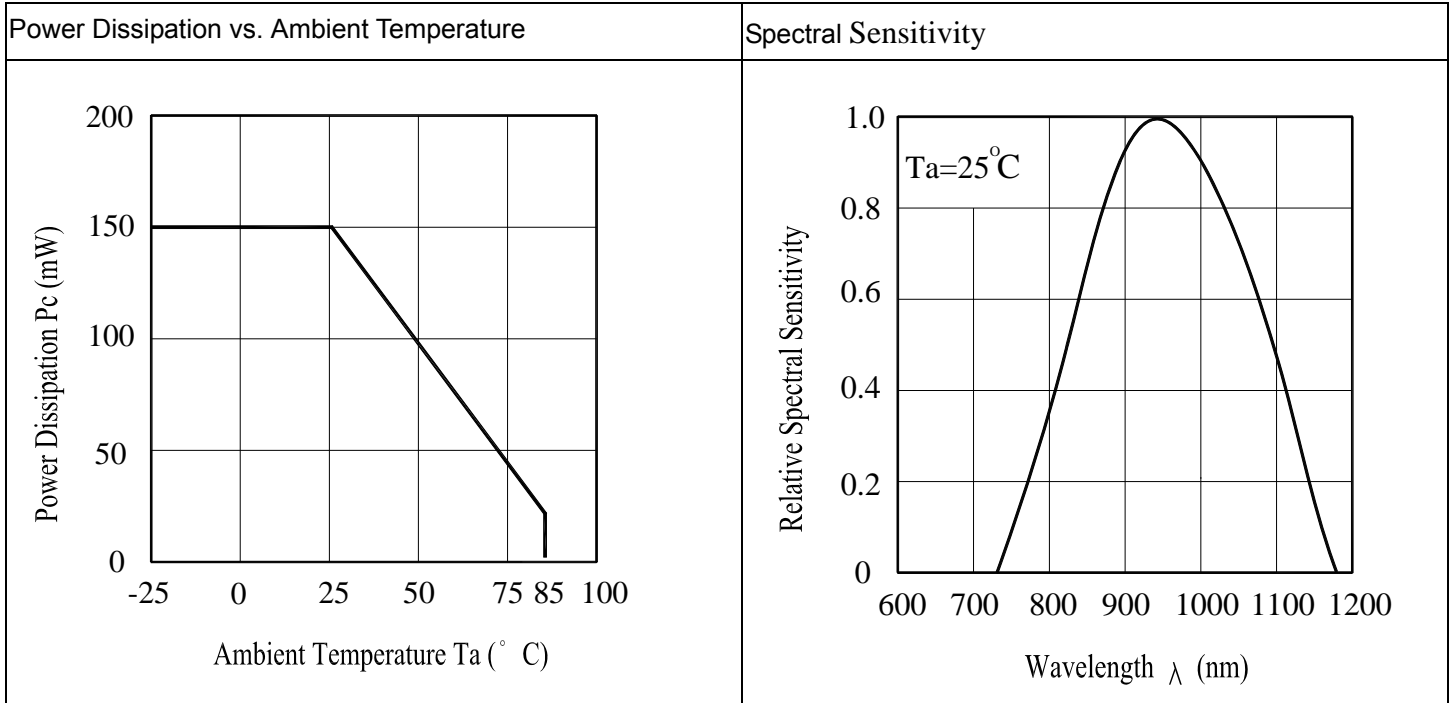
**Notes:** \*1: Soldering time ≤ 5 seconds.

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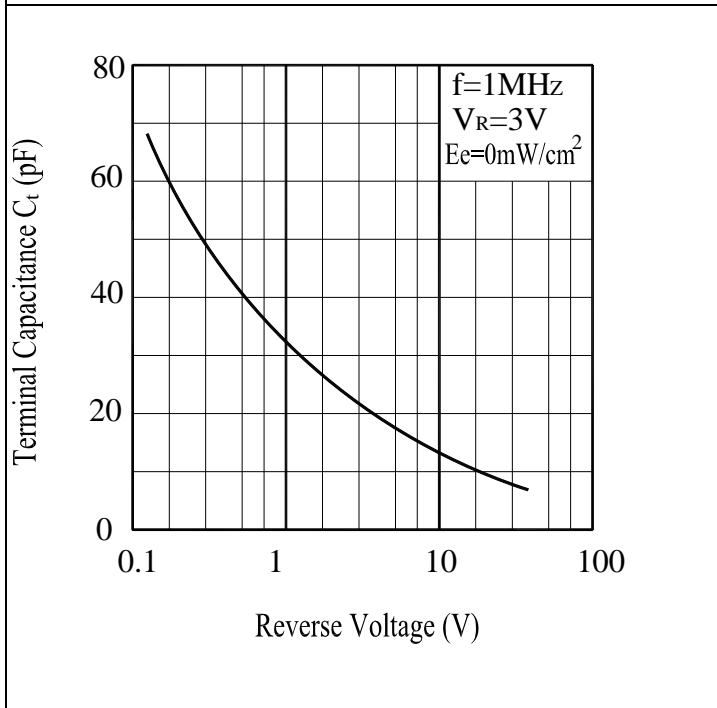
**Electro-Optical Characteristics (Ta=25°C)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Rang of Spectral Bandwidth	$\lambda_{0.5}$	840	-----	1100	nm	-----
Wavelength of Peak Sensitivity	$\lambda_p$	-----	940	-----	nm	-----
Open-Circuit Voltage	$V_{OC}$	-----	0.35	-----	V	Ee=5m W/cm2 $\lambda_p=940nm$
Short- Circuit Current	$I_{SC}$	-----	18	-----	uA	Ee=1m W/cm2 $\lambda_p=940nm$
Reverse Light Current	$I_L$	10.2	18	-----	uA	Ee=1m W/cm2 $\lambda_p=940nm$ VR=5V
Dark Current	$I_d$	----	5	30	nA	Ee=0m W/cm2 VR=10V
Reverse Breakdown	BVR	32	170	-----	V	Ee=0m W/cm2 IR=100μA
Total Capacitance	$C_t$	----	25	----	pF	Ee=0m W/cm2 VR=3V f=1MHZ
Rise/Fall Time	tr/tf	----	50/50	----	nS	VR=10V RL=1KΩ

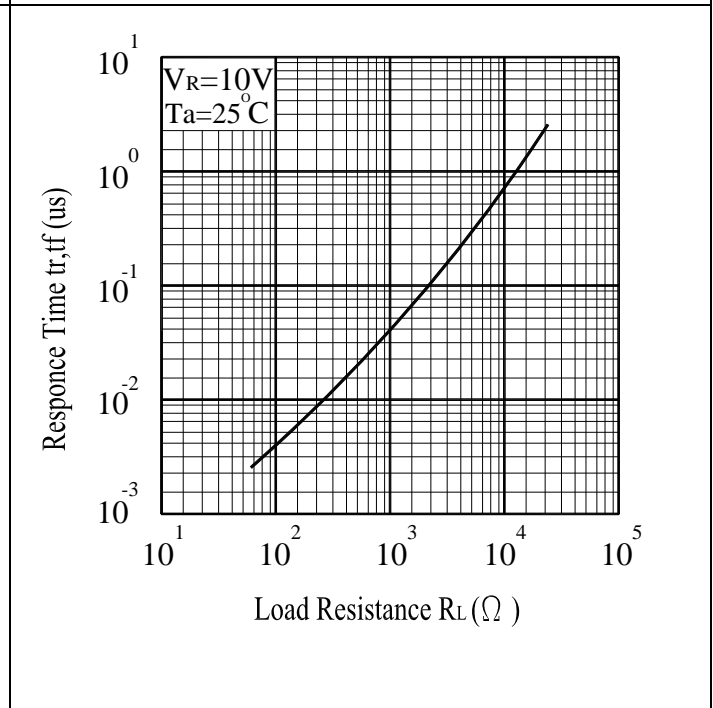
**Typical Electro-Optical Characteristics Curves**



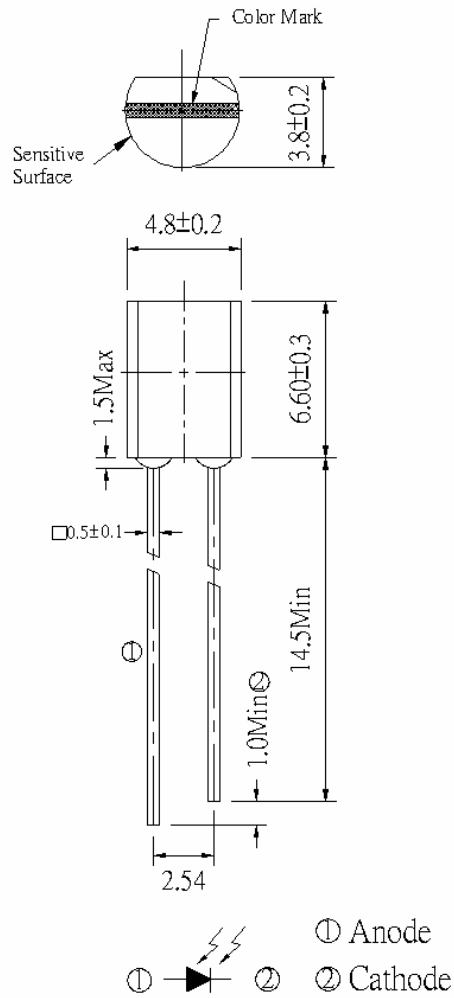
Terminal Capacitance vs. Reverse Voltage



Response Time vs. Load Resistance

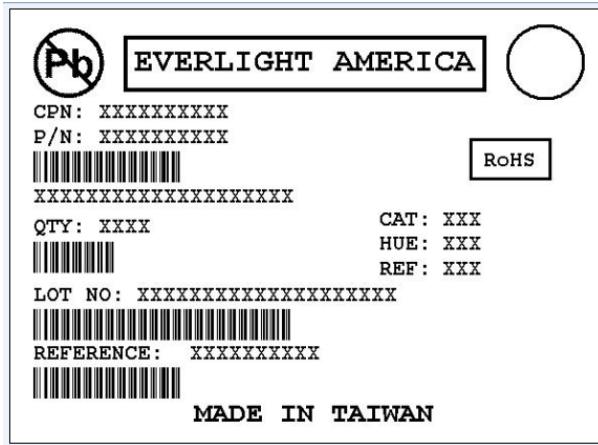


## Package Dimension



Note: Tolerances unless dimensions  $\pm 0.25$ mm

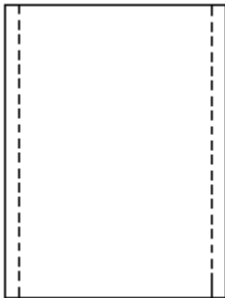
## Label Explanation



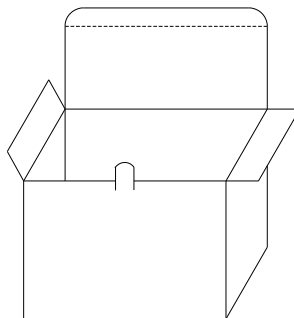
- CPN: Customer's Product Number
- P/N: Product Number
- QTY: Packing Quantity
- CAT: Luminous Intensity Rank
- HUE: Dom. Wavelength Rank
- REF: Forward Voltage Rank
- LOT No: Lot Number
- Reference: Identify Label Number

## Packing Specification

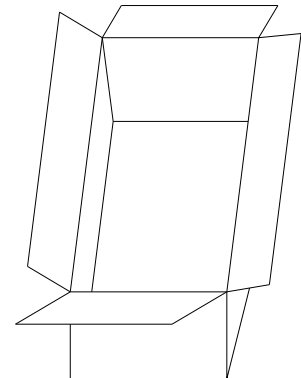
### ■ Anti-electrostatic bag



### ■ 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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