



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## 5mm Phototransistor EAPLP05RDDA1

### Features

- Fast response time
- High photo sensitivity
- Pb free
- The product itself will remain within RoHS compliant version.

### Description

- EAPLP05RDDA1 is a high speed and high sensitive NPN silicon NPN epitaxial planar phototransistor molded in a standard 5 mm package. Due to its Black epoxy the device is sensitive to infrared radiation.

### Applications

- Infrared applied system
- Camera
- Printer
- Cockroach catcher

## Device Selection Guide

Chip Materials	Lens Color
Silicon	Black

## Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Collector-Emitter Voltage	$V_{CEO}$	30	V
Emitter-Collector-Voltage	$V_{ECO}$	5	V
Collector Current	$I_C$	20	mA
Operating Temperature	$T_{opr}$	-25~+85	°C
Storage Temperature	$T_{stg}$	-40~ +100	°C
Lead Soldering Temperature*1	$T_{sol}$	260	°C
Power Dissipation at (or below) 25°C Free Air Temperature	$P_c$	75	mW

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

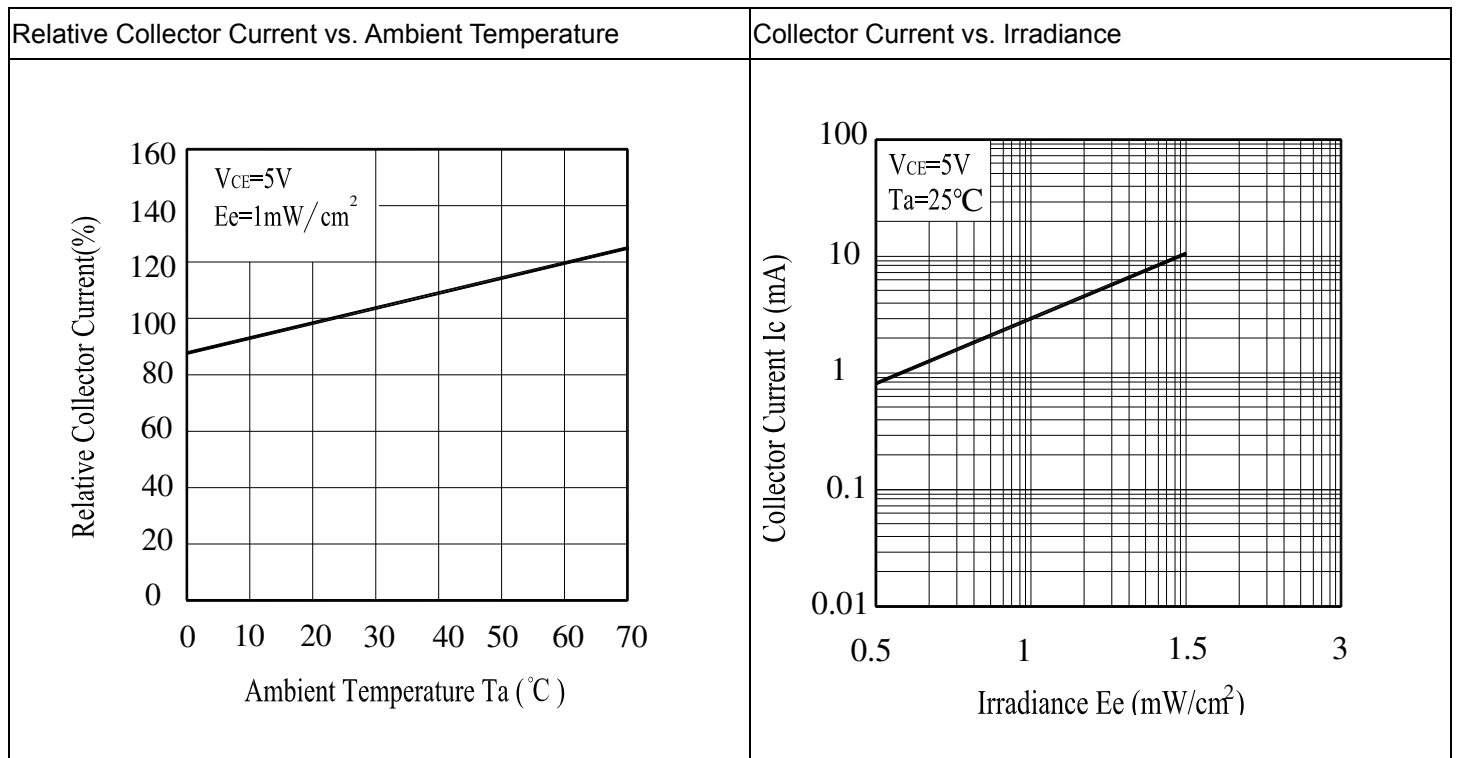
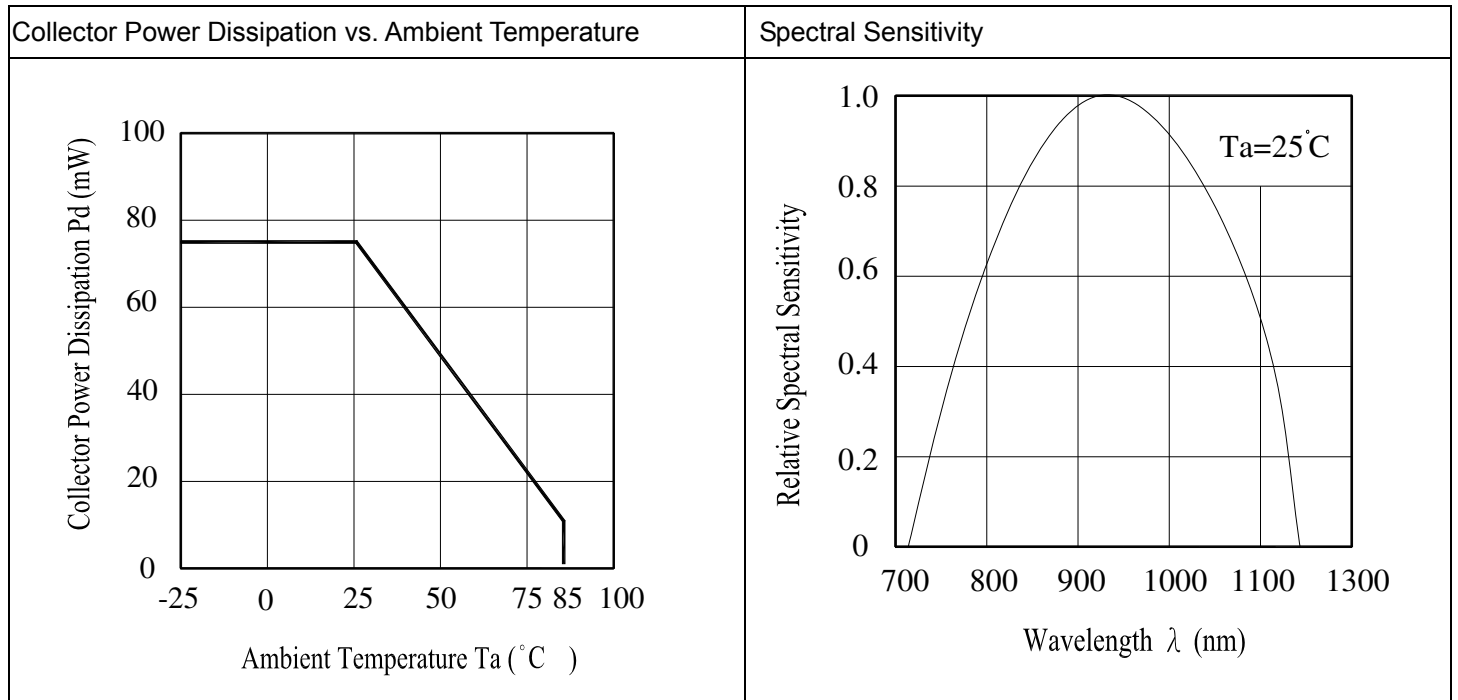
### Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Collector – Emitter Breakdown Voltage	$BV_{CEO}$	30	-----	-----	V	$I_C=100\mu A$ $E_e=0mW/cm^2$
Emitter-Collector Breakdown Voltage	$BV_{ECO}$	5	-----	-----	V	$I_E=100\mu A$ $E_e=0mW/cm^2$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	-----	-----	0.4	V	$I_C=2mA$ $E_e=1mW/cm^2$
Rise Time	$t_r$	-----	15	-----	$\mu S$	$V_{CE}=5V$ $I_C=1mA$ $RL=1000\Omega$
Fall Time	$t_f$	-----	15	-----		
Collector Dark Current	$I_{CEO}$	-----	-----	100	nA	$E_e=0mW/cm^2$ $V_{CE}=20V$
On State Collector Current	$I_{C(on)}$	0.7	3.0	-----	mA	$E_e=1mW/cm^2$ $V_{CE}=5V$ $\lambda_p=940nm$
Rang Of Spectral Bandwidth	$\lambda_{0.5}$	840	-----	1100	nm	----
Wavelength of Peak Sensitivity	$\lambda_P$	-----	940	-----	nm	----

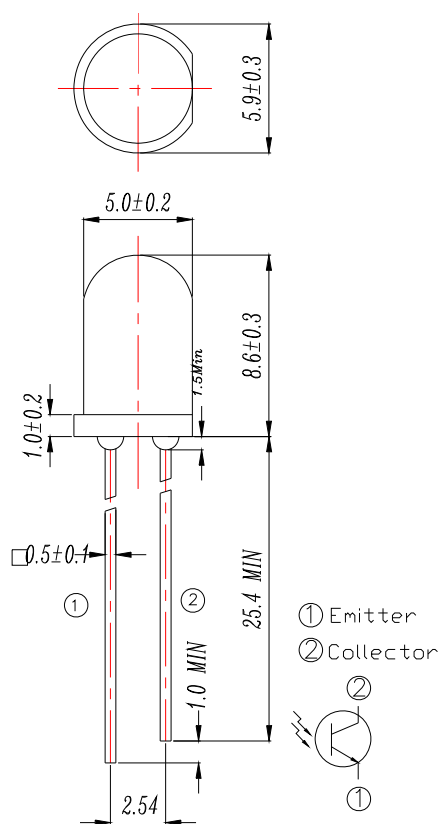
### Rankings

Parameter	Symbol	Min	Max	Unit	Test Condition
G	$I_{c(ON)}$	0.70	1.90	mA	$V_{ce}=5V$ $E_e=1mW/cm^2$
H		1.14	2.60		
J		1.77	3.61		
K		2.67	5.07		
L		4.18	7.07		

**Typical Electro-Optical Characteristics Curves**

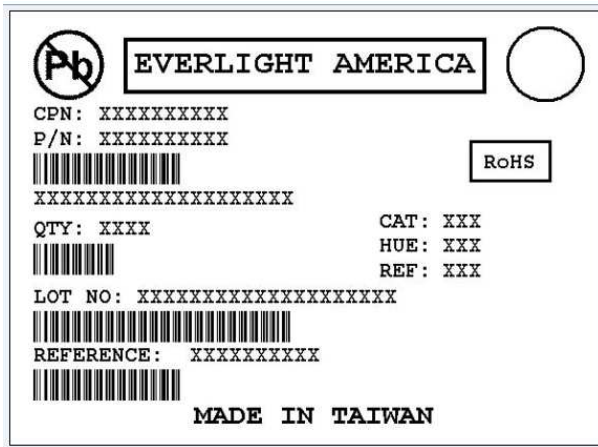


## Package Dimension



Note: Tolerances unless dimensions  $\pm 0.25$ mm

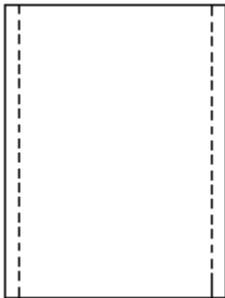
## Label Explanation



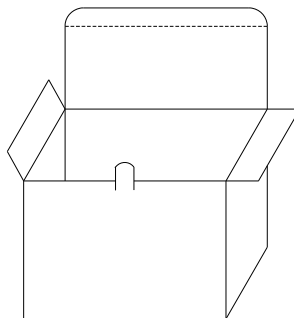
- CPN: Customer's Product Number
- P/N: Product Number
- QTY: Packing Quantity
- CAT: Luminous Intensity Rank
- HUE: Dom. Wavelength Rank
- REF: Forward Voltage Rank
- LOT No: Lot Number
- Reference: Identify Label Number

## Packing Specification

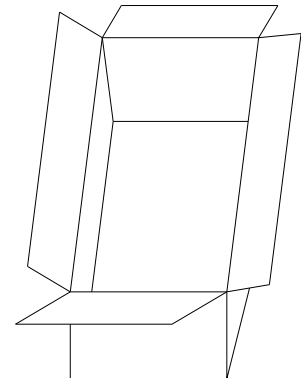
### ■ Anti-electrostatic bag



### ■ 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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