

### 5mm Silicon PIN Photodiode , T-1 3/4 EAPDLP05RDDA0



#### Features

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

#### Description

EAPDLP05RDDA0 is a high speed and high sensitive PIN photodiode in a standard 5  $\phi$  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

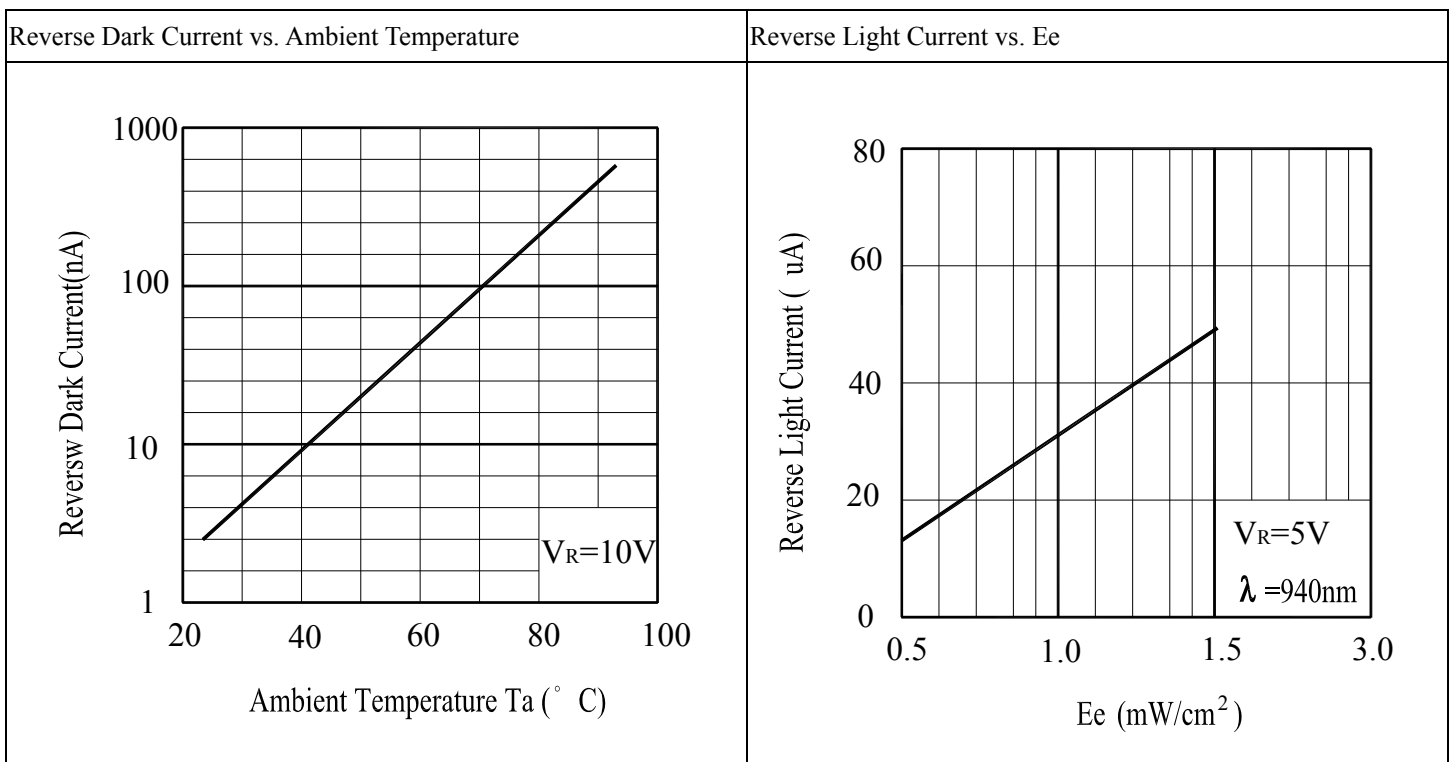
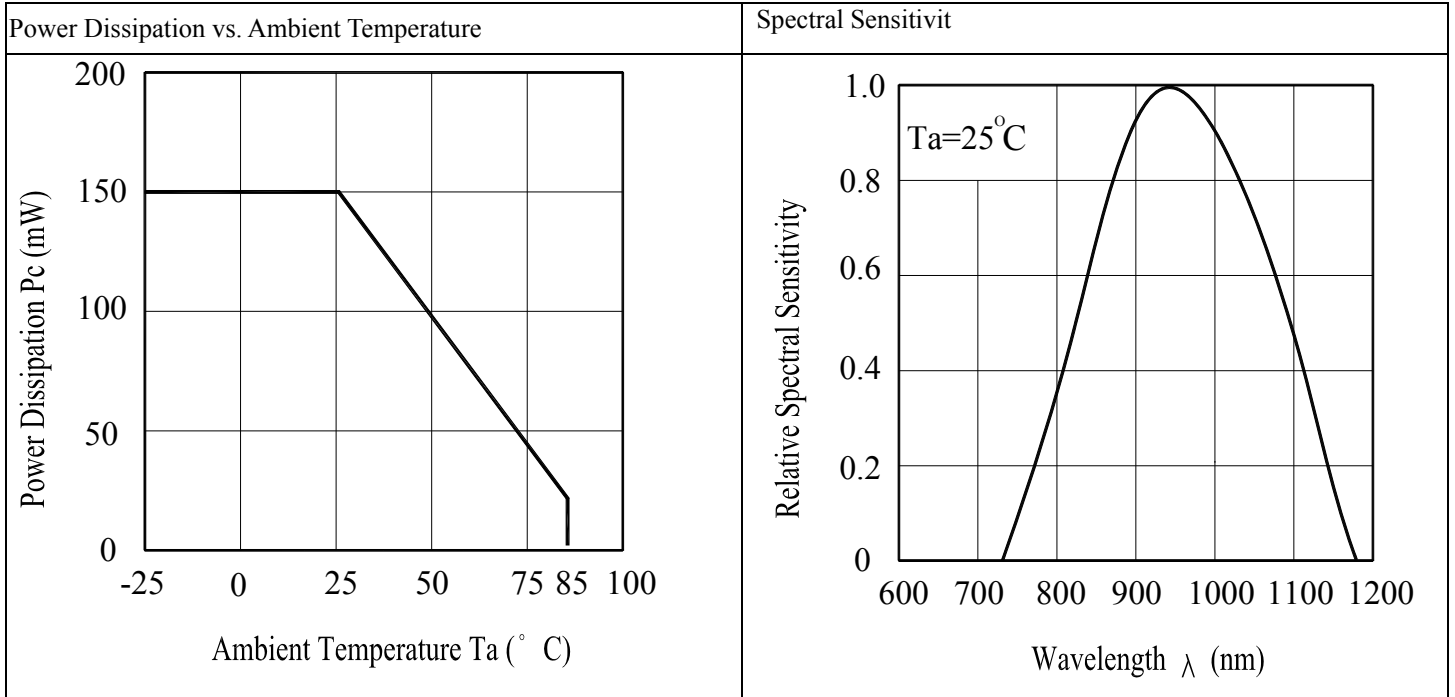
**Absolute Maximum Ratings (Ta=25°C)**

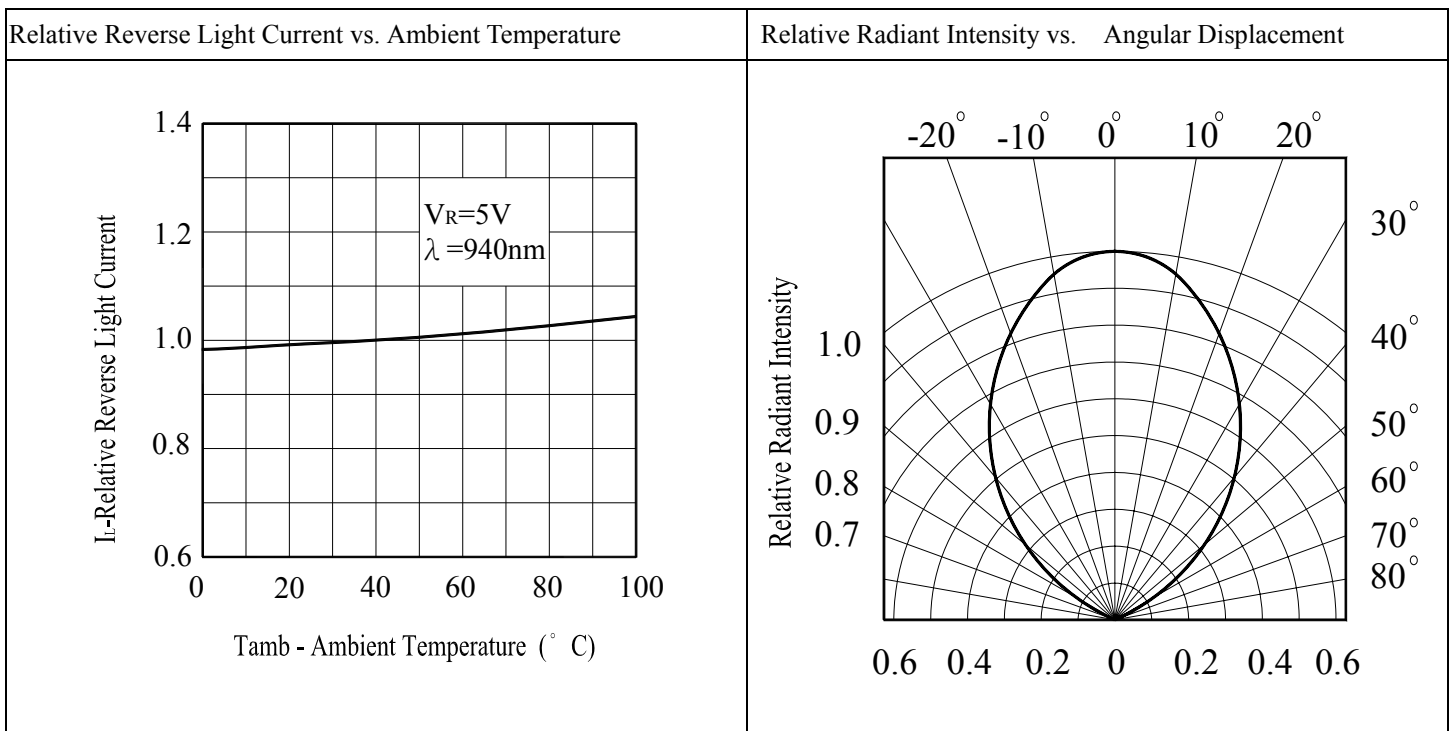
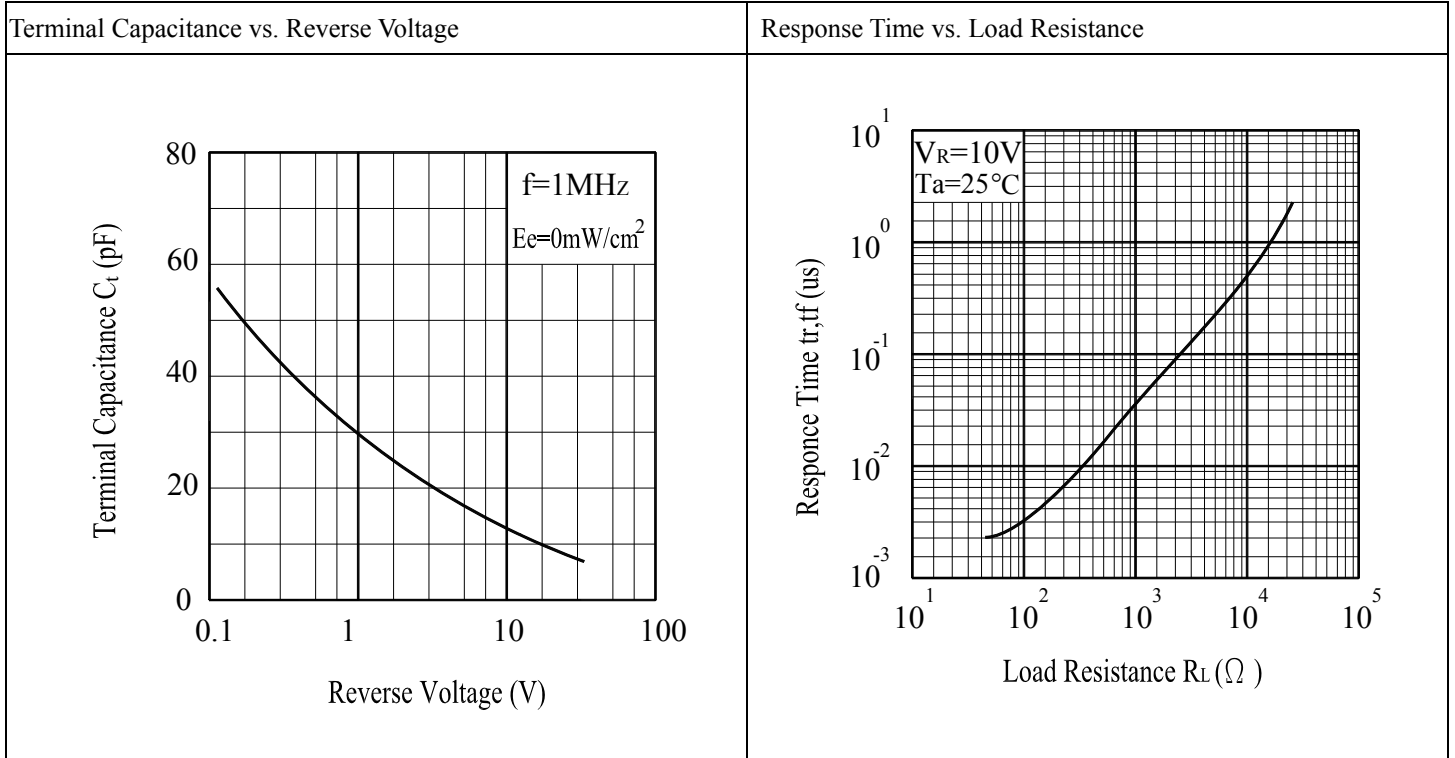
Parameter	Symbol	Rating	Unit
Reverse Voltage	VR	32	V
Power Dissipation	Pd	150	mW
Lead Soldering Temperature	Tsol	260	°C
Operating Temperature	Topr	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +100	°C

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

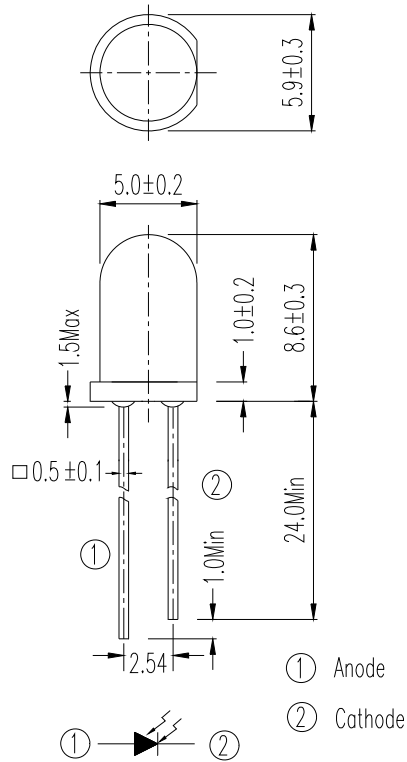
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Range Of Spectral Bandwidth	$\lambda_{0.5}$	840	---	1100	nm	-----
Wavelength Of Peak Sensitivity	$\lambda_p$	---	940	---	nm	-----
Open-Circuit Voltage	$V_{OC}$	---	0.39	---	V	$E_e=5m W/cm^2$ $\lambda_p=940nm$
Short- Circuit Current	$I_{SC}$	---	35	---	$\mu A$	$E_e=1m W/cm^2$ $\lambda_p=940nm$
Reverse Light Current	$I_L$	25	35	---		$E_e=1m W/cm^2$ $\lambda_p=940nm$ $V_R=5V$
Reverse Dark Current	$I_D$	---	5	30	nA	$E_e=0m W/cm^2$ $V_R=10V$
Reverse Breakdown Voltage	$V_{BR}$	32	170	---	V	$E_e=0m W/cm^2$ $I_R=100 \mu A$
Total Capacitance	$C_t$	---	18	---	pF	$E_e=0m W/cm^2$ $V_R=5V$ $f=1MHZ$
Rise Time/ Fall Time	$t_r / t_f$	---	45/45	---	nS	$V_R=10V$ $R_L=1K \Omega$
View Angle	201/2	--	80	--	deg	$I_f=20mA$

**Typical Electro-Optical Characteristics Curves**



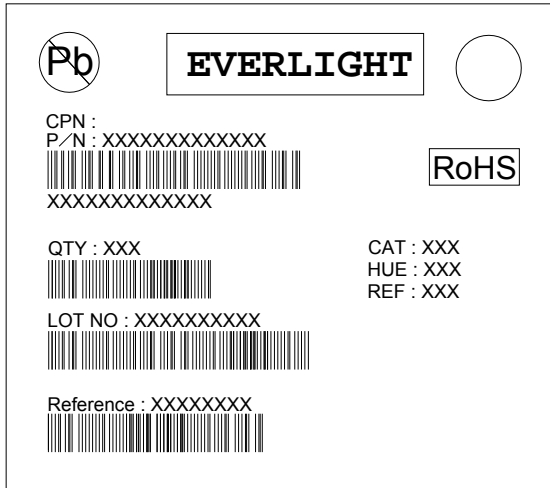


**Package Dimension**



Note: Tolerances unless dimensions  $\pm 0.25$ mm

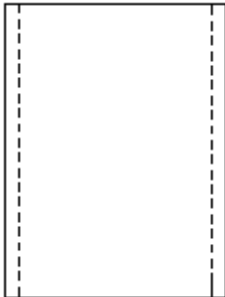
**Label Form Specification**



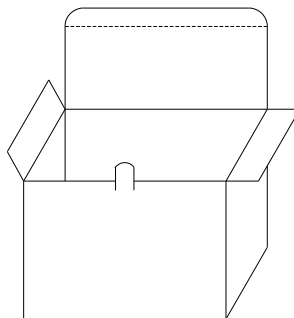
- CPN: Customer's Product Number
- P/N: Product Number
- QTY: Packing Quantity
- CAT: Luminous Intensity Rank
- HUE: Dom. Wavelength Rank
- REF: Forward Voltage Rank
- LOT No: Lot Number
- X: Month
- Reference: Identify Label Number

**Packing Specification**

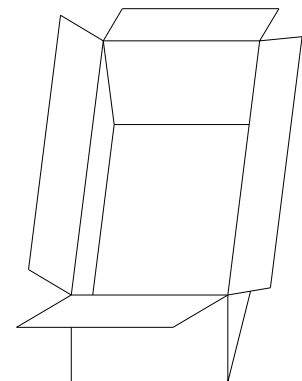
■ Anti-electrostatic bag



■ 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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