

3mm Photodiode, T-1 EAPDLP03RDAA1



Features

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

Description

EAPDLP03RDAA1 is a high speed and high sensitive PIN photodiode in a standard 3Φ plastic package.

Due to its water clear epoxy the device is sensitive to visible and infrared radiation.

Applications

- Automatic door sensor
- Camera
- Game machine
- High speed photo detector

Device Selection Guide

Chip Materials	Lens Color
Silicon	Water clear

Absolute Maximum Ratings (Ta=25°C)

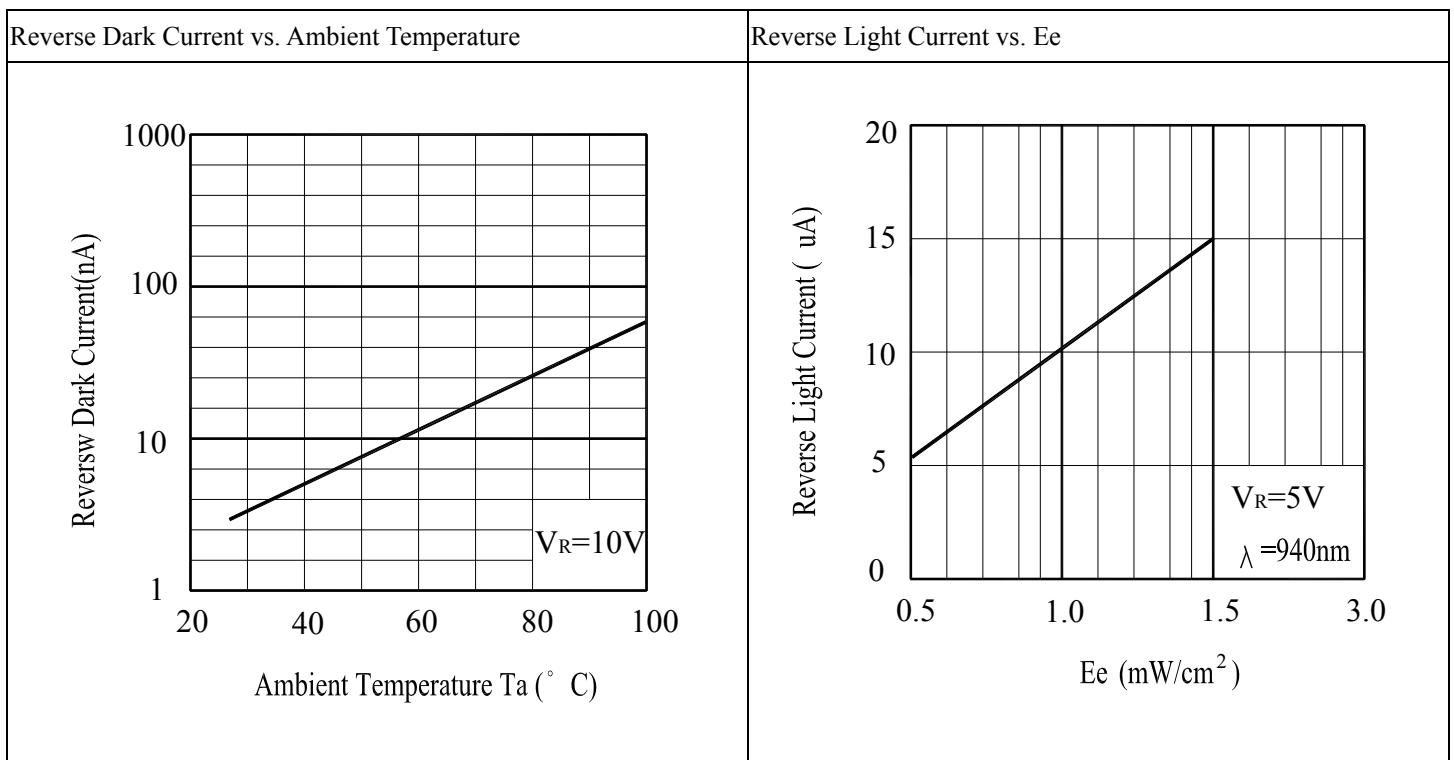
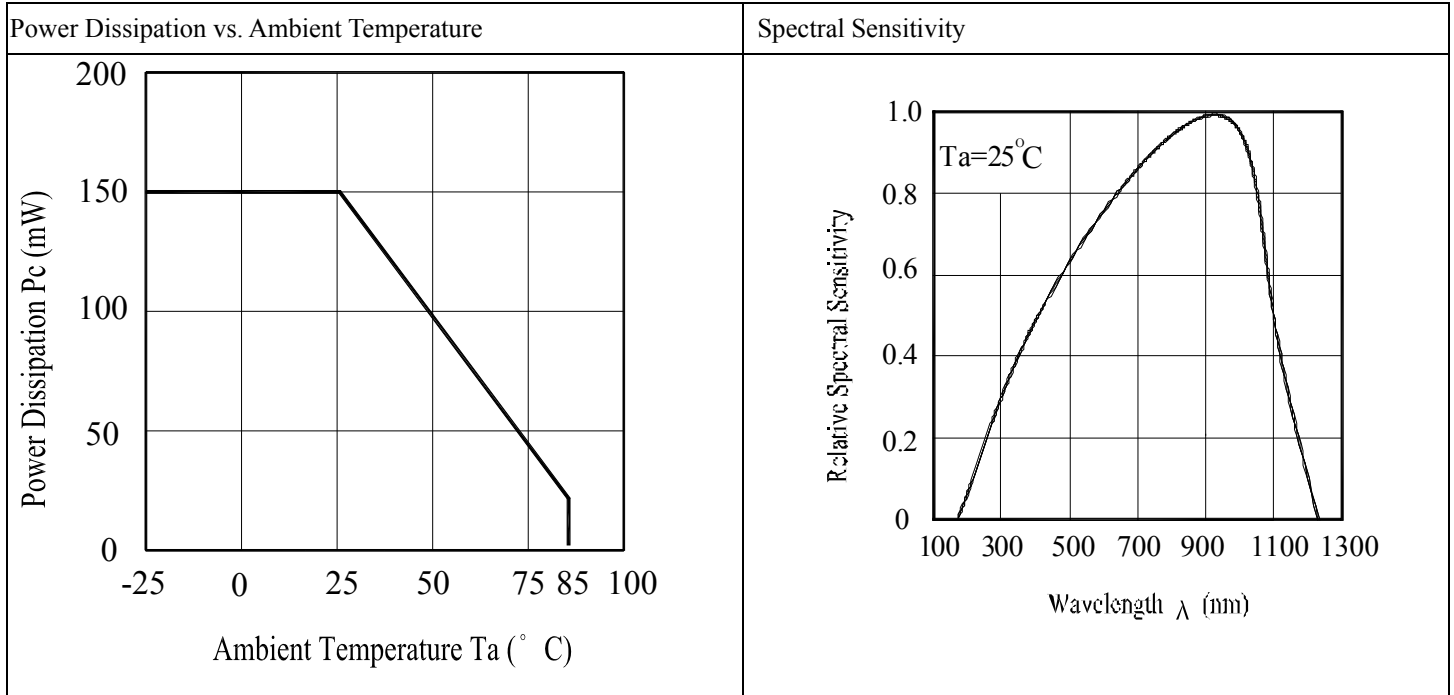
Parameter	Symbol	Rating	Unit
Reverse Voltage	V_R	32	V
Operating Temperature	T_{opr}	-40 ~ +85	°C
Storage Temperature	T_{stg}	-40 ~ +100	°C
Soldering Temperature	T_{sol}	260	°C
Power Dissipation at (or below) 25°C Free Air Temperature	P_c	150	mW

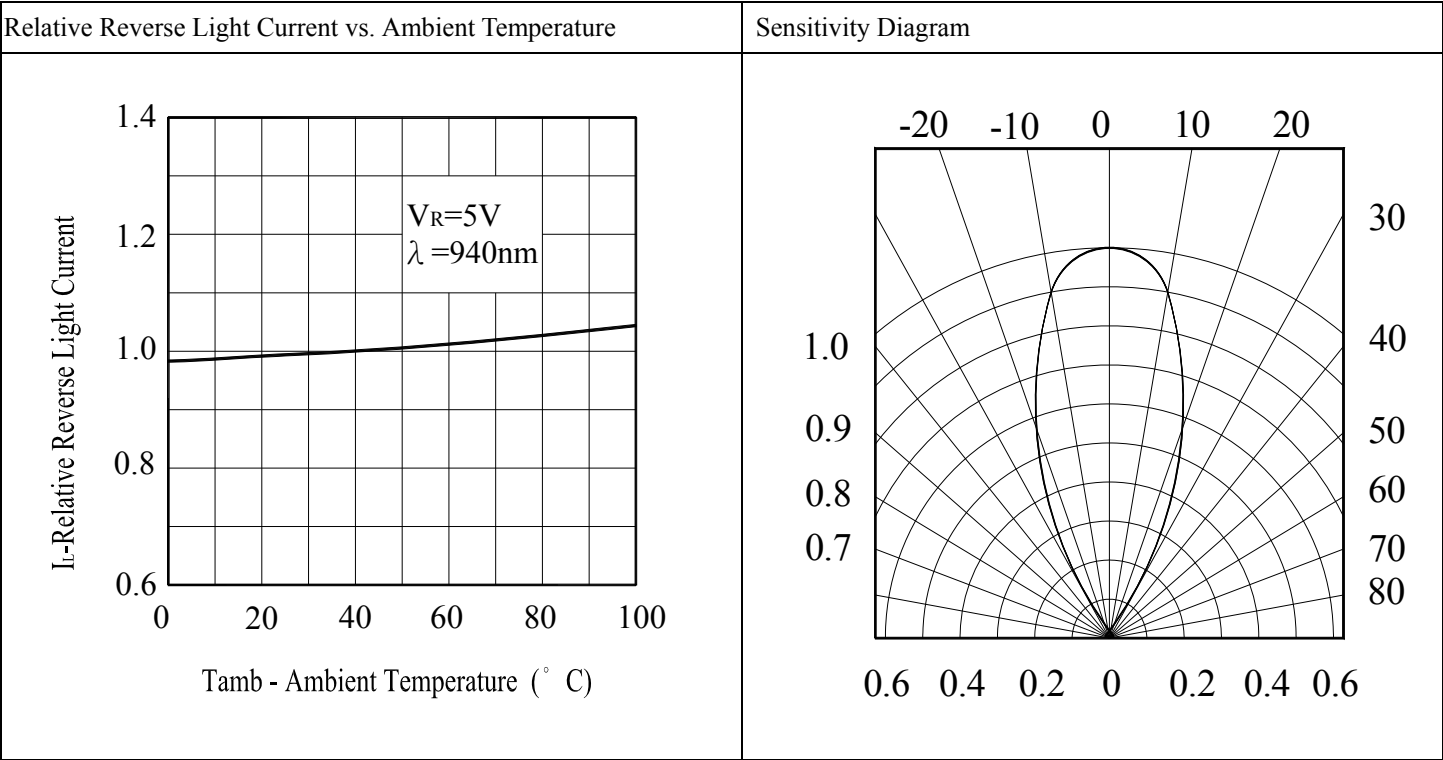
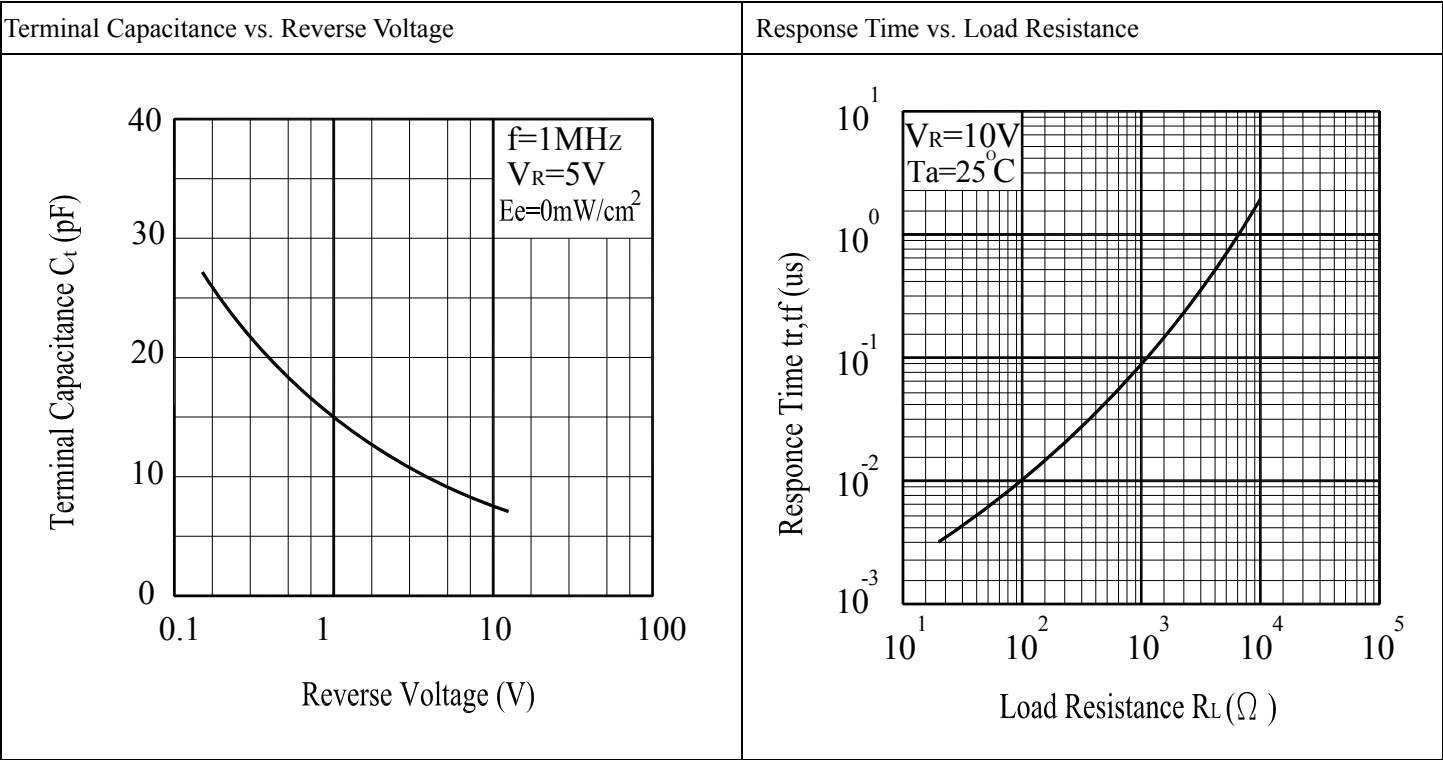
Notes: *1: Soldering time $\leq$ 5 seconds.

Electro-Optical Characteristics (Ta=25°C)

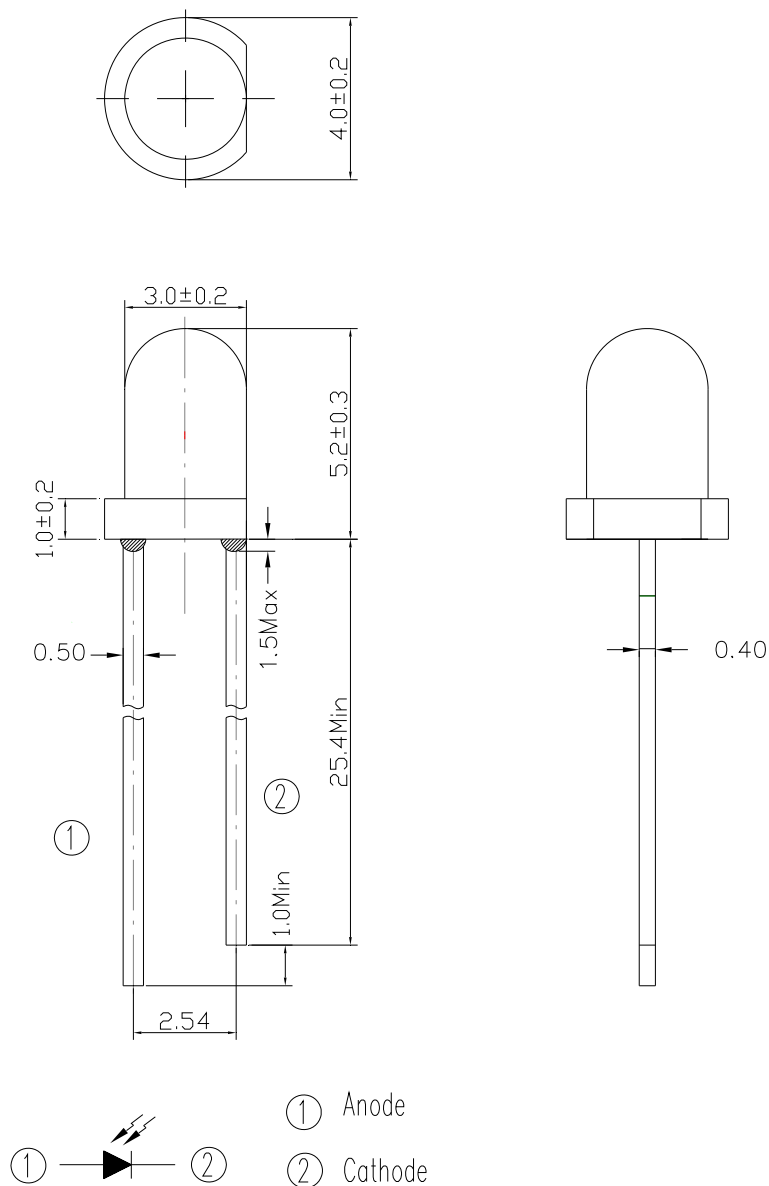
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Range Of Spectral Bandwidth	$\lambda_{0.5}$	400	---	1100	nm	-----
Wavelength Of Peak Sensitivity	λ_P	---	940	---	nm	-----
Open-Circuit Voltage	V_{OC}	---	0.44	---	V	Ee=5mW/cm ² λ_P =940nm
Short- Circuit Current	I_{SC}	---	10	---	μA	Ee=1mW/cm ² λ_P =940nm
Reverse Light Current	I_L	---	10	---	μA	Ee=1mW/cm ² λ_P =940nm V_R =5V
Reverse Dark Current	I_D	---	---	10	nA	Ee=0mW/cm ² V_R =10V
Reverse Breakdown Voltage	V_{BR}	32	170	---	V	Ee=0mW/cm ² I_R =100 μA
Total Capacitance	C_t	---	10	---	pF	Ee=0mW/cm ² V_R =5V f=1MHz
Rise Time/ Fall Time	t_r / t_f	-----	10	-----	ns	V_R =10V R_L =100 Ω
View Angle	2 θ 1/2	-----	45	-----	deg	I_F =20mA

Typical Electro-Optical Characteristics Curves





Package Dimension



Note: Tolerances unless dimensions ± 0.25 mm

Label Form Specification

Pb **EVERLIGHT** **RoHS**

CPN :
P/N : XXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX

QTY : XXX
XXXXXXXXXXXX

LOT NO : XXXXXXXXXXXX
XXXXXXXXXXXX

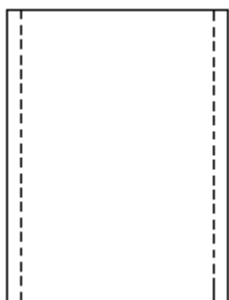
Reference : XXXXXXXX
XXXXXXXXXXXX

CAT : XXX
HUE : XXX
REF : XXX

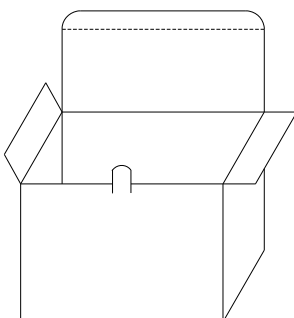
- CPN: Customer's Product Number
- P/N: Product Number
- QTY: Packing Quantity
- CAT: Luminous Intensity Rank
- HUE: Dom. Wavelength Rank
- REF: Forward Voltage Rank
- LOT No: Lot Number
- X: Month
- Reference: Identify Label Number

Packing Specification

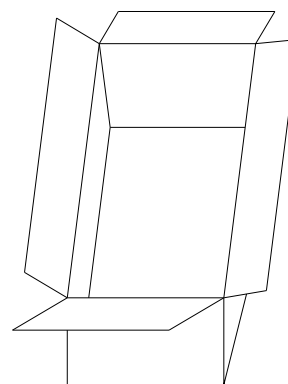
■ Anti-electrostatic bag



■ Inner Carton



■ Outside Carton



■ Packing Quantity

1. 1000 PCS/1 Bag, 4 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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