EVERLIGHT AMERICAS

DATASHEET

EAPDLP04SCAA2



Features

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

Descriptions

EAPDLP04SCAA2is 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

LED Part No.	Chip Material	Lens Color
EAPDLP04SCAA2	Silicon	Black

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Absolute Maximum Ratings (Ta=25℃)

Parameter	Symbol	Rating	Units
Reverse Voltage	V_R	32	V
Power Dissipation	Pd	150	mW
Lead Soldering Temperature	Tsol	260	℃
Operating Temperature	Topr	-40 ~ +85	℃
Storage Temperature	Tstg	-40 ~ +100	℃

Notes: *1:Soldering time≦5 seconds.

Electro-Optical Characteristics (Ta=25℃)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Rang of Spectral Bandwidth	$\lambda_{0.5}$	-----	840	---	1100	nm
Wavelength of Peak Sensitivity	λ_p	-----	---	940	---	nm
Open-CircuitVoltage	V_{OC}	Ee=5m W/cm^2 λ_p=940nm	---	0.41	---	V
Short- Circuit Current	I_{SC}	Ee=1m W/cm^2 λ_p=940nm	---	18	---	μA
Reverse Light Current	I_L	Ee=1m W/cm^2 λ_p=940nm V_R=5V	10.2	18	---	
Dark Current	Id	Ee=0m W/cm^2 V_R=10V	---	5	30	nA
Reverse Breakdown	BV_R	Ee=0m W/cm^2 I_R=100μA	32	170	---	V
Total Capacitance	Ct	Ee=0m W/cm^2 V_R=5V f=1MHZ	---	18	---	pF
Rise/Fall Time	t_r/t_f	V_R=10V R_L=1KΩ	---	50/50	---	nS

Note:

Tolerance of Luminous Intensity: ±10%
Tolerance of Dominant Wavelength: ±1nm
Tolerance of Forward Voltage: ±0.1V

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Typical Electro-Optical Characteristics Curves

Fig.1 Power Dissipation vs. Ambient Temperature

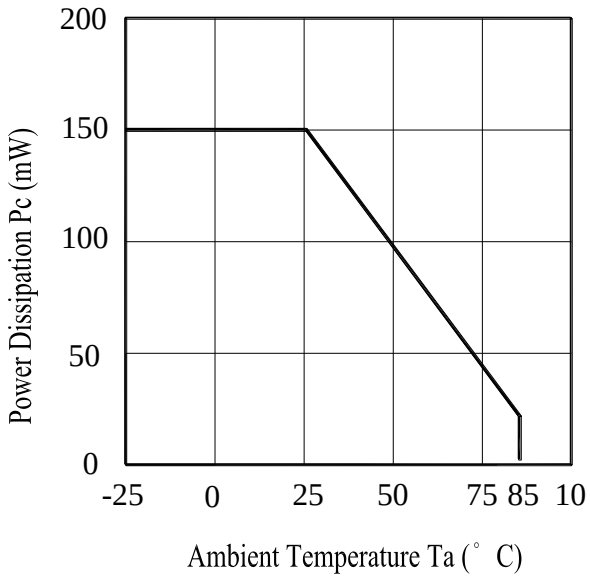


Fig.2 Spectral Sensitivity

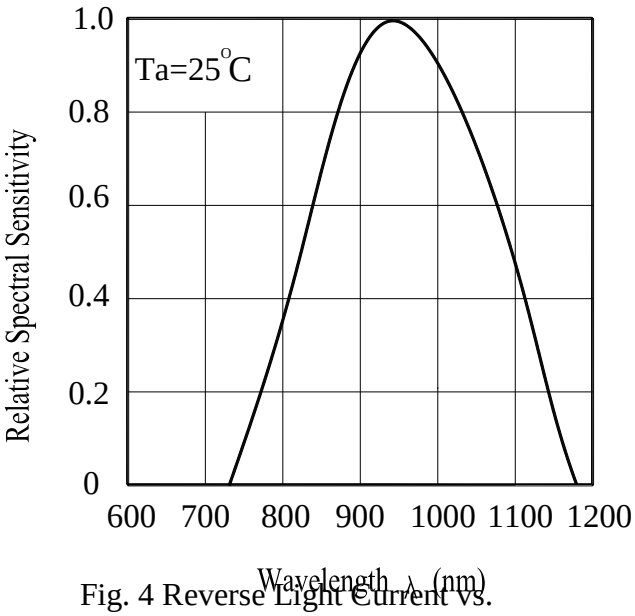


Fig.3 Dark Current vs. Ambient Temperature

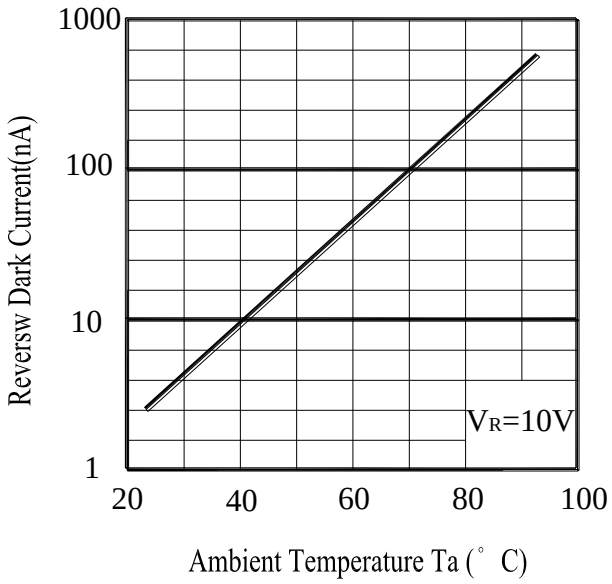
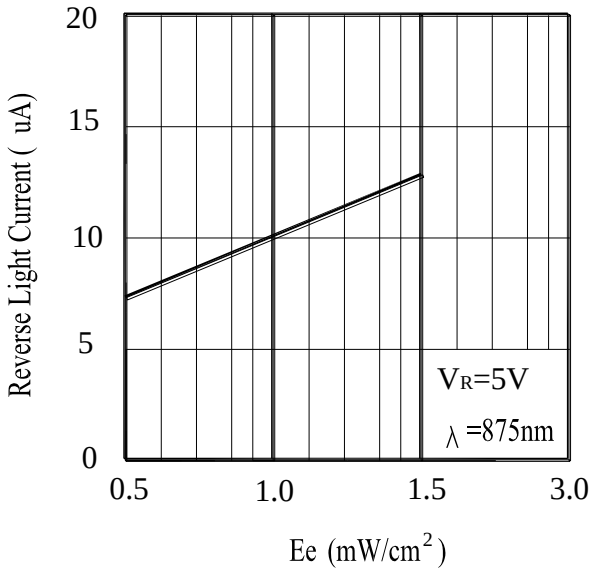


Fig. 4 Reverse Light Current vs. Ee



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Typical Electro-Optical Characteristics Curves

Fig.5 Terminal Capacitance vs. Reverse Voltage

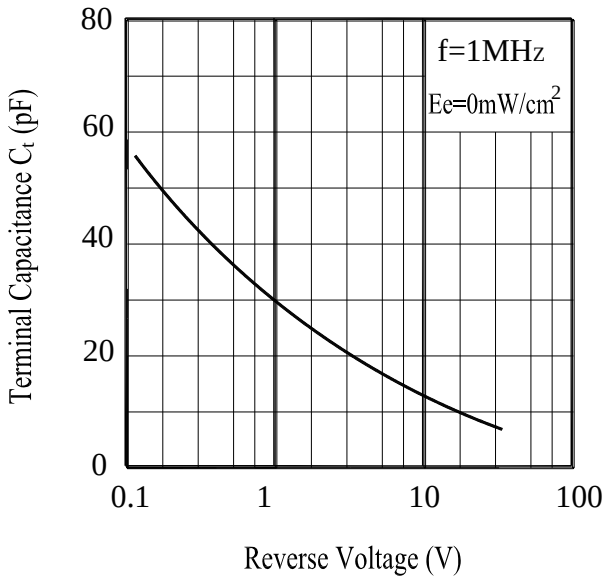
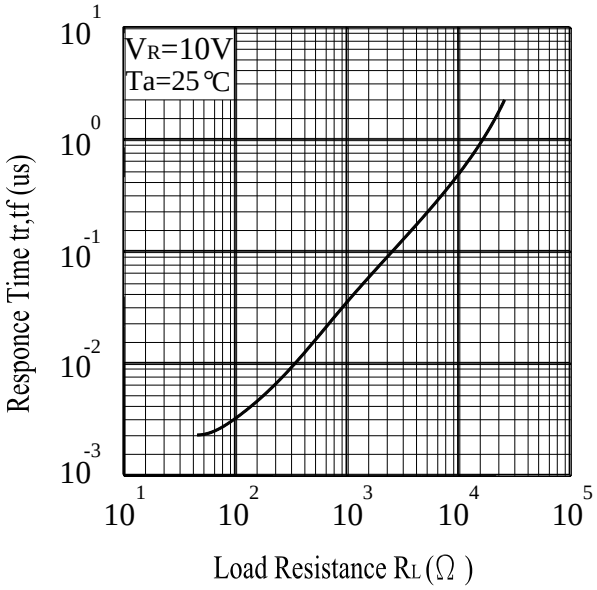
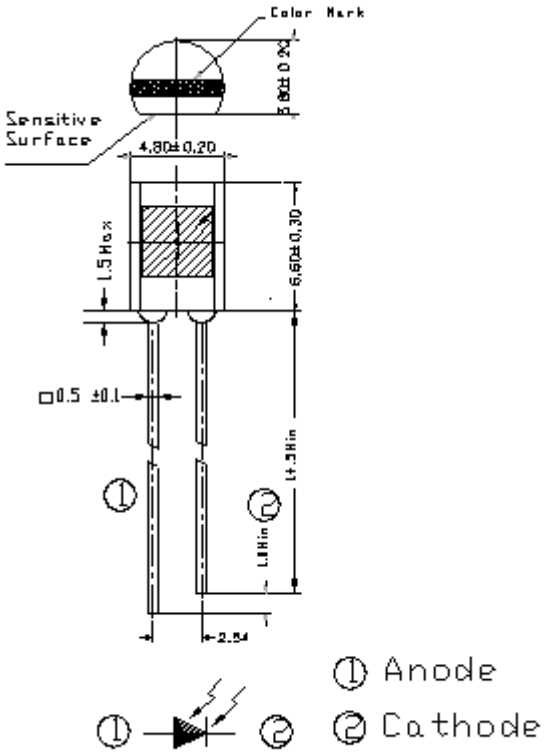


Fig.6 Response Time vs. Load Resistance



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Package Dimension



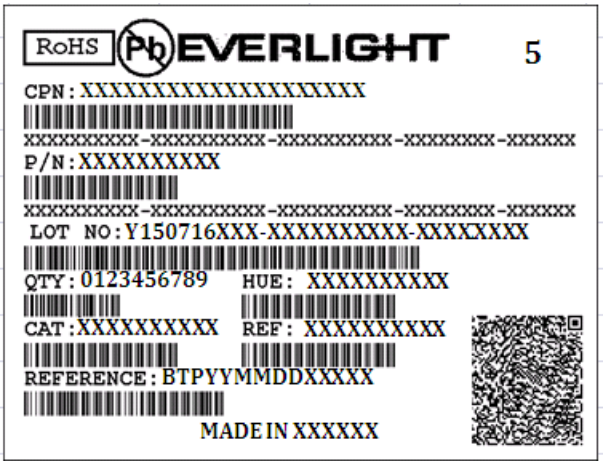
Note: Tolerances unless dimensions ±0.25mm

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Packing Specification

■ Packing Quantity
1. 200~500 PCS/1 Bag, 5Bags/1 Inner Carton
2. 10Inner Cartons/1 Outside Carton

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
- Reference: Identify Label Number

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