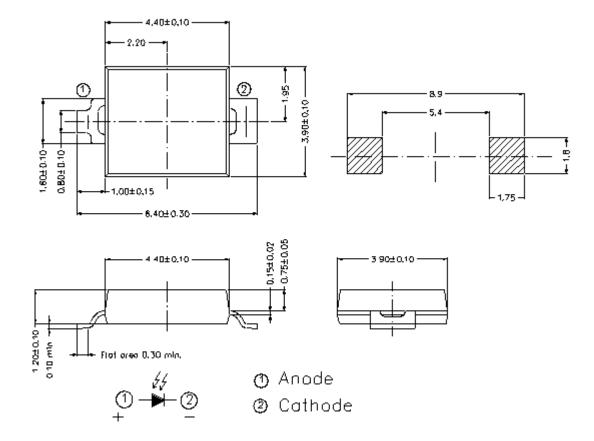


Package Dimensions



Notes: 1.All dimensions are in millimeters 2.Tolerances unless dimensions ±0.1mm

Absolute Maximum Ratings (Ta=25°C)

Parameter	Parameter Symbol Rati		Units	
Reverse Voltage	V _R	32	V	
Operating Temperature	T _{opr}	-25 ~ +85	°C	
Storage Temperature	T _{stg}	-40 ~ +85	°C	
Soldering Temperature *1	T _{sol}	260	°C	
Power Dissipation at(or below) 25°C Free Air Temperature	P _d	150	mW	

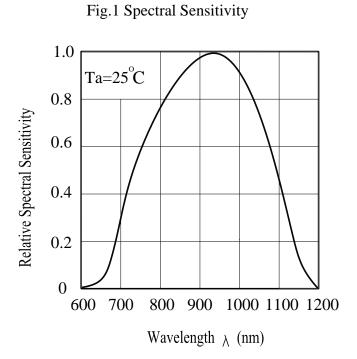
Notes: *1:Soldering time \leq 5 seconds.

2

Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min	Тур	Max	Unit
Rang Of Spectral Bandwidth	λ 0.5		730		1100	nm
Wavelength Of Peak Sensitivity	λp			940		nm
Short- Circuit Current	I _{SC}	$Ee=1mW/cm^{2}$ $\lambda p=940nm$		35		μA
Reverse Light Current	IL	$Ee=1mW/cm^{2}$ $\lambda p=940nm$ $V_{R}=5V$	17	25		μA
Reverse Dark Current	I _D	Ee=0mW/cm ² V _R =10V		5	30	nA
Reverse Breakdown Voltage	V _{BR}	Ee=0mW/cm ² I _R =100 μ A	32	170		v

Typical Electro-Optical Characteristics Curves



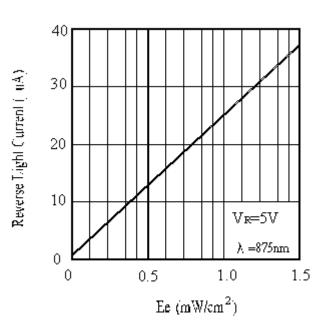


Fig.2 Reverse Light Current vs. Ee

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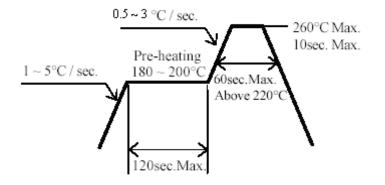
Precautions For Use

1. Over-current-proof

Customer must apply resistors for protection , otherwise slight voltage shift will cause big

current change (Burn out will happen).

- 2. Storage
 - 2.1 Do not open moisture proof bag before the products are ready to use.
 - 2.2 Before opening the package, the PHOTODIODEs should be kept at 30° C or less and 90%RH or less.
 - 2.3 The PHOTODIODEs should be used within a year.
 - 2.4 After opening the package, the PHOTODIODEs should be kept at 30° C or less and 60% RH or less.
 - 2.5 The PHOTODIODEs should be used within 168 hours (7 days) after opening the package.
- 2.6 If the moisture absorbent material (silica gel) has faded away or the PHOTODIODEs have exceeded the storage time, baking treatment should be performed using the following conditions.
 Baking treatment : 60±5°C for 24 hours.
- 3. Soldering Condition
- 3.1 Pb-free solder temperature profile



- 3.2 Reflow soldering should not be done more than two times.
- 3.3 When soldering, do not put stress on the PHOTODIODEs during heating.
- 3.4 After soldering, do not warp the circuit board.

Data Sheet Silicon Planar PIN Photodiode PD70-01B/TR7

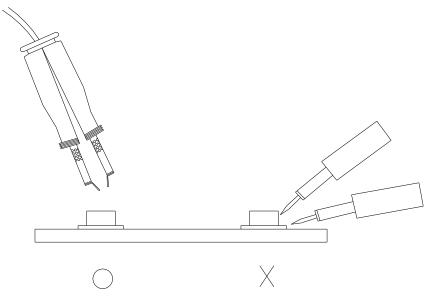
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4.Soldering Iron

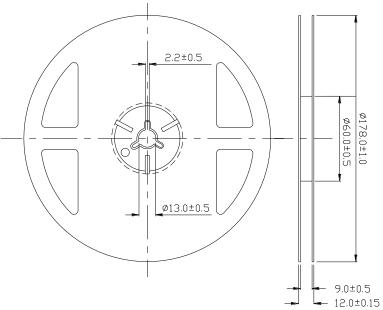
Each terminal is to go to the tip of soldering iron temperature less than 350° C or 3 seconds within once in less than the soldering iron capacity 25W. Leave two seconds and more intervals, and do soldering of each terminal. Be careful because the damage of the product is often started at the time of the hand solder.

5.Repairing

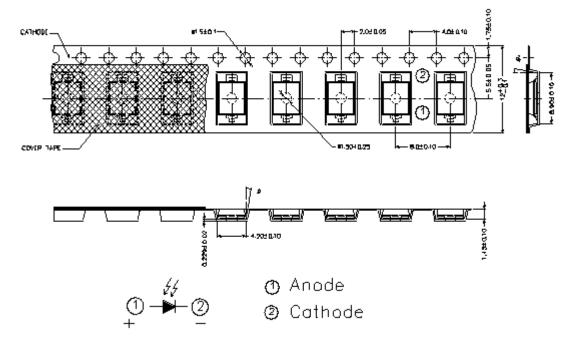
Repair should not be done after the PHOTODIODEs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used (as below figure). It should be confirmed beforehand whether the characteristics of the PHOTODIODEs will or will not be damaged by repairing.



Package Dimensions



Note: The tolerances unless mentioned is ± 0.1 mm, Unit = mm



Carrier Tape Dimensions:(Quantity: 1000pcs/reel)

Note: The tolerances unless mentioned is ± 0.1 mm, Unit = mm

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EVERLIGHT

Label Form Specification

RoHS Pb)**EVERLIGHT** 5 P/N:XXXXXXXXXX ********* QTY:0123456789 HUE:XXXXXXXX HUE: XXXXXXXXXXX REF: XXXXXXXXXX CAT:XXXXXXXXXX REFERENCE: BTPYYMMDDXXXXX MADE IN XXXXXX MSL-X

CPN: Customer's Production Number P/N : Production Number QTY: Packing Quantity CAT: Ranks HUE: Peak Wavelength REF: Reference LOT No: Lot Number

DISCLAIMER

- 1. EVERLIGHT reserves the right(s) on the adjustment of product material mix for the specification.
- 2. The product meets EVERLIGHT published specification for a period of twelve (12) months from date of shipment.
- 3. The graphs shown in this datasheet are representing typical data only and do not show guaranteed values.
- 4. When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. EVERLIGHT assumes no responsibility for any damage resulting from the 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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- 6. This product is not intended to be used for military, aircraft, automotive, medical, life sustaining or life saving applications or any other application which can result in human injury or death. Please contact authorized Everlight sales agent for special application request.