

Package Dimensions









Anode ② Cathode

Recommend Sodering Pad



- Notes: 1.All dimensions are in millimeters
 - 2.Tolerances unless dimensions ±0.1mm
 - 3. Suggested pad dimension is just for reference only

Please modify the pad dimension based on individual need

Absolute Maximum Ratings (Ta=25℃)

Parameter	Symbol	Rating	Units	
Continuous Forward Current	I _F	65	mA	
Reverse Voltage	V _R	5	V	
Operating Temperature	T _{opr}	-25~ +85	°C	
Storage Temperature	T _{stg}	-40 ~ +100	°C	
Soldering Temperature	T_{sol}	260	°C	
Power Dissipation at(or below)	D	100	mW	
25°C Free Air Temperature	P _d	130	11100	

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

Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min.	Тур.	Max.	Units
Radiant Intensity	l _e	I _F =20mA	0.5	2.0		mW/sr
Peak Wavelength	λр	I _F =20mA	-	850		nm
Spectral Bandwidth	Δλ	I _F =20mA	-	45		nm
Forward Voltage	V _F	I _F =20mA		1.45	1.65	V
Reverse Current	I _R	V _R =5V			10	μA
View Angle	201/2	I _F =20mA		120		deg

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Typical Electro-Optical Characteristics Curves

Fig.1 Forward Current vs.

Fig.2 Spectral Distribution

Ambient Temperature







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Typical Electro-Optical Characteristics Curves

Fig.5 Relative Radiant Intensity vs.

Angular Displacement



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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 LEDs should be kept at 10° C $\sim 30^{\circ}$ C and 90%RH or less.
 - 2.3 The LEDs suggested be used within one year.
 - 2.4 After opening the package, the devices must be stored at $10^{\circ}C \sim 30^{\circ}C$ and $\leq 60^{\circ}RH$, and used within 168 hours (floor life). If unused LEDs remain, it should be stored in moisture proof packages.
 - 2.5 If the moisture absorbent material (desiccant material) has faded or unopened bag has exceeded the shelf life or devices (out of bag) have exceeded the floor life, baking treatment is required.
 - 2.6 If baking is required, refer to IPC/JEDEC J-STD-033 for bake procedure or recommend the following conditions:

96 hours at $60^{\circ}C \pm 5^{\circ}C$ and < 5 % RH (reeled/tubed/loose units)

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 LEDs during heating.
- 3.4 After soldering, do not warp the circuit board.

Ver.:1

狀態:Approved(正式發行)

Data Sheet 0805 Package Infrared Chip LED HIR17-21C/TR8

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4. Soldering Iron

Each terminal is to go to the tip of soldering iron temperature less than 350° C for 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 LEDs 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 LEDs will or will not be damaged by repairing.



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





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Label Form Specification



CPN: Customer's Production Number P/N : Production Number LOT No: Lot Number QTY: Packing Quantity HUE: Peak Wavelength CAT: Ranks REF: Reference MSL-X: MSL Level Made In: Manufacture place

DISCLAIMER

- 1. EVERLIGHT reserves the right(s) on the adjustment of product material mix for the specification.
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