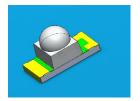


DATASHEET

1.6mm round Subminiature Infrared LED IR26-21C/L110/TR8



Features

- Small double-end package
- Low forward voltage
- Good spectral matching to Si photo detector
- Package in 12mm tape on 7" diameter reel.
- Pb free
- The product itself will remain within RoHS compliant version.

Descriptions

• IR26-21C/L110/TR8 is an infrared emitting diode in miniature SMD package which is molded in a water clear plastic with spherical top view lens. The device is spectrally matched with silicon photodiode and phototransistor

Applications

- PCB mounted infrared sensor
- Infrared emitting for miniature light barrier
- Floppy disk drive
- Optoelectronic switch
- Smoke detector

Device Selection Guide

Part Category	Chip Material	Lens Color	
IR	GaAlAs	Water Clear	

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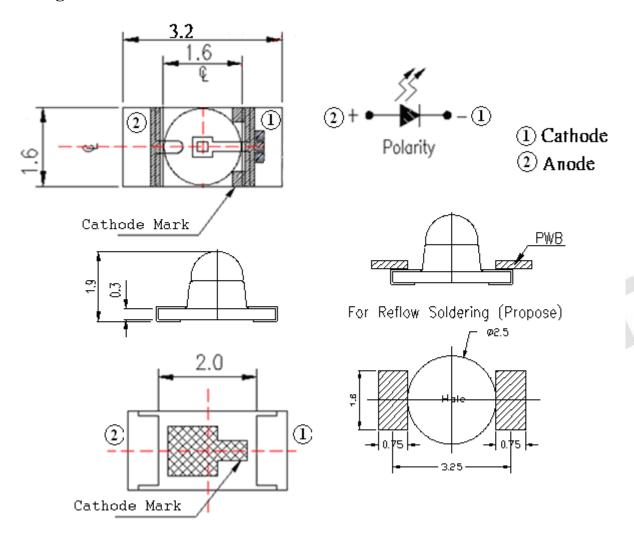
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Revision : 2 LifecyclePhase: Appro

Expired Period: Forever



Package Dimensions



Notes: 1.All dimensions are in millimeters

2.Tolerances unless dimensions ±0.1mm

Revision

Expired Period: Forever

LifecyclePhase: Approved

: 2

1.6mm round Subminiature Infrared LED IR26-21C/L110/TR8



Absolute Maximum Ratings (Ta=25)

Parameter	Symbol	Rating	Units	
Continuous Forward Current	$ m I_F$	65	mA	
Reverse Voltage	V_R	5	V	
Operating Temperature	T_{opr}	-25 ~ +85		
Storage Temperature	T_{stg}	-40 ~ +85		
Soldering Temperature *1	T_{sol}	260		
Power Dissipation at(or below) 25 Free Air Temperature	P _d	130	mW	

Notes: *1:Soldering time 5 seconds.

Electro-Optical Characteristics (Ta=25)

— · · · · · · · · · · · · · · · · ·									
Parameter	Symbol	Condition	Min.	Тур.	Max.	Units			
Radiant Intensity	Ie	$I_F=20mA$	1.0	3.0		mW/sr			
Peak Wavelength	p	I _F =20mA		940	4	nm			
Spectral Bandwidth		I _F =20mA		45	7	nm			
Forward Voltage	V_{F}	I _F =20mA	ж (1.2	1.5	V			
Reverse Current	I_R	V _R =5V			10	μA			
View Angle	2 1/2	I _F =20mA		20		deg			

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Revision : 2 Release Date:2013-06-25 10:10:27.0

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Typical Electro-Optical Characteristics Curves

Fig.1 Forward Current vs. **Ambient Temperature**

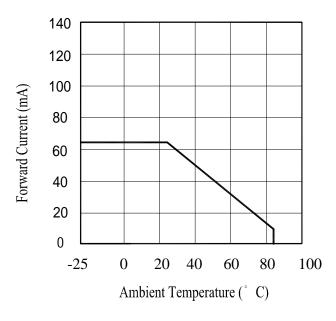


Fig.3 Forward Current vs. Forward Voltage

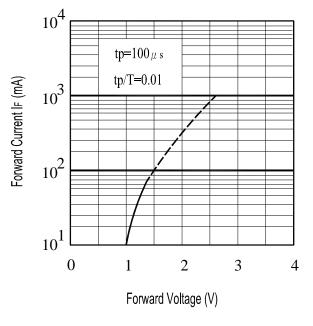


Fig.2 Spectral Distribution

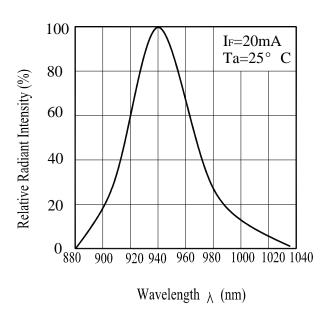
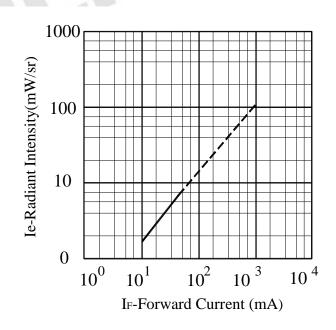


Fig.4 Relative Intensity vs. Forward Current



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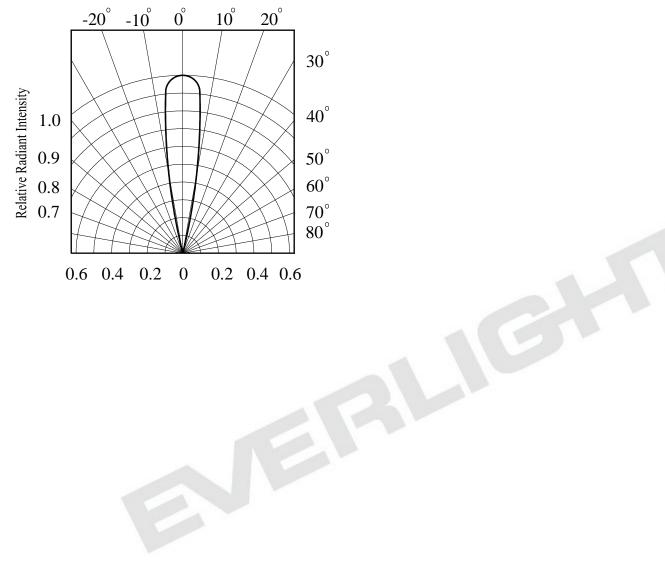
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Typical Electro-Optical Characteristics Curves

Fig.5 Relative Radiant Intensity vs.

Angular Displacement





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Precautions For Use

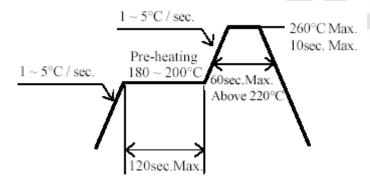
1. Over-current-proof

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 30 or less and 90%RH or less.
 - 2.3 The LEDs should be used within a year.
 - 2.4 After opening the package, the LEDs should be kept at 30 or less and 70%RH or less.
 - 2.5 The LEDs 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 LEDs have exceeded the storage time, baking treatment should be performed using the following conditions.

for 24 hours. Baking treatment : 60±5

- 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.

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: 2 LifecyclePhase:

Data Sheet

1.6mm round Subminiature Infrared LED IR26-21C/L110/TR8

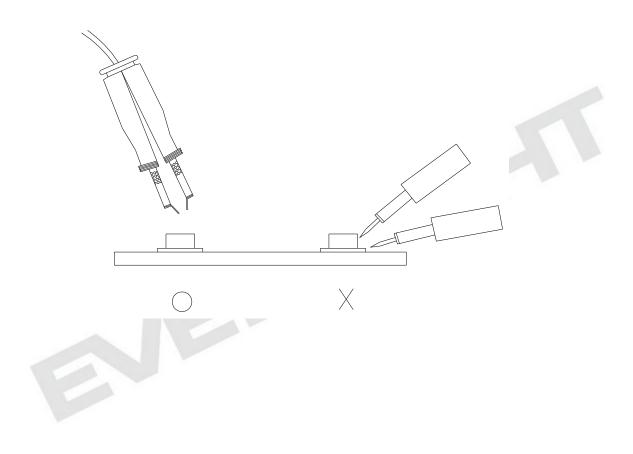


4. Soldering Iron

Each terminal is to go to the tip of soldering iron temperature less than 350 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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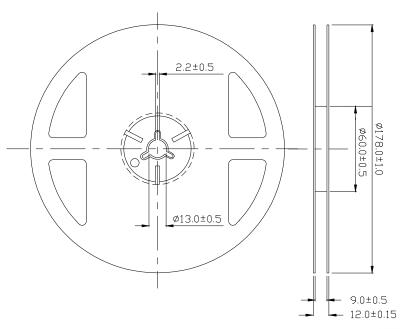
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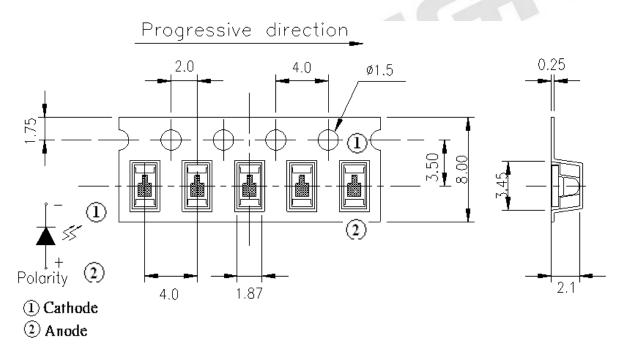


Package Dimensions



Note: The tolerances unless mentioned are ±0.1, unit=mm.

Carrier Taping Dimensions: Loaded Quantity 1500PCS/Reel



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

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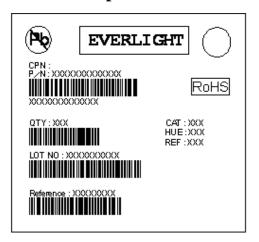
LifecyclePhase:

Expired Period: Forever

1.6mm round Subminiature Infrared LED IR26-21C/L110/TR8



Label Form Specification



CPN: Customer's Production Number

P/N : Production Number QTY: Packing Quantity

CAT: Ranks

HUE: Peak Wavelength

REF: Reference

LOT No: Lot Number

Notes

- 1. Above specification may be changed without notice. EVERLIGHT 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 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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Authorized Distribution Brand:

























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