

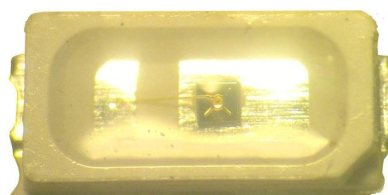


Specification for Approval

● Feature

- water clear type
- 3014 standard directivity
- superior weather-resistance
- high radiant intensity

◆ Appearance



● Applications

- Free air transmission system
- Up to electronic switch
- Infrared remote control units with high power requirement
- Infrared lighting
- Smoke detector and Medical equipment

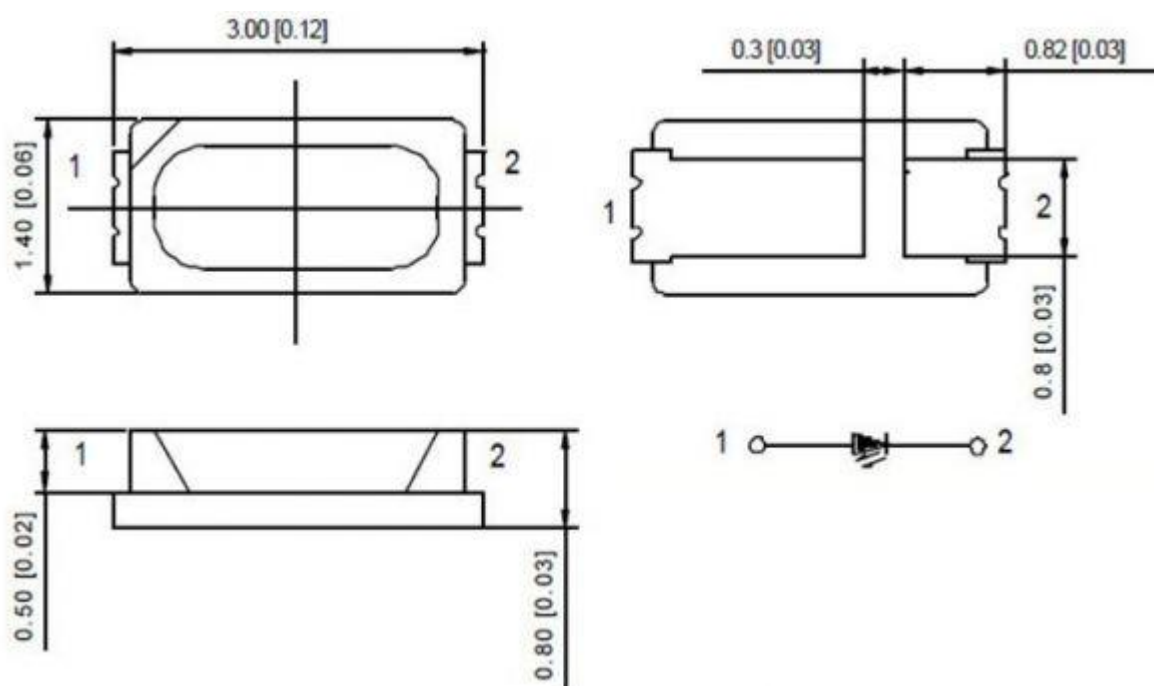
■ Notes

1. All dimensions are in millimeter.
2. Protruded resin under flange 0.1mm Max
3. Lead spacing is measured where the lead emerge from the package.
4. lens color : Water clear.
5. Above specification may be changed without notice . Our company will reserve authority on material change for above specification.
6. These specification sheets include materials protected under copyright of SEALAND corporation.



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Package size :



Note: The tolerances unless mentioned is $\pm 0.1\text{mm}$;Unit = mm



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Absolute Maximum Rating (Ta=25°C)

Item	Symbol	Value	Unit
DC forward current	I _F	20	mA
Pulse forward current	I _{FP}	50	mA
Power dissipation	P _D	2	mW
Operating temperature	T _{opr}	-40~+85	°C
Storage temperature	T _{stg}	-40~+80	°C
Reverse voltage	V _R	5	V
Sold soldering temperature	T _{sol}	260°C/3Sec	---

Plus with Max 10ms,duty ratio max1/10

● Initial Electrical/Optical Characteristics

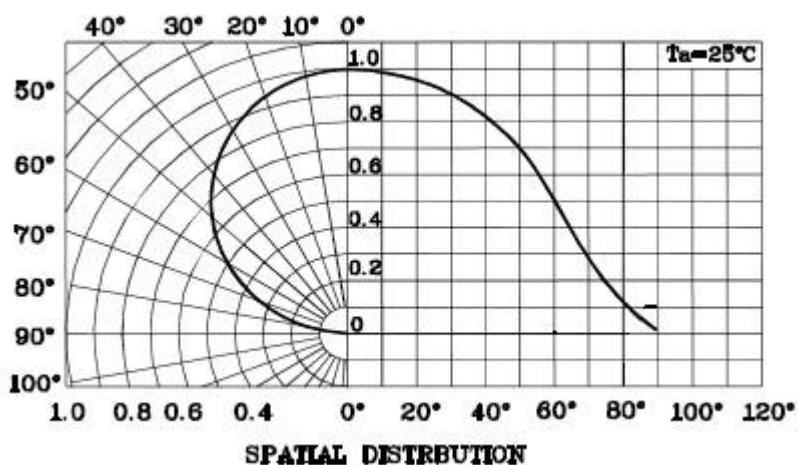
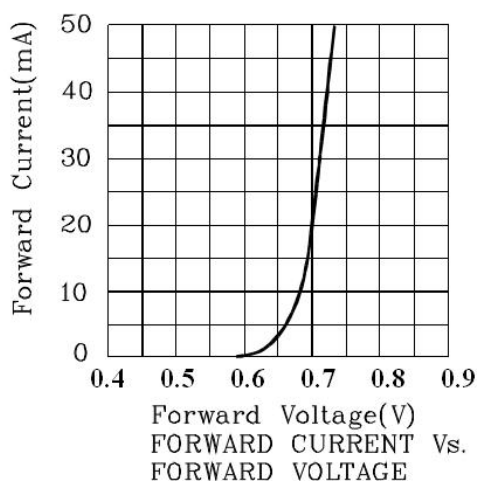
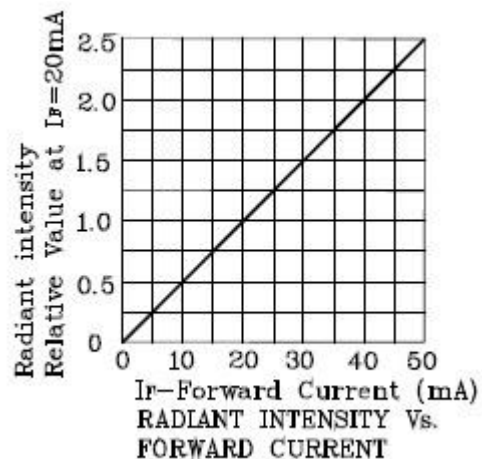
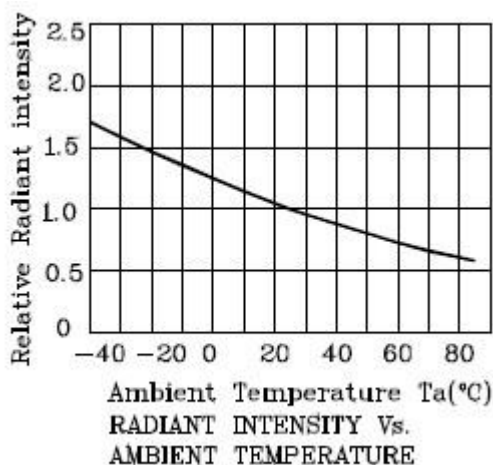
(Ta=25°C)

Item	Symbol	condition	Min	Type	Max	Unit
DC forward Voltage	V _F	I=20mA	0.6	0.7	0.85	V
		I=50mA*	----	0.85	1.0	
DC reverse Current	I _R	V=5V	----	----	10	μA
Peak Wavelength	W _p	I=20mA	--	1720	--	Nm
Spectrum Radiation Bandwidth	Δλ	I=20mA	----	130	----	nm
Radiant Power	Φ _e	I=20mA		1	----	mW
		I=50mA*		3		
50%Power Angle	2θ1/2	I=20mA	----	120	----	deg
Rise time	Tr	I _F =50mA*		15		ns
Fall time	Tl	I _F =50mA*		15		ns

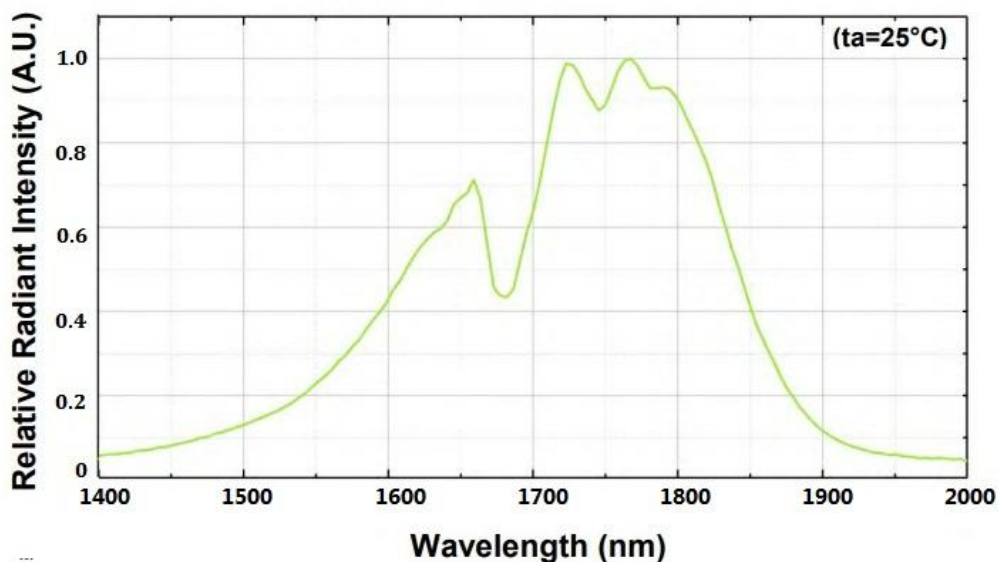
*Plus with Max 10ms,duty ratio max1/10



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Relative Spectral Emission





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Reliability performance

Test items and result

Test classification	Test item	Test condionts	Test duration	Sample size	AC/RE
Life test	Room temperature DC operating life test	Ta=25±5°C IF=20mA	1000hrs	30pcs	0/1
Environment test	Thermal shock Test	-10±5°C←→+100±5°C 5min 10sec 5min	50cycles	30pcs	0/1
	Temperature cycle test	-40±5°C←→+85±5°C 30min 5sec 30min	50cycles	30pcs	0/1
	High temperature & High humidity test	Ta=85±5°C RH=85%±0.5%RH	1000hrs	30pcs	0/1
	High temperature storage	Ta =100±5 °C	1000hrs	30pcs	0/1
	Low temperture storage	Ta =-55±5°C	1000hrs	30pcs	0/1
Mechanical test	Resistance to soldering heat	Ta =230±5°C	5sec	30pcs	0/1
	Lead integrity	Load 2.5N(0.25KGf) 0 °C ∞ 90 °C ∞ 0°C	3times	30pcs	0/1

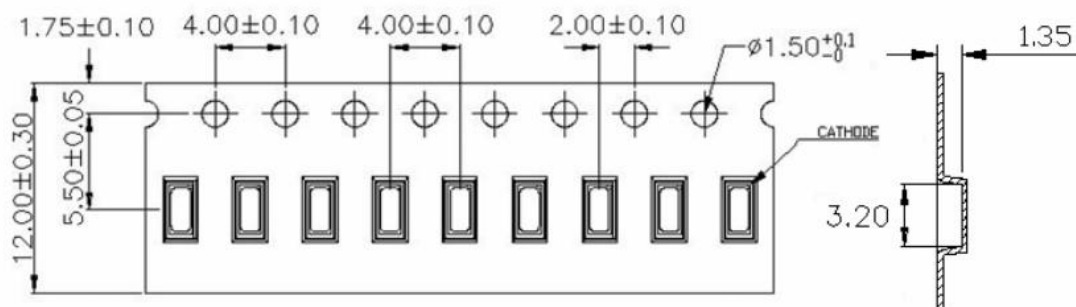


深 圳 市 希 兰 光 电 有 限 公 司
SHENZHEN SEALAND OPTOELECTRONICS CO.,LTD

NO: XL3014IRC1720
3014 1720nm SMD diode

Specification for Approval

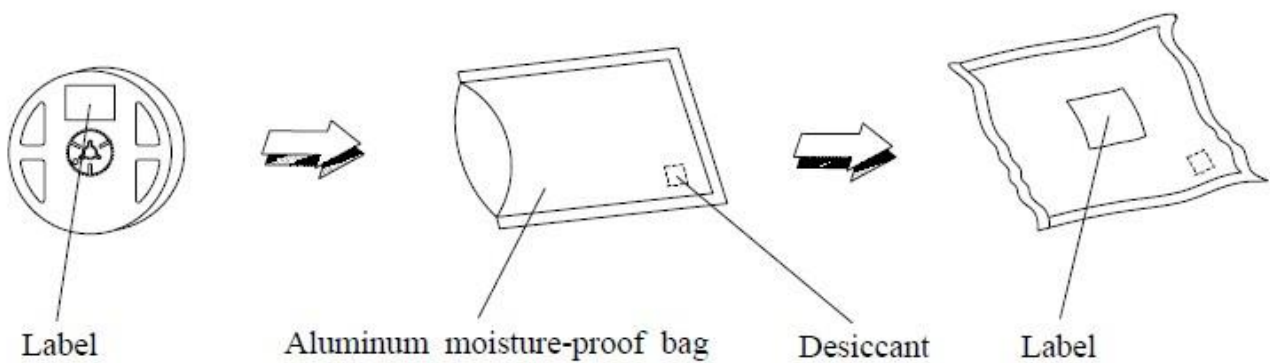
Carrier Tape Dimensions; Loaded Quantity 2000 pcs Per Reel



Note:

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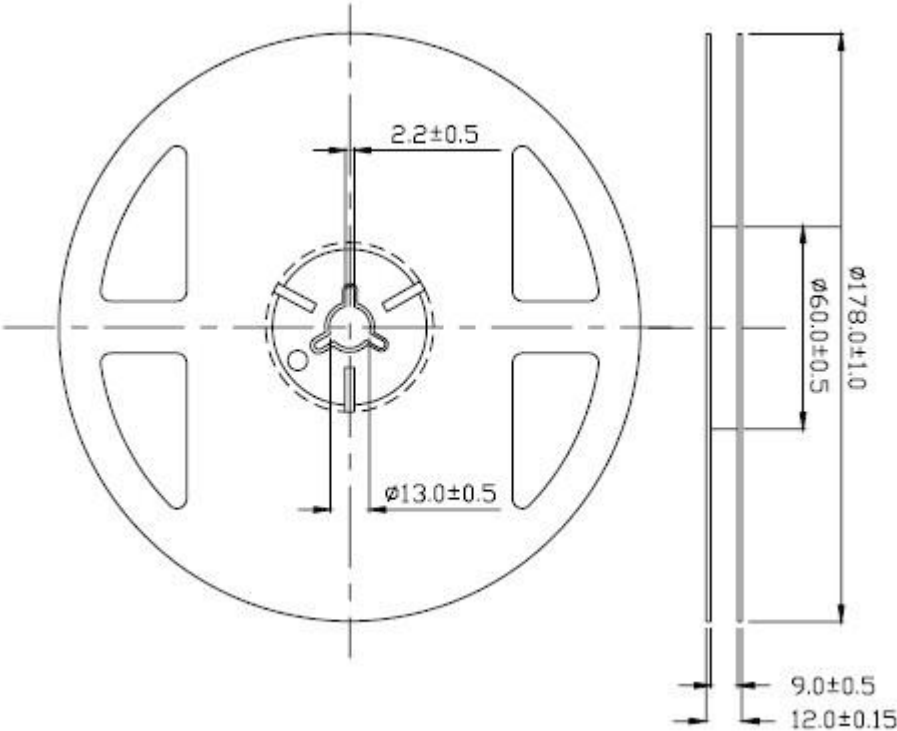
Moisture Resistant Packaging





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Reel Dimensions



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



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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°C or less and 90%RH or less.

2.3 After opening the package: The LED's floor life are 168 hours under 30°C or less and 60% RH or less.

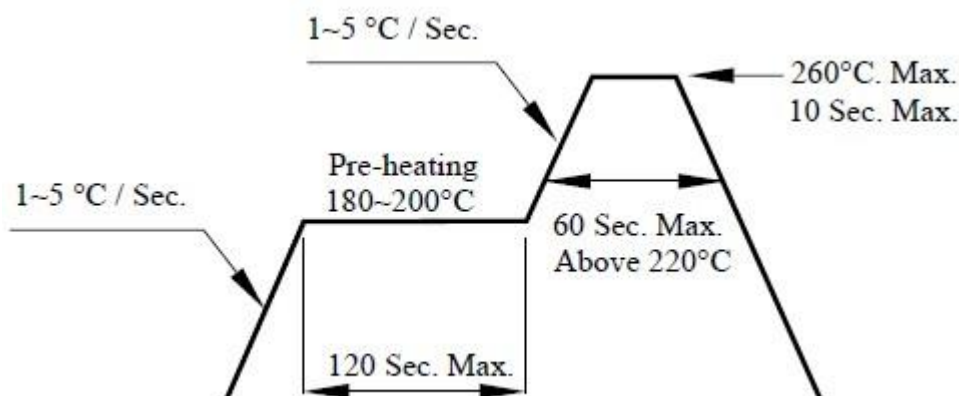
If unused LEDs remain, it should be stored in moisture proof packages.

2.4 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.

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 LEDs during heating.

3.4 After soldering, do not warp the circuit board.



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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.