

\*Customer:

# SPECIFICATION

<b>ITEM</b>	<b>Photo Transistor</b>
<b>MODEL</b>	<b>SSC-PTR202-IX0</b>
<b>PART NO.</b>	

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Drawn by	Checked by	Approved by

## 1. Features

Material : Si

- Package : 3.0×1.5×1.4 mm
- Inner Lens type
- Peak Sensitive Wavelength : 800 nm

## 2. Absolute Maximum Ratings

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Collector-Emitter Voltage	$V_{CEO}$	30	V
Emitter-Collector Voltage	$V_{ECO}$	5	V
Collector Current	$I_C$	30	mA
Collector Power Dissipation	$P_C$	100	mW
Operating Temperature	$T_{opr}$	-40 ~ 85	°C
Storage Temperature	$T_{stg}$	-40 ~ 100	°C

## 3. Electro-Optical Characteristics

(Ta=25°C)

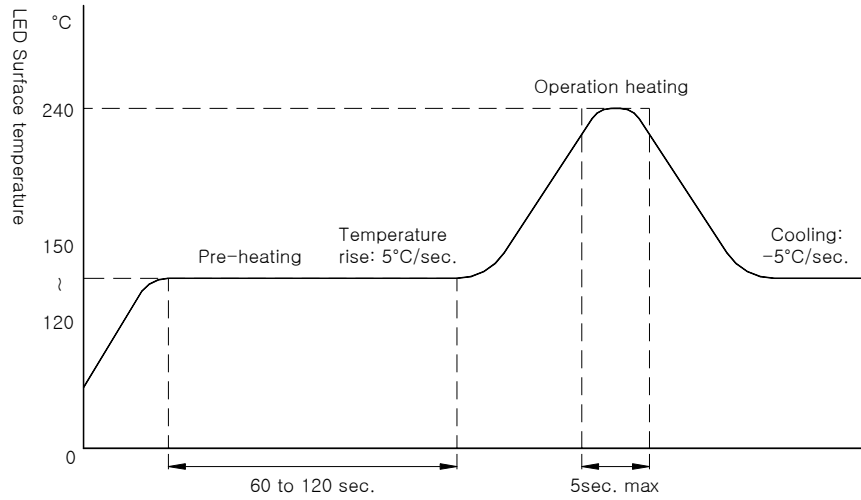
Parameter	Symbol	Condition	Min	Typ	Max	Unit
Light Current	$I_c$	$V_{CE}=10V,$ $E=1000 \text{ lux}$	1.0	2.5	-	mA
Collector dark current	$I_{CEO}$	$V_{CE}=5V$	-	-	100	nA
Saturated voltage between collector & emitter	$V_{CE(Sat)}$	$I_C=2mA$ $E=1000 \text{ lux}$			0.4	V
Peak sensitive wave length	$\lambda_p$	-	-	800	-	nm
Spectral efficiency	$\lambda$	-	350	-	1100	nm
Response (Rise time)	$T_r$	$V_{CE}=5V, I_C=1mA,$ $R_C=1000\Omega$	-	15	-	$\mu s$
Response (Fall time)	$T_f$		-	15	-	$\mu s$

#### 4. Soldering Profile

##### (1) Reflow Soldering Conditions / Profile

Preliminary heating to be at 150°C max. for 2 minutes max.

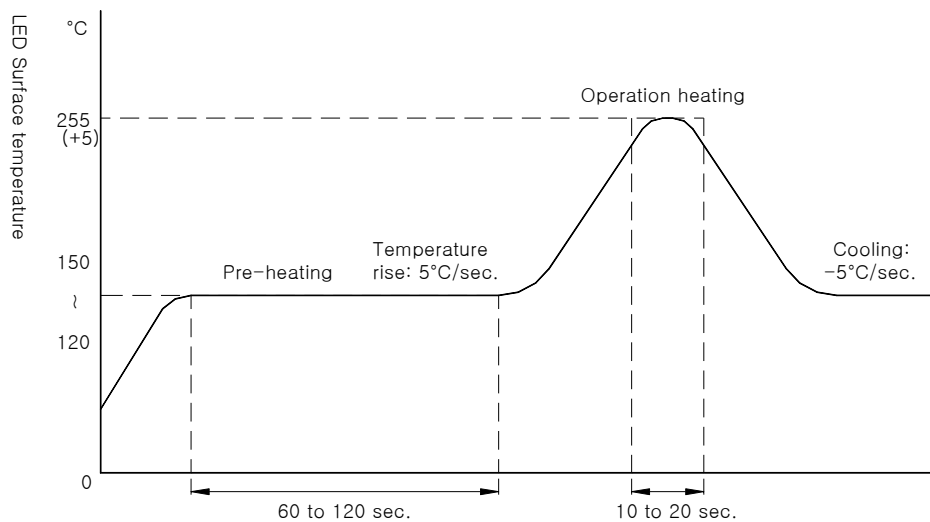
Soldering heat to be at 240°C max. for 5 seconds max.



##### (2) Reflow Soldering Conditions / Profile

Preliminary heating to be at 150°C max. for 2 minutes max.

Soldering heat to be at 255°C (+5/-0) max for 20 seconds max.



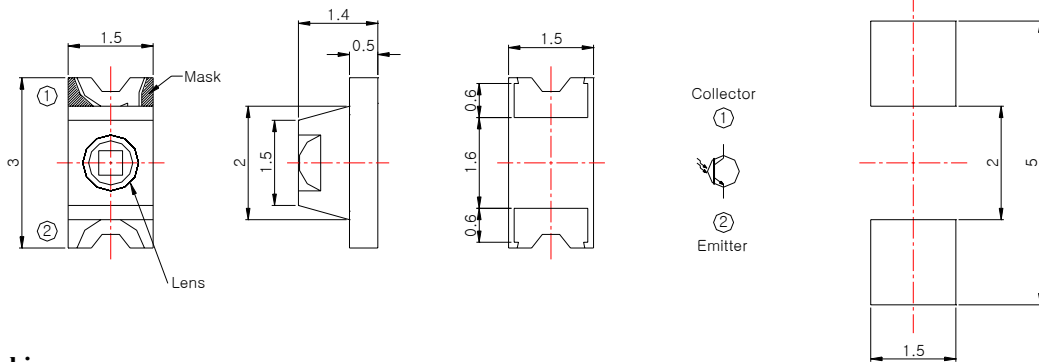
##### (3) Hand Soldering conditions

Not more than 3 seconds @MAX280°C, under Soldering iron.

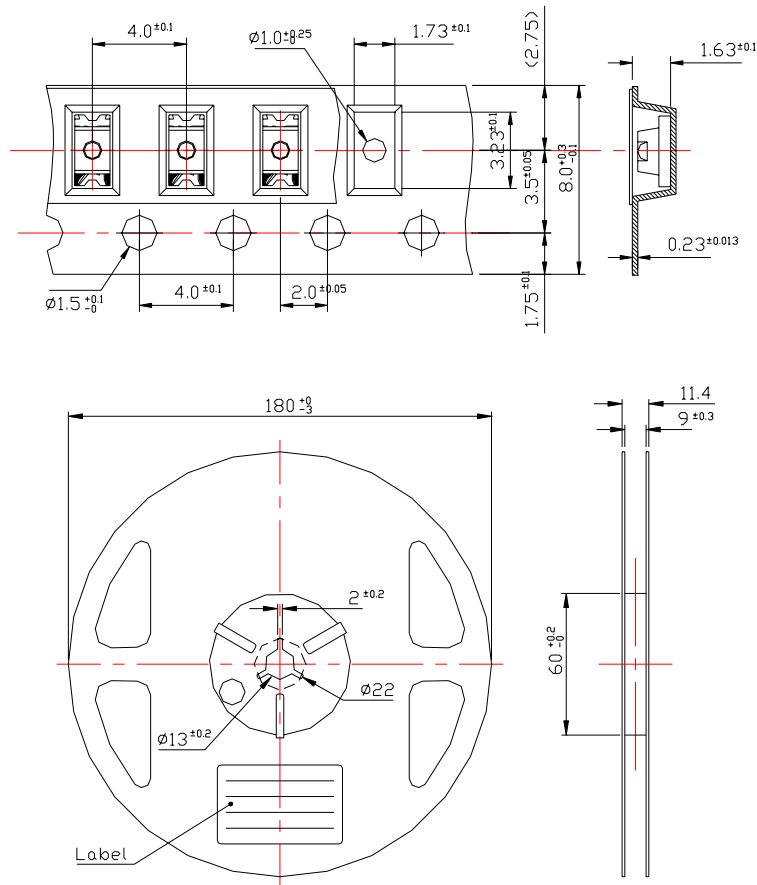
[Note] In case the soldered products are reused in soldering process, we don't guarantee the products.

## 5. Outline Dimension

Tolerance:  $\pm 0.1$ , Unit: mm



## 6. Packing

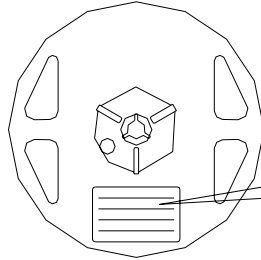


Tolerance:  $\pm 0.2$ , Unit: mm

- (1) Quantity: 3,000pcs./Reel
- (2) Cumulative Tolerance: Cumulative Tolerance/10pitches to be  $\pm 0.2$ mm
- (3) Adhesion Strength of Cover Tape: Adhesion strength to be 0.1-0.7N when the over tape is turned off from the carrier tape at  $10^\circ$  angle to be the carrier tape.
- (4) Package: P/N, Manufacturing data Code No. and quantity to be indicated on a damp proof Package.

## 7. Reel Packing Structure

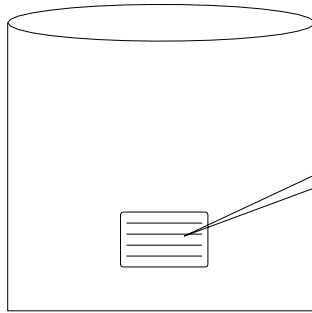
### Reel



PART NO. : #####  
 PO NUMBER : #####  
 QUANTITY : 3,000  
 LOT NUMBER : #####  
 SSC PART NUMBER : SSC-PTR202



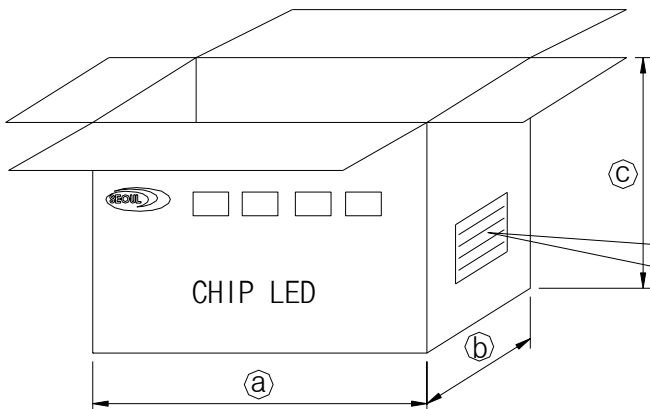
### Aluminum Vinyl Bag



PART NO. : #####  
 PO NUMBER : #####  
 QUANTITY : 3,000  
 LOT NUMBER : #####  
 SSC PART NUMBER : SSC-PTR202



### Outer Box



\*Material : Paper (SW3B(B))

TYPE	SIZE (mm)		
	a	b	c
7inch	245	220	142

CHIP LED

PART : SSC-PTR202  
 CODE :  
 Q'YT : 30,000EA  
 LOT NO :  
 DATE :

SEOUL SEMICONDUCTOR CO.,LTD

## 8. Precaution for use

### (1) Storage

In order to avoid the absorption of moisture, it is recommended to store in the dry box (or desiccator) with a desiccant . Otherwise, to store them in the following environment is recommended.

Temperature : 5 °C~30 °C      Humidity : 60%HR max.

### (2) Attention after opened

However **Photo Transistor** is correspond SMD, when **Photo Transistor** be soldered dip, interfacial separation may affect the light transmission efficiency, causing the light intensity to drop. Attention in followed.

a. After opened and mounted, the soldering shall be quickly.

b. Keeping of a fraction

Temperature : 5 ~ 40 °C      Humidity : less than 30%

(3) In case of more than 1 week passed after opening or change color of indicator on desiccant components shall be dried 10-12hr. at 60±5 °C.

(4) In case of supposed the components is humid, shall be dried dip-solder just before.

100Hr at 80±5 °C    or 12Hr at 100±5 °C.

(5) Any mechanical force or any excess vibration shall not be accepted to apply during cooling process to normal temp. after soldering.

(6) Quick cooling shall not be avoid.

(7) Components shall not be mounted on warped direction of PCB.

(8) Anti radioactive ray design is not considered for the products listed here in.

(9) Gallium arsenide is used in some of the products listed in this publication. These products are dangerous if they are burned or smashed in the process of disposal. It is also dangerous to drink the liquid or inhale the gas generated by such products when chemically disposed.

(10) This device should not be used in any type of fluid such as water, oil, organic solvent and etc. When washing is required, IPA should be used.

(11) **Photo Transistors** must be stored to maintain a clean atmosphere. If the **Photo Transistors** are stored for 3 months or more after being shipped from SSC, a sealed container with a nitrogen atmosphere should be used for storage.

(12) The **Photo Transistors** must be soldered within seven days after opening the moisture-proof packing.

(13) Repack unused products with anti-moisture packing, fold to close any opening and then store in a dry place.

(14) The appearance and specifications of the product may be modified for improvement without notice.