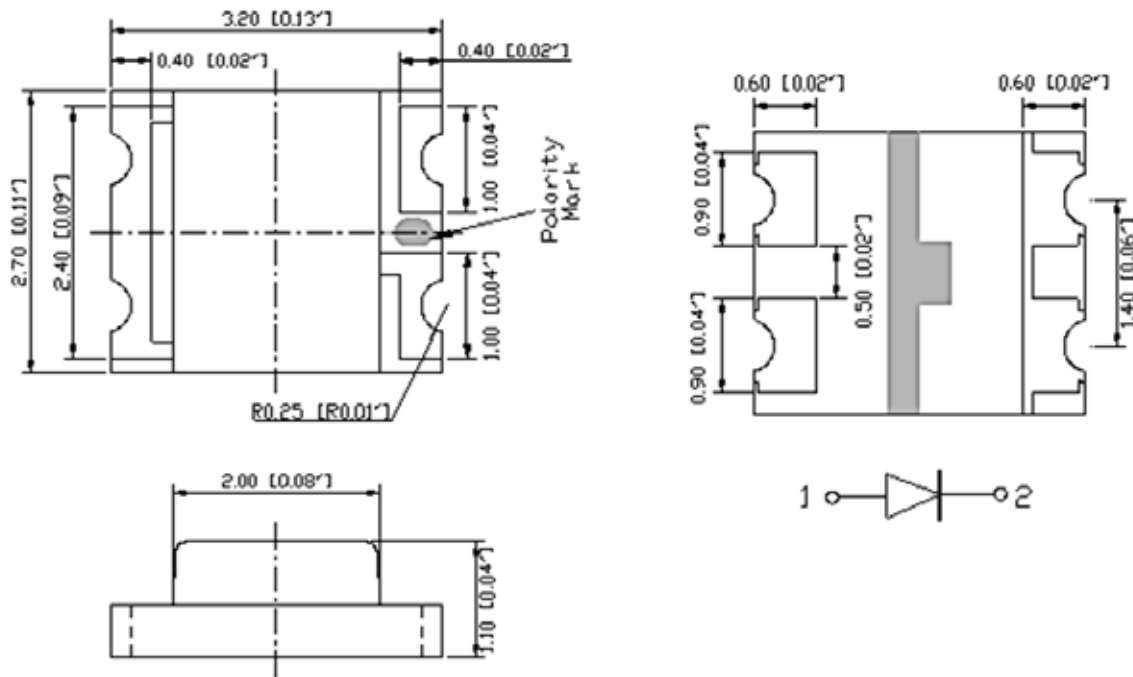


**SPECIFICATION**
**CS121PT2C**
**PACKAGE OUTLINES**

**Notes:**

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25\text{mm}$  (0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Viewing Angle
CS121PT2C	Silicon	Phototransistor	Water Clear	140°



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**ABSOLUTE MAXIMUM RATINGS**
**(TA=25°C)**

Parameter	Symbol	Max Rating	Unit
Forward Current	IF	35	mA
Reverse Current @ 5V	IR	10	μA
Power Dissipation	Pd	150	mW
Operating Temperature Range	TOP	-40~+80	°C
Storage Temperature Range	TSTG	-40~+85	°C
Peak Pulsing Current (1/10 duty f = 10KHz)	IFP	125	mA
Soldering Temperature	TSOL	Max 260°C for 10 sec Max	

**OPTICAL-ELECTRICAL CHARACTERISTICS**
**(TA=25°C)**

Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Light Current	IL	VR = 5V	-	11	-	μA
Forward Voltage	VF	IF = 10mA	-	0.8	1.3	V
Reverse Dark Current	IR	VR = 10V	-	-	10	μA
Junction capacitance	2θ1/2	VR = 3V	-	11	-	pF
Wavelength of Peak Sensitivity	λP	-	-	940	-	nm

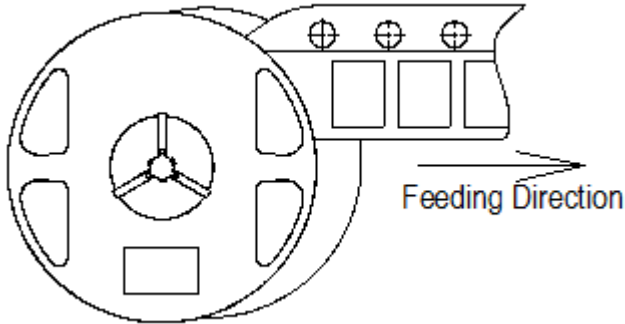
\*Tolerance of viewing angle: -10 / +5 deg.



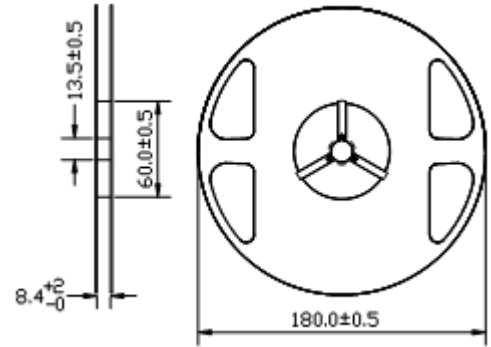
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## PACKAGING SPECIFICATION

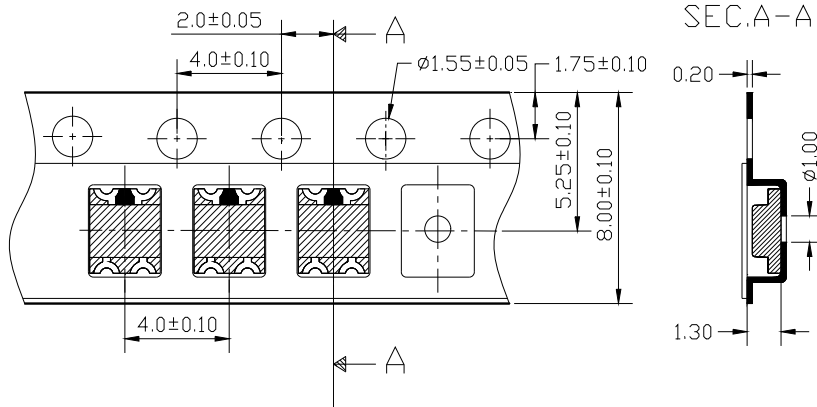
Feeding Directions



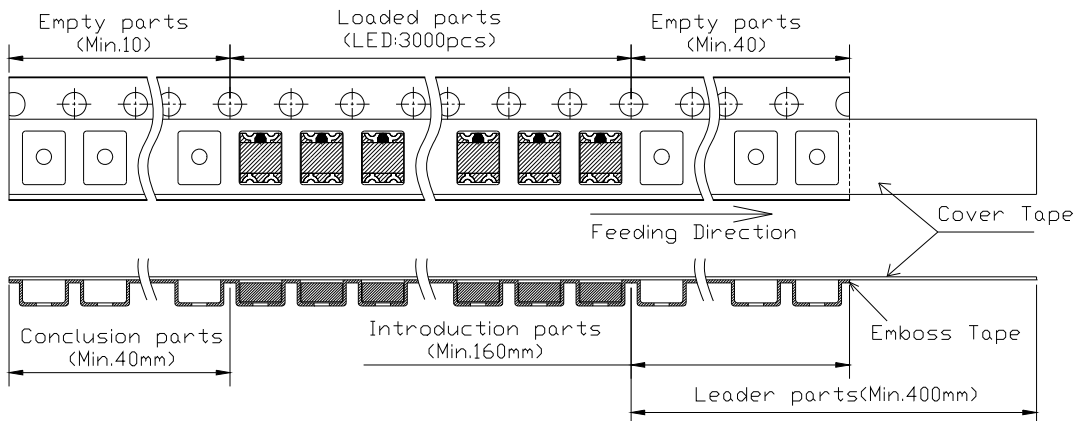
Dimensions of Reel (unit: mm)



Dimensions of Tape (unit: mm)



Arrangement of Tape



Notes:

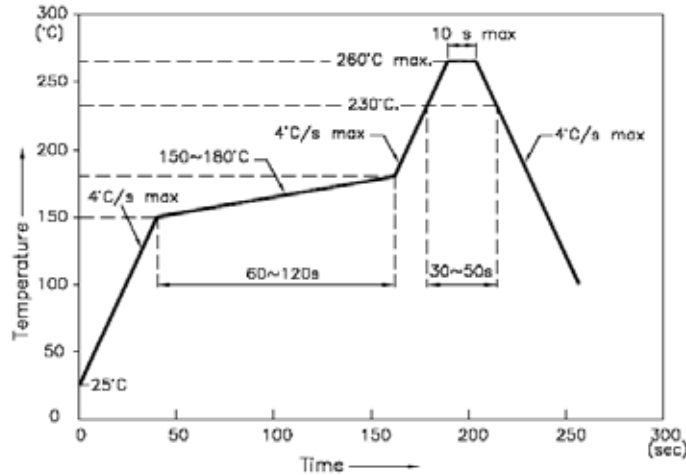
1. Empty component pockets are sealed with top cover tape;
2. The maximum number of missing lamps is two;
3. The cathode is oriented towards the tape sprocket hole.
4. 3,000pcs/Reel



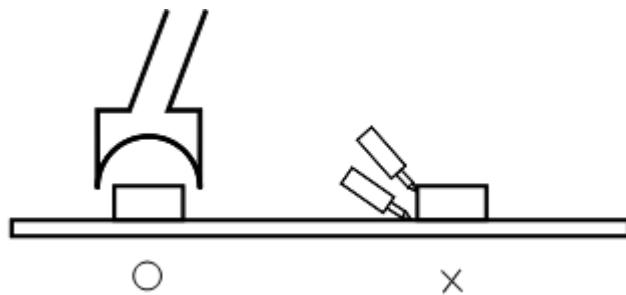
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## SOLDERING CONDITIONS

### REFLOW PROFILE



1. We recommend the reflow temperature 245°C (± 5 °C). The maximum soldering temperature should be limited to 260 °C.
  2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
  3. Number of reflow process shall be 2 times or less.
- Soldering Iron:  
Basic spec is ≤ 5 sec when 260 °C. If the temperature is higher, time should be shorter (+10 °C → -1 sec). Power dissipation of iron should be smaller than 20W and temperature should be controllable. Surface temperature of the device should be under 230 °C.
  - Rework:
    1. Customer must finish rework within 5 sec under 260 °C
    2. The head of iron cannot touch copper foil
    3. Twin-head type is preferred.



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