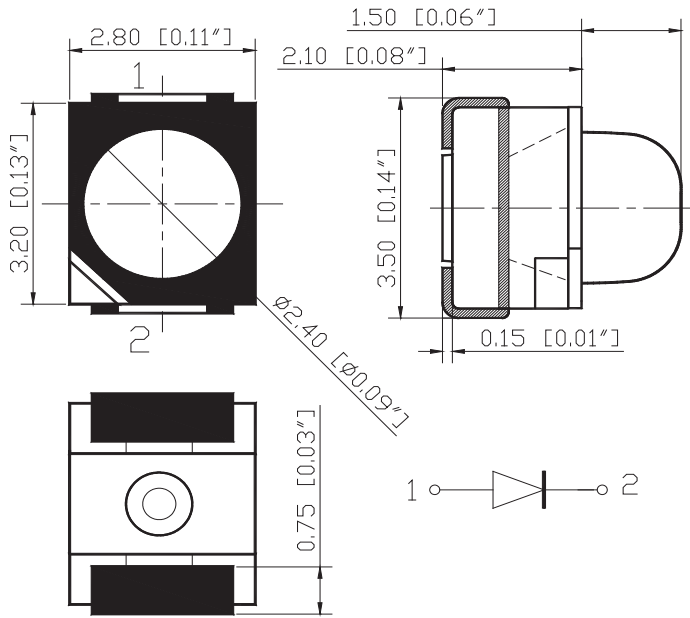
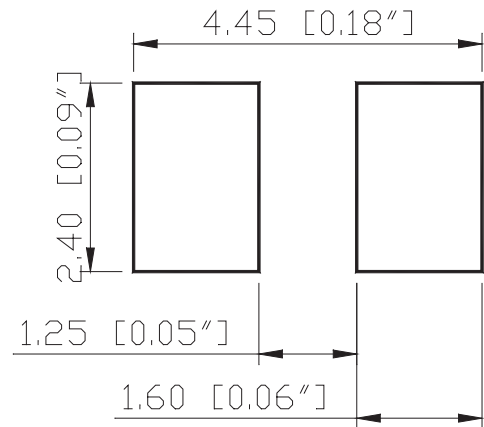


**SPECIFICATION** **CSD1311B2C-B**
**PACKAGE OUTLINES**

**RECOMMENDED PAD LAYOUT**

**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
CSD1311B2C-B	InGaN	Blue	Water Clear	30°



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

Parameter	Symbol	Max Rating	Unit
Forward Current	I <sub>F</sub>	30	mA
Reverse Current @ 5V	I <sub>R</sub>	10	μA
Power Dissipation	P <sub>d</sub>	111	mW
Operating Temperature Range	T <sub>OP</sub>	-40~+80	°C
Storage Temperature Range	T <sub>STG</sub>	-40~+85	°C
Peak Pulsing Current (1/10 duty f = 10KHz)	I <sub>FP</sub>	125	mA
Soldering Temperature	T <sub>SOL</sub>	Max 260°C for 10 sec Max	

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

Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Luminous Intensity	I <sub>v</sub>	I <sub>F</sub> = 20mA	1250	2400	-	mcd
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 20mA	-	3.0	3.7	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> = 5V	-	10	-	μA
Viewing Angle at 50% I <sub>v</sub>	2θ <sub>1/2</sub>	I <sub>F</sub> = 20mA	-	30	-	Deg
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> = 20mA	-	460	-	nm
Dominant Wavelength	λ <sub>D</sub>	I <sub>F</sub> = 20mA	460	465	470	nm

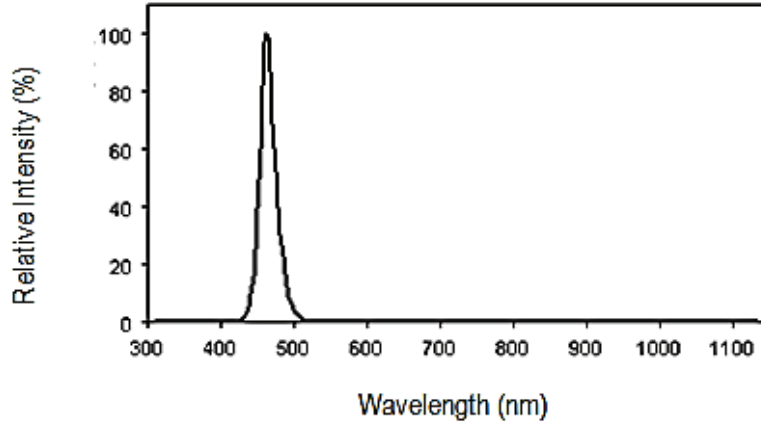
\*Tolerance of viewing angle: -10 / +5 deg.



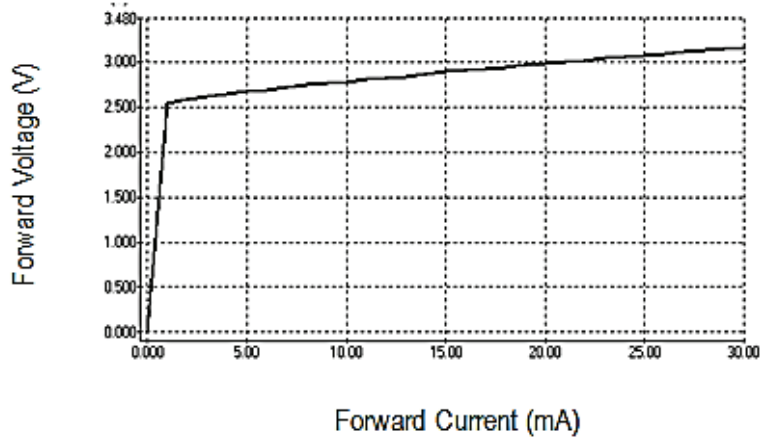
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OPTICAL CHARACTERISTIC CURVES

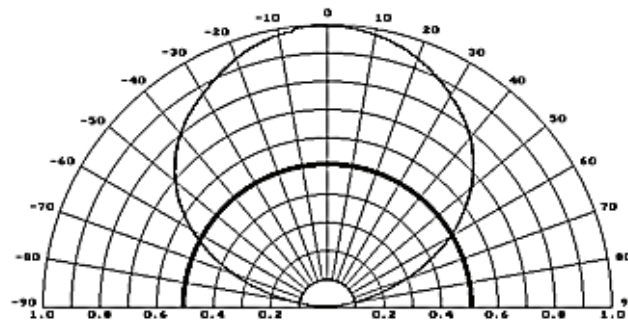
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage



Directive Characteristics

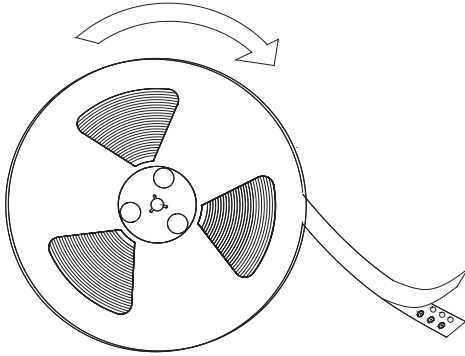


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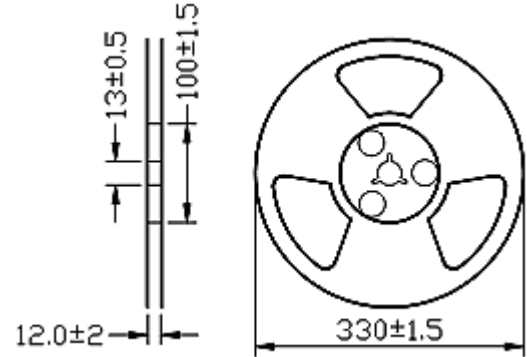
## PACKAGING SPECIFICATION

### PACKAGE SPECIFICATIONS

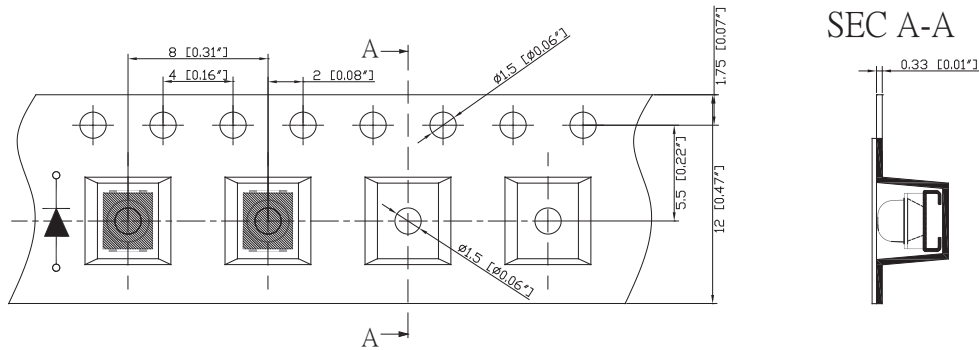
Feeding Direction



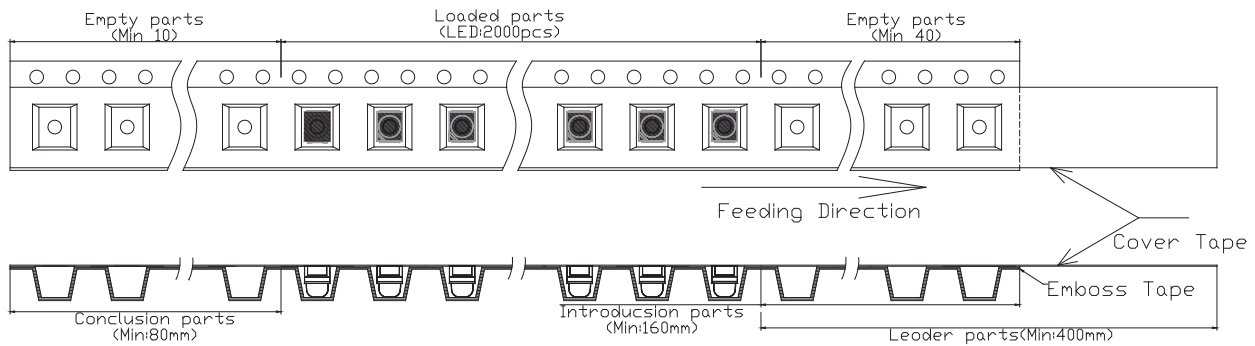
Dimensions of Reel (Unit: mm)



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 lamp is two.
3. The cathode is oriented towards the tape sprocket hole.
4. 2,000 pcs/Reel

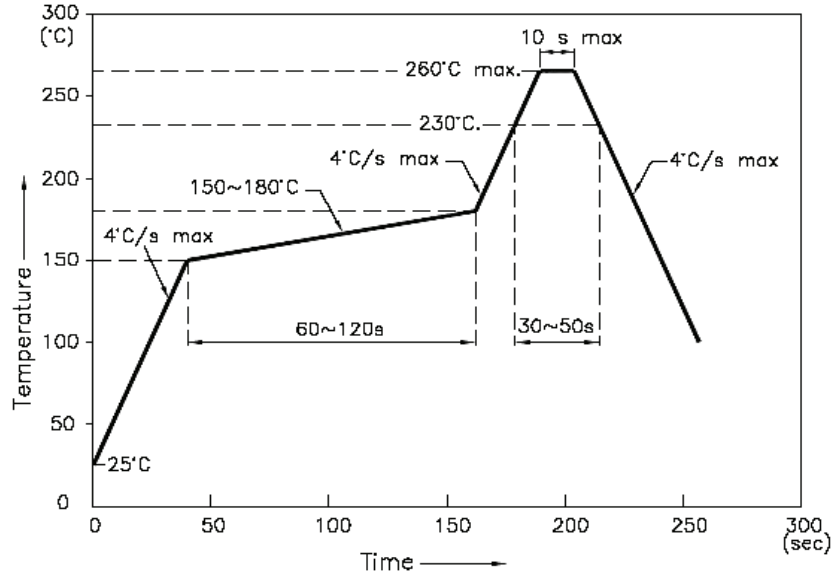


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## SOLDERING CONDITIONS

### REFLOW PROFILE

- Reflow Temp/Time



Notes:

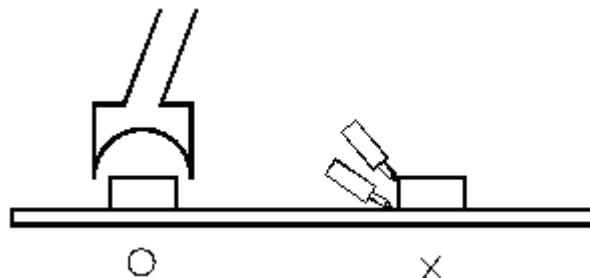
1. We recommend the reflow temperature 245°C (±5°C). The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

- Soldering Iron

Basic spec is ≤5sec when 260°C. If temperature is higher, time should be shorter (+10°C → -1sec). Power dissipation of iron should be smaller than 20W, and temperatures 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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