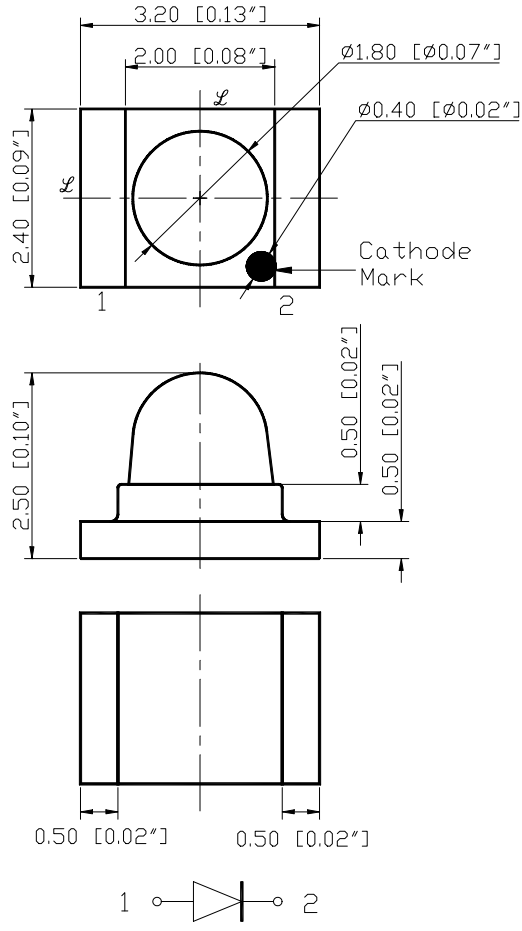
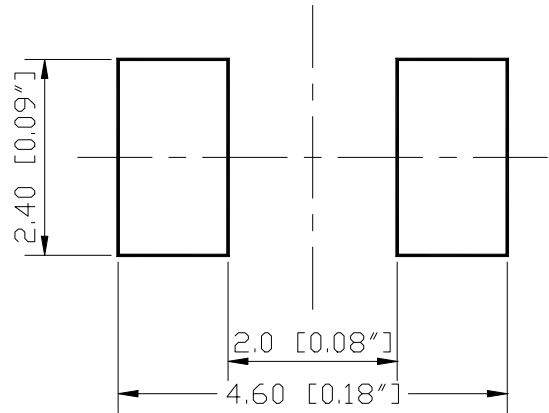


**SPECIFICATION** **CSD131B3C**
**PACKAGE OUTLINES**

**RECOMMEND 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
CSD131B3C	InGaN	Blue	Water Clear	15°



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

Parameter	Symbol	Max Rating	Unit
Forward Current	IF	30	mA
Reverse Current @ 5V	IR	10	μA
Power Dissipation	Pd	111	mW
Operating Temperature Range	TOP	-40~+85	°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	
Luminous Intensity	Iv	IF = 20mA	1250	2200	-	mcd
Forward Voltage	VF	IF = 20mA	-	3.1	3.7	V
Reverse Leakage Current	IR	VR = 5V	-	10	-	μA
Viewing Angle at 50% Iv	2θ1/2	IF = 20mA	-	15	-	Deg
Peak Wavelength	λP	IF = 20mA	-	465	-	nm
Dominant Wavelength	λD	IF = 20mA	465	470	475	nm

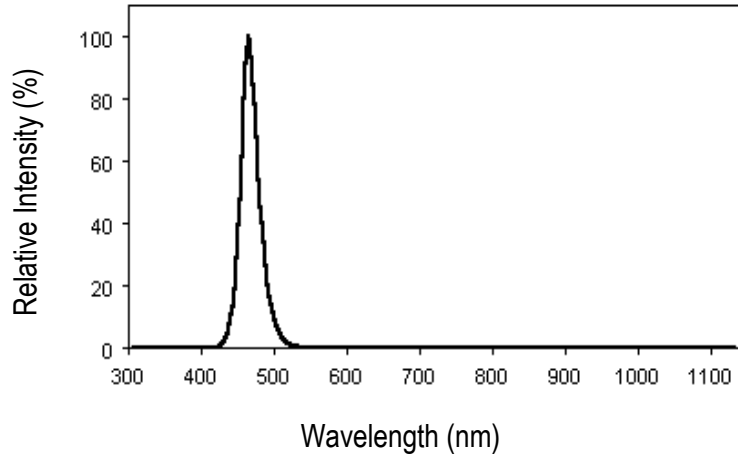
\*Tolerance of viewing angle: -10 / +5 deg.



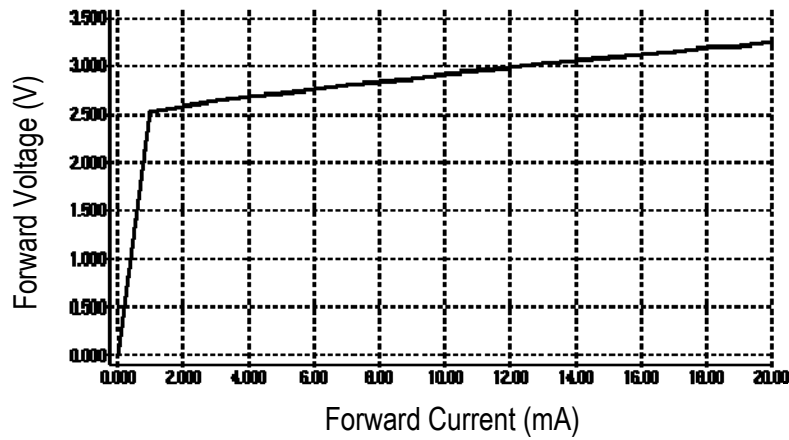
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OPTICAL CHARACTERISTIC CURVES

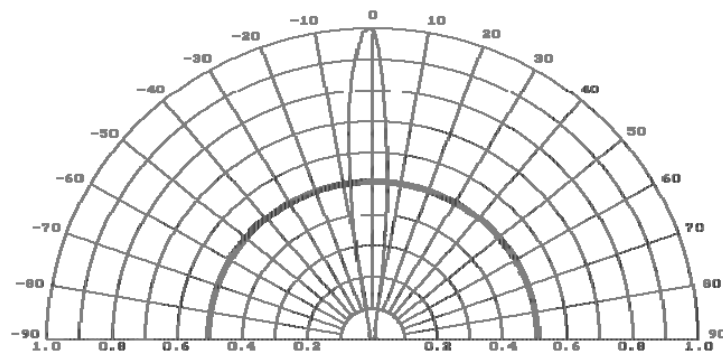
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage



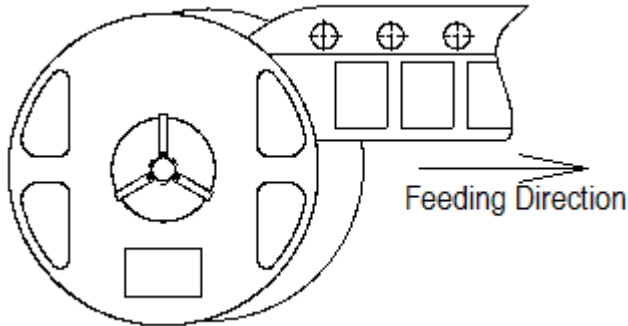
Directive Characteristics



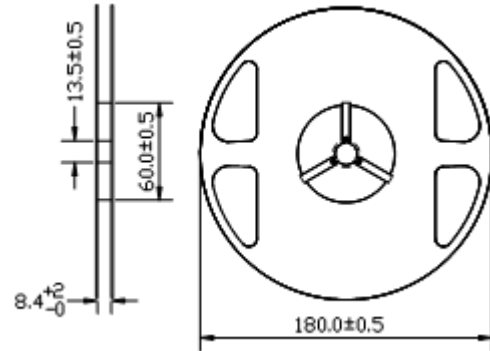
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## PACKAGING SPECIFICATION

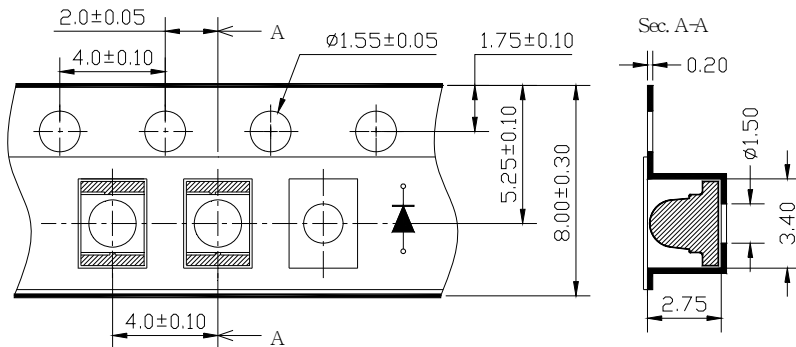
Feeding Direction



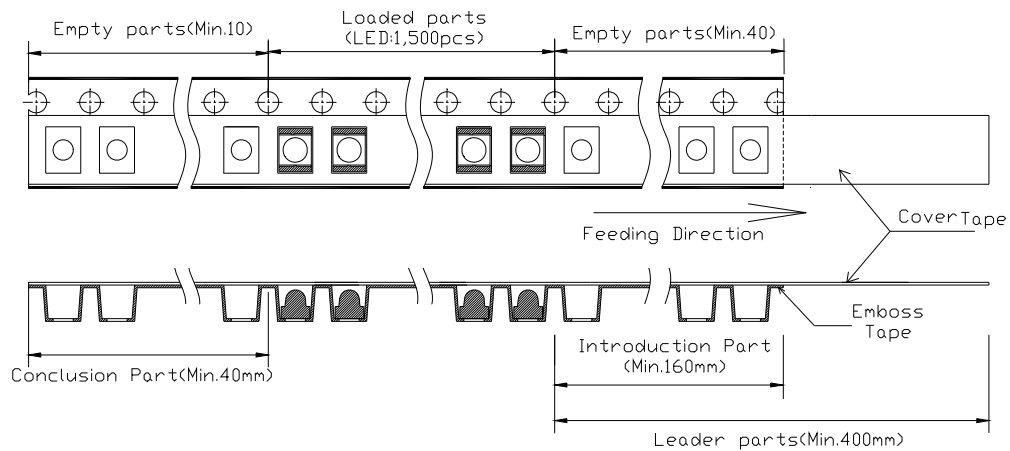
Dimensions of Reel (Unit: mm)



Dimensions of Tape (Unit: mm)



Arrangement of Tape

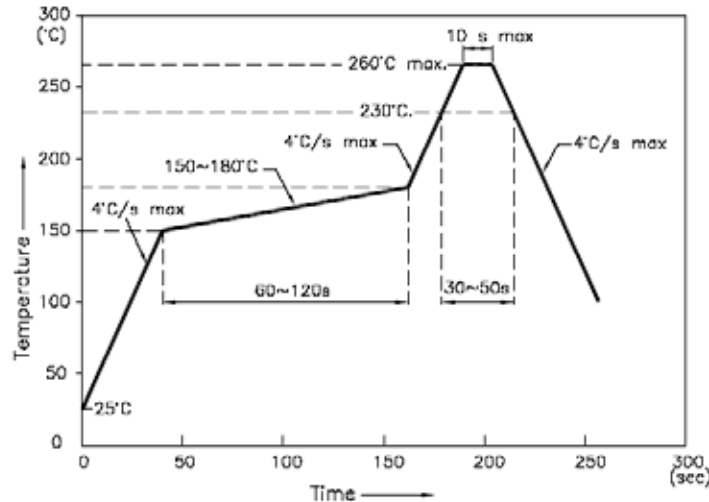


Notes:

1. Empty component pockets are sealed with top cover tape
2. Maximum number of missing lamps is two
3. Cathode is oriented towards the tape sprocket hole in accordance with ANSI/EIA RS-481 specifications
4. 1,500 pcs/Reel



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**SOLDERING CONDITIONS**
**REFLOW PROFILE**

**Notes:**

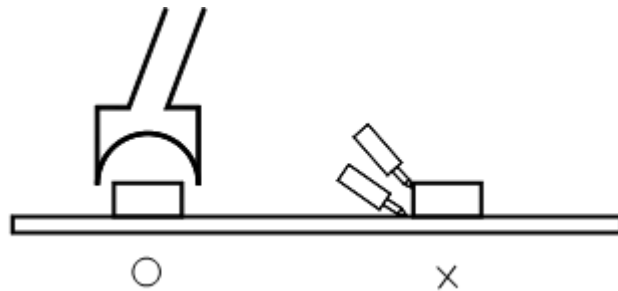
1. We recommend reflow temperature 245°C ( $\pm 5^\circ\text{C}$ ). The maximum soldering temperature should be limited to 260°C.
2. Do not cause stress to epoxy resin while it is exposed to high temperature.
3. Number of reflow process should be 2 times or less.

- Soldering Iron

Basic spec is  $\leq 5$  sec when 260°C. If temperature is higher, time should be shorter (+10°C  $\rightarrow$  -1 sec). Power dissipation of iron should be smaller than 20W and temperature should be controllable. Surface temperature of device should be under 230°C.

- Rework

1. Customer must finish rework within 5 sec under 260°C.
2. The head of the iron cannot touch copper foil.
3. Twin-head type is preferred



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