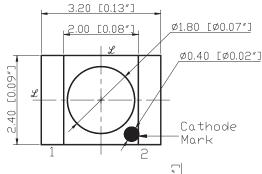
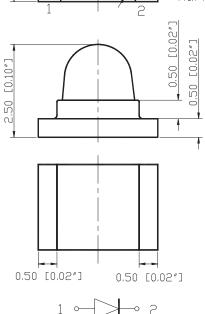


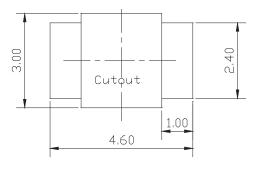
# SPECIFICATION CSD131B3C-R

### **PACKAGE OUTLINES**





### RECOMMENDED PAD LAYOUT



#### Notes:

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

Part Number	Chip Material	Color of Emission	Lens Type	Viewing Angle	
CSD131B3C-R	InGaN	Blue	Water Clear	15°	





## **ABSOLUTE MAXIMUM RATINGS**

(TA=25°C)

Parameter	Symbol	Max Rating	Unit	
Forward Current	lF	30	mA	
Reverse Current @ 5V	lR	10	μΑ	
Power Dissipation	Pd	111	mW	
Operating Temperature Range	Тор	-40~+85	°C	
Storage Temperature Range	Тѕтс	-40~+85	°C	
Peak Pulsing Current (1/10 duty f = 10KHz)	lFP	125	mA	
Soldering Temperature	TsoL	Max 260°C for 10 sec Max		

# **OPTICAL-ELECTRICAL CHARACTERISTICS**

(TA=25°C)

Darameter	Symbol	Toot Condition	Value			Lloit
Parameter		Test Condition	Min	Тур	Max	Unit
Luminous Intensity	lv	IF = 20mA	1250	2200	-	mcd
Forward Voltage	VF	IF = 20mA	-	3.1	3.7	V
Reverse Leakage Current	lR	VR = 5V	-	10	-	μΑ
Viewing Angle at 50% Iv	201/2	IF = 20mA	-	15	-	Deg
Peak Wavelength	λР	IF = 20mA	-	465	-	nm
Dominant Wavelength	λD	IF = 20mA	465	470	475	nm

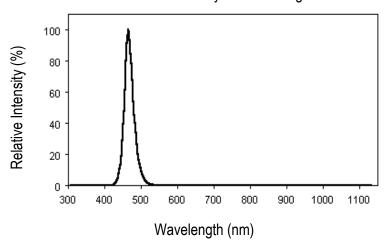
<sup>\*</sup>Tolerance of viewing angle: -10 / +5 deg.



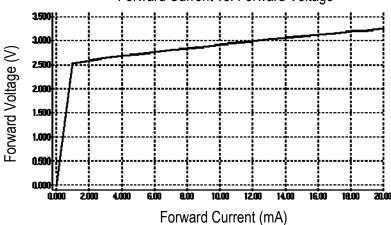


# **OPTICAL CHARACTERISTIC CURVES**

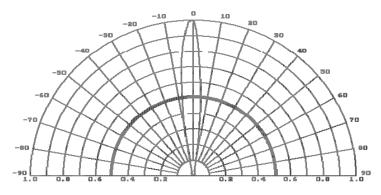
### Relative Intensity vs. Wavelength



### Forward Current vs. Forward Voltage



#### **Directive Characteristics**

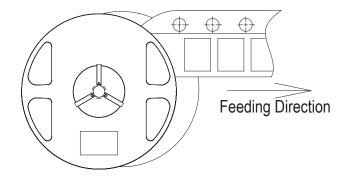


RoHS Compliant

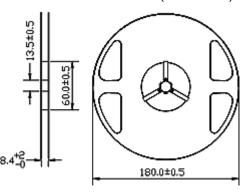


### **PACKAGING SPECIFICATION**

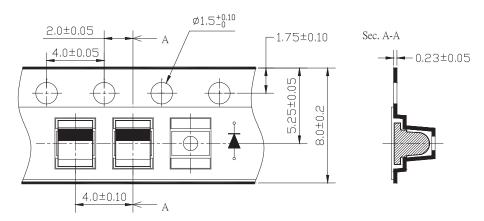
### **Feeding Direction**



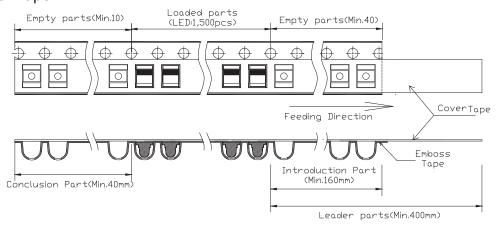
### Dimensions of Reel (Unit: mm)



### Dimensions of Tape (Unit: mm)



### Arrangement of Tape



#### Notes:

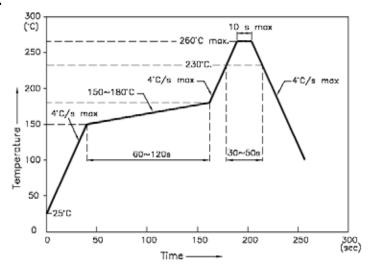
- 1. Empty component pockets are sealed with top cover tape
- 2. Maximum number of missing lamps is two
- 3. Cathode is oriented towards the tape sprocket hole in accordance with ANSI/EIA RS-481 specifications
- 4. 1,500 pcs/Reel





### **SOLDERING CONDITIONS**

#### REFLOW PROFILE



#### Notes:

- 1. We recommend reflow temperature 245°C ( $\pm 5$ °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

