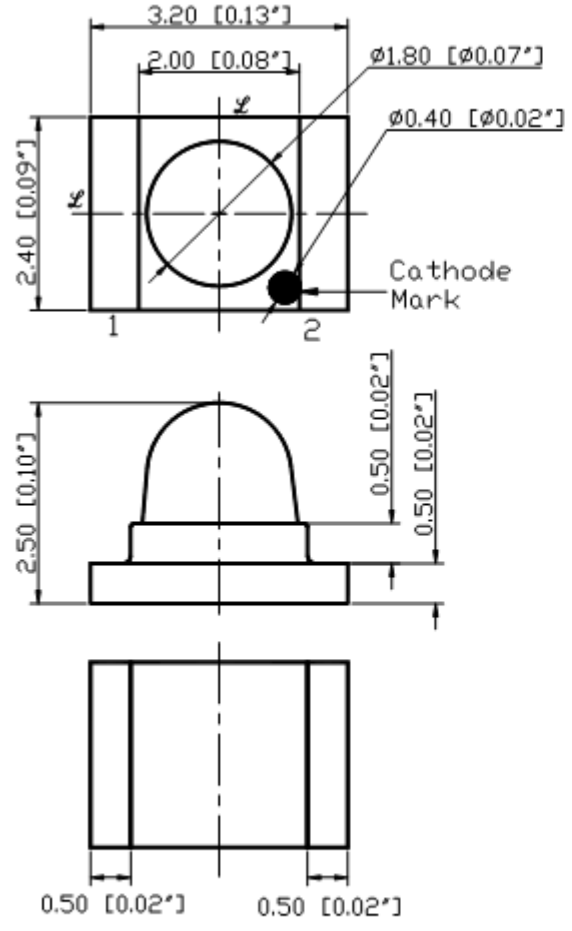
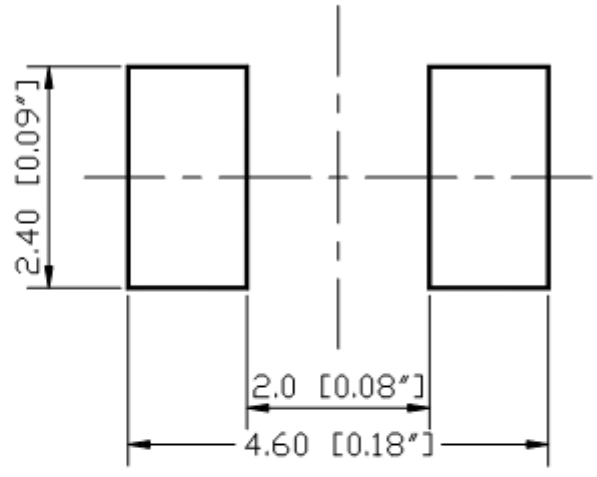


**SPECIFICATION** **CSD131R880C**
**PACKAGE OUTLINES**

**RECOMMEND PAD LAYOUT**


ITEM	MATERIALS
Resin (mold)	Epoxy
Lens color	Water transparent
Dice	GaAlAs
Emitted color	Infrared

- 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
CSD131R880C	AlGaAs/GaAs	Infrared	Water Clear	15°



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

Parameter	Symbol	Max Rating	Unit
Forward Current	IF	50	mA
Reverse Current @ 5V	IR	10	μA
Power Dissipation	Pd	80	mW
Operating Temperature Range	TOP	-40~+80	°C
Storage Temperature Range	TSTG	-40~+85	°C
Peak Pulsing Current (1/10 duty f = 10KHz)	IFP	1	A
Soldering Temperature	TSOL	Max 260°C for 5 sec Max	

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

Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Radiant Intensity	Iv	IF = 20mA	9.6	11	-	mW/sr
Forward Voltage	VF	IF = 20mA	-	1.3	1.8	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	870	880	890	nm

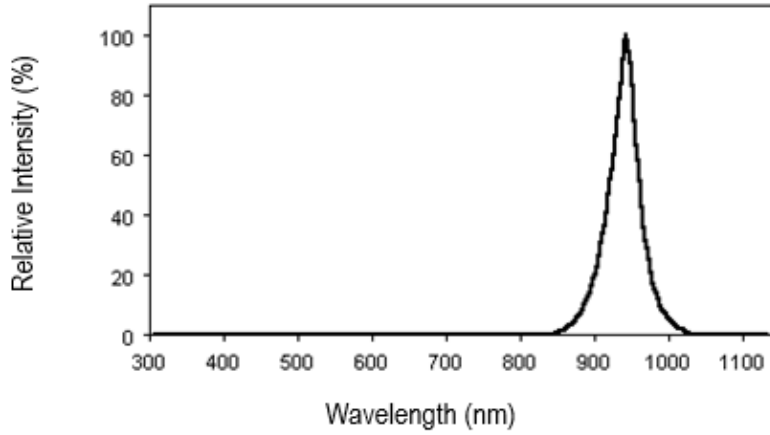
\*Tolerance of viewing angle: -10 / +5 deg.



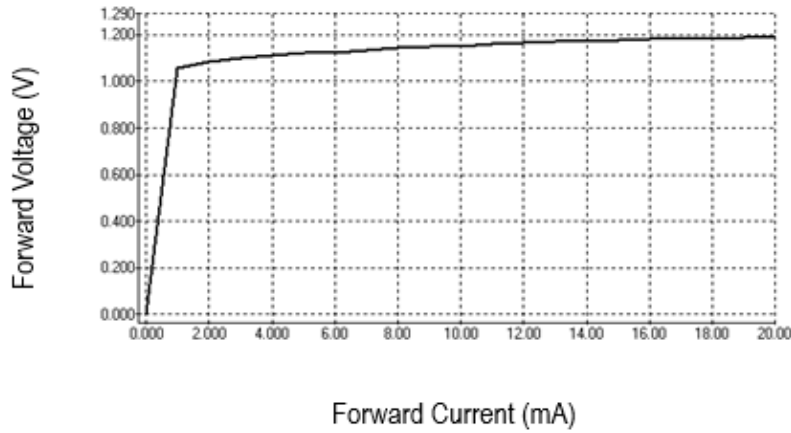
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**OPTICAL CHARACTERISTIC CURVES**

Relative Intensity vs. Wavelength

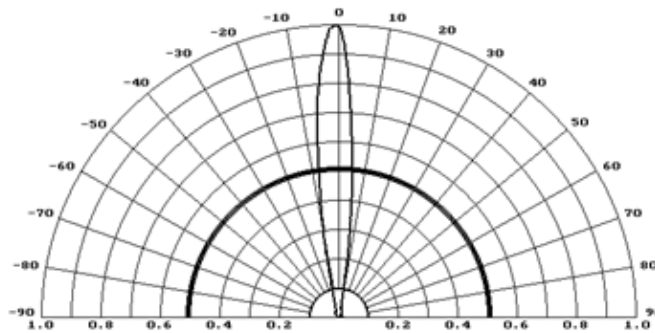


Forward Current vs. Forward Voltage



Forward Current (mA)

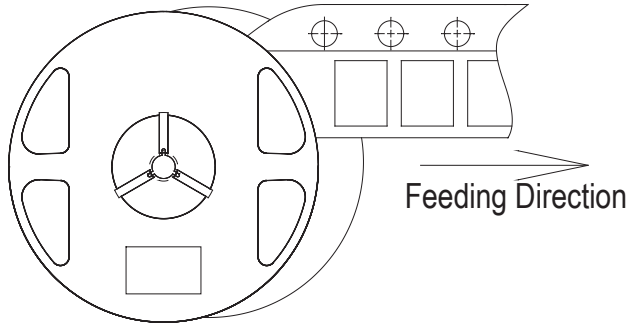
Directive Characteristics



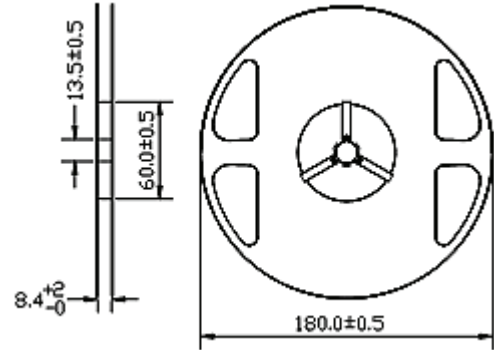
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## PACKAGING SPECIFICATION

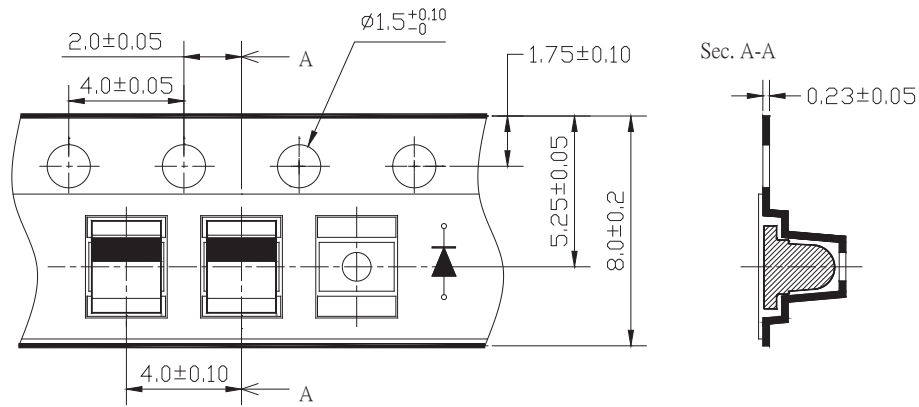
Feeding Direction



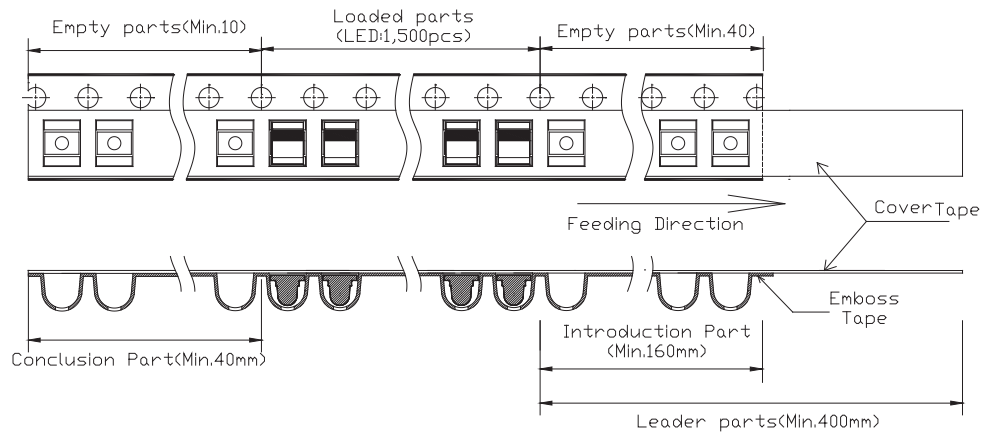
Dimensions of Reel (Unit: mm)



Dimensions of Tape (Unit: mm)



Arrangement of Tape



Notes:

1. Empty component pockets are sealed with top cover tape.
2. The maximum number of missing lamp is two.
3. The cathode is oriented towards the tape sprocket hole.
4. 1,500 pcs/Reel



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# SOLDERING CONDITIONS

## RECOMMENDED Sn-PB IR-Reflow Soldering Profile



## RECOMMENDED Pb-Free Soldering Profile



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