

Figure 1: Dimensions of the package. The diagram shows three views of a package: a top view of the cathode side, a side view, and a top view of the anode side. Dimensions are given in mm. The cathode side shows a cathode mark, P-Di die, resin, and soldering terminal. The anode side shows a soldering terminal. The package is mounted on a P.C. board.

Dimensions (mm):

- Cathode side: (2.53) (0.35) (1.2) 2.4 (2) 3.2 (2.6) (0.3)
- Side view: (2.1) 2.4
- Anode side: 0.5 2.2 (0.5)

Labels:

- カソードマーク (Cathode mark)
- P-Di素子 (P-Di die)
- 樹脂 (Resin)
- はんだ付け電極 (Soldering terminal)
- 基板 (P.C. board)
- 極性 (Polarity)

単位 /Unit : mm

推奨はんだ付けパターン

The following soldering patterns are recommended for reflow-soldering:

基板はんだ付けパターン
Soldering pattern on P.C. Board

(上面発光用)
(For upright mounting)

(側面発光用)
(For right-angle mounting)

1. Both mounting available; namely, uplight and right-angle mounting
2. Small and square size, dimensions: 3.2(L)×2.4(W)×2.4(H) mm
3. Automatic mounting by chip mounter available
4. Reflow soldering available

1. IR transmitter for remote control commander
2. IR light source for opto-sensors

項目/Item	記号/Symbol	定格値/Rating	単位/Unit
許容損失/Power dissipation	P _d	80	mW
順電流/Forward current	I _F	50	mA
パルス順電流/Pulse forward current	I _{FP}	1※1	A
逆電圧/Reverse voltage	V _R	5	V
動作温度範囲/Operating temperature range	T _{OP}	-30~+85	°C
保存温度範囲/Storage temperature range	T _{ST}	-35~+90	°C

部品コード Code for parts	発光色 Lighting color	V _F (I _F =50mA)		λ _P (nm)	Δ λ (nm)	I _a (I _F =50mA)	
		TYP(V)	MAX(V)			MIN (mW/sr)	TYP (mW/sr)
CL-201IR	赤外/Infrared	1.3	1.6	950	45	7	2

指向特性
Directive Characteristics ($T_a=25^{\circ}\text{C}$)

Figure 10 shows the directive characteristics of the TA-100 antenna at $T_a=25^{\circ}\text{C}$. The graph plots relative gain (%) against angle (0° to 90°). The main lobe is centered at 0° with a peak gain of 100%. The side lobes reach a maximum of about 20% at 30°. The back lobe is very low, around 1% at 180°.