

HPI - 14262

HPI - 14262 is silicon PIN photodiodes for detecting laser beam. HPI - 14262 has active areas for tracking on both sides of four segmented photodiodes.

FEATURES

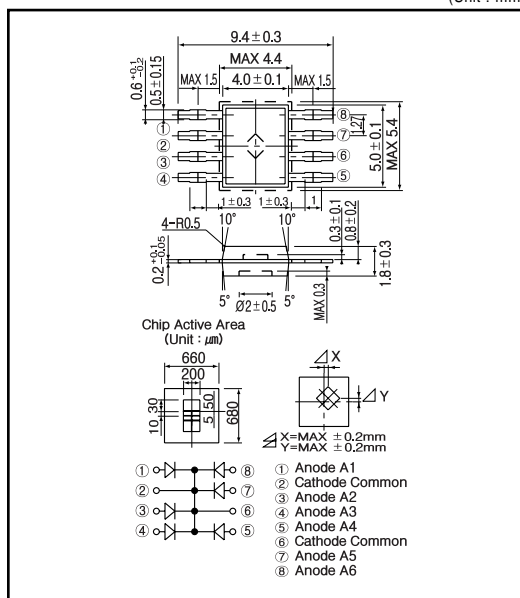
- Six segmented photodiodes

APPLICATIONS

- Optical pick up

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

($T_a = 25$)

| Item | Symbol | Rating | Unit |
|--------------------|------------|--------------|------|
| Reverse voltage | V_R | 30 | V |
| Power dissipation | P_D | 30 | mW |
| Operating temp. | $T_{opr.}$ | - 20 ~ + 85 | |
| Storage temp. | $T_{stg.}$ | - 40 ~ + 100 | |
| Soldering temp. *1 | $T_{sol.}$ | 260 | |

*1. For MAX.2 seconds at the position of 0.5mm from the package

ELECTRO-OPTICAL CHARACTERISTICS

($T_a = 25$)

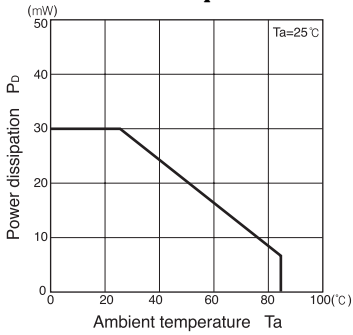
| Item | Symbol | Conditions | Min. | Typ. | Max. | Unit. |
|----------------------|----------|---|------|---|------|---------------|
| Open circuit voltage | V_{op} | $E_V = 1000\text{lx}$ | | 0.38 | | V |
| Light current | I_L | $V_R = 10\text{V}, E_V = 1,000\text{lx}^{-2}$ | | $\begin{matrix} (1) 0.02 \\ (2) 0.1 \end{matrix}$ | | μA |
| Sensitivity | S | $p = 680\text{nm}$ | 0.4 | 0.5 | | A/W |
| Dark current | I_d | $V_R = 10\text{V}$ | | | 10 | nA |
| Capacitance | C_t | $V_R = 10\text{V}, f = 1\text{MHz}$ | | $\begin{matrix} (1) 4 \\ (2) 6 \end{matrix}$ | | pF |
| Spectral sensitivity | | | | 400 ~ 1100 | | nm |
| Peak wavelength | p | | | 800 | | nm |
| Half angle | | | | ± 65 | | deg. |

*2. Color temp. = 2856K standard Tungsten lamp

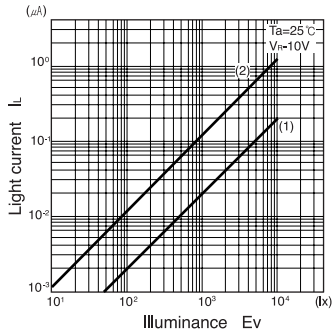
Laser detectors

HPI - 14262

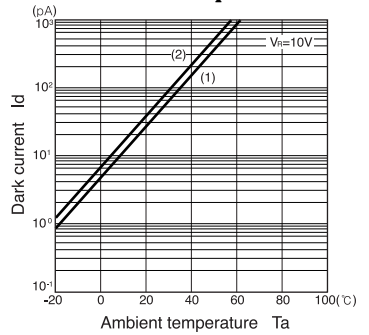
Power dissipation Vs. Ambient temperature



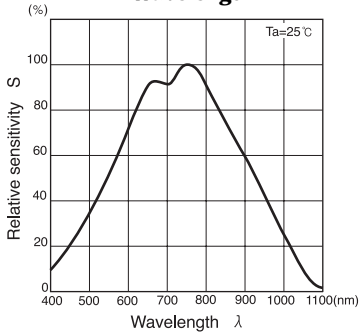
Light current Vs. Illuminance



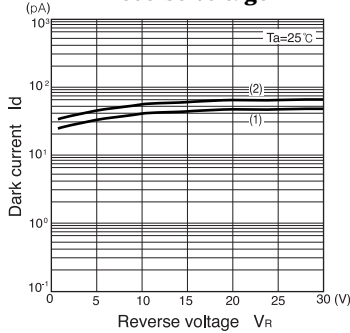
Dark current Vs. Ambient temperature



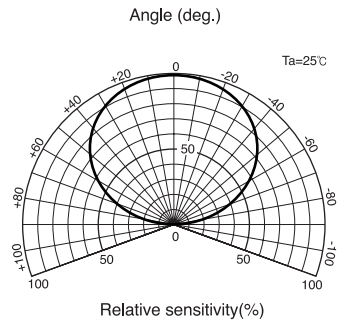
Relative sensitivity Vs. Wavelength



Dark current Vs. Reverse voltage



Radiant Pattern



Capacitance between terminals Vs. Reverse voltage

