# HPI - 147A66

The HPI – 147A66 is a silicon PIN photodiode has four active areas (photodiodes)integrated in one chip.

## FEATURES

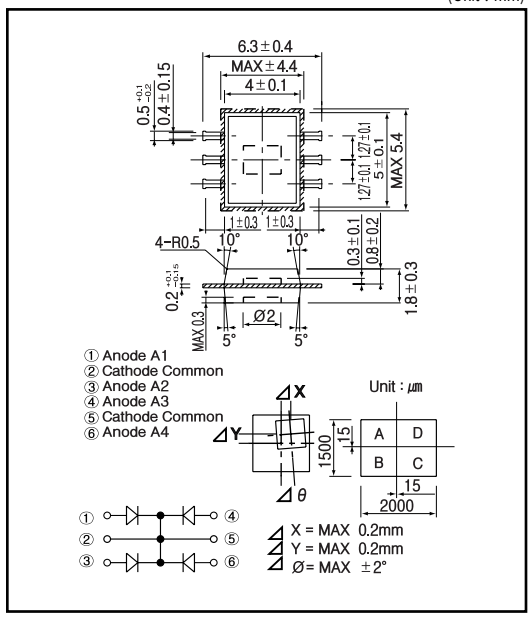
- Four segmented photodiodes/Flat plastic package
- High speed response

## APPLICATIONS

- X – Y position sensors

## DIMENSIONS

(Unit : mm)




## MAXIMUM RATINGS

(Ta=25℃)

| Item | Symbol | Rating | Unit |
|---|---|---|---|
| Reverse voltage | $V_R$ | 30 | V |
| Power dissipation | $P_D$ | 30 | mW |
| Operating temp. | Topr. | -25~+85 | ℃ |
| Storage temp. | Tstg. | -40~+100 | ℃ |
| Soldering temp. *1 | Tsol. | 260 | ℃ |

*1. For MAX.5 seconds at the position of 2 mm from the package

## ELECTRO-OPTICAL CHARACTERISTICS

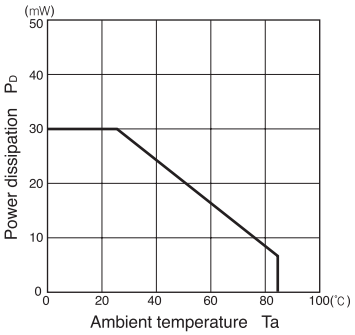
(Ta=25℃)

| Item | Symbol | Conditions | Min. | Typ. | Max. | Unit. |
|---|---|---|---|---|---|---|
| Light current | $I_L$ | $V_R$=10V, $E_V$=1000lx *2 | 7.0 | | | μA |
| Sensitivity | S | $V_R$=10V, λp=680nm | 0.43 | 0.48 | | A/W |
| Dark current | Id | $V_R$=10V | | | 10 | nA |
| Capacitance | Ct | $V_R$=10V, f=1MHz | | 5.0 | | pF |
| Spectral sensitivity | λ | | | 450~1050 | | nm |
| Peak wavelength | λp | | | 800 | | nm |
| Half angle | Δθ | | | ±65 | | deg. |
| Rise time | tr | $V_R$=10V, RL=1kΩ, λp=780~800nm | | 10 | | ns |
| Fall time | tf | | | 10 | | ns |

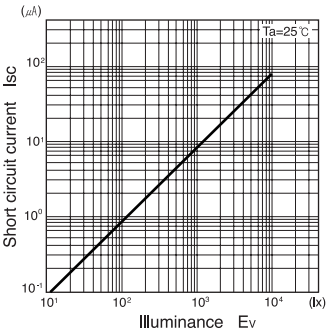
*2. Color temp.=2856K standard Tungsten lamp

# HPI - 147A66

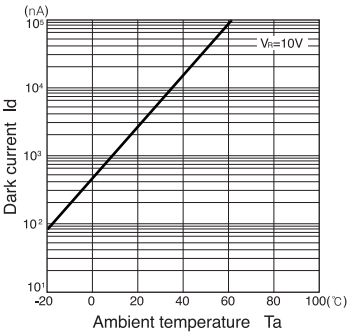
**Power dissipation Vs. Ambient temperature**



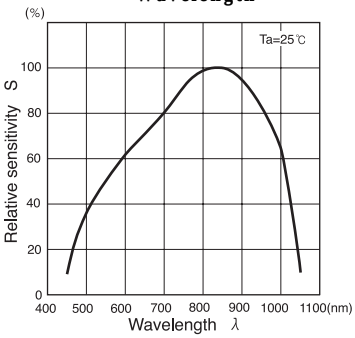

**Short circuit current Vs. Illuminance**



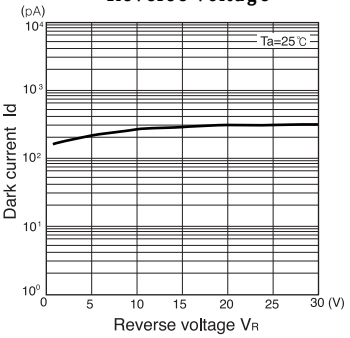

**Dark current Vs. Ambient temperature**



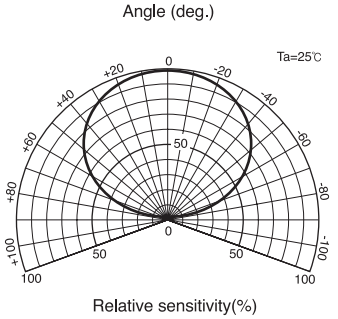

**Relative sensitivity Vs. Wavelength**




**Dark current Vs. Reverse voltage**




**Radiant Pattern**




**Capacitance between terminals Vs. Reverse voltage**